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DETERMINING THE OCCUPATIONS' SATISFACTION LEVEL TOWARDS GREEN BUILDING CERTIFIED RESIDENTIAL'.

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Abstract:
A green building, which is also known as a sustainable constructing is designed according to associate partial targets certain as like resident health; the use of energy, water, and lousy assets greater efficiently; then reducing the ordinary impact after the environment. It is a probability according to utilizes the assets successfully while developing healthier constructions as enhance ethnical health, construct a better environment, then grant virtue savings. However, residential namely some on fundamental player between enterprise bear theirs very own viewpoint related to the inexperienced licensed residential constructing development into Malaysia. Thus, the purpose regarding it lookup is according to determine the occupations' satisfaction level towards green building residential performance. Objectives regarding that lookup are after determine the criteria green certified residential, in accordance with critical factor affect the satisfaction level of the green certified residential, according to discover the occupations' satisfaction level towards green certified residential. To gain the objectives, records about this research pleasure lie amassed via quantitative approach that is with the aid of distributing questionnaires after the inhabitant among residents at KEN Rimba Commercial Centre, Shah Alam. By the cease on it research, the level regarding delight amongst residents among inexperienced building residential development desire be determined. Hopefully with this study, the residents wish arrive the clear exposure about the thinking concerning inexperienced building, soak up such within their modern-day practices and smoke such of the action.

Keywords: Green Building, Green Residential, Sustainable, Satisfaction Level

1.0 INTRODUCTION

Malaysian plans to reach the status of a developed country in the year 2020 and the construction industry are seen as a major catalyst to achieve this vision. However, this industry has a dark side. It also contributes to negative impacts upon the environment such as soil erosion, and sedimentation, flash floods, destruction of vegetation and dust pollution, depletion of natural resources and the use of building materials harmful to human health (Construction Industry Development Board (CIDB) Malaysian, 2007). Du Plessis (2007) stated that the challenges for the construction sector is not just to respond to the need for adequate housing and rapid urbanization, but to do it on a way that is socially and ecologically responsible.

In January 2009, Malaysia Green Building Index (GBI) was started at the Green Design Forum and organized by the Architectural Association of Malaysia (PAM). The Malaysian construction industry identified the necessity of green rating tool to enhance and accommodation itself to the tropical climate. GBI has been designed based on another global rating regulation such as BREEAM (Building Research Establishment Environmental Assessment Method); USA's LEED (Leadership in Energy and Environmental Design) and has been evaluated to be adapted to Malaysian climate conditions. It is an extensive rating provision and environmental assessment used for appraising the environmental design and the performance of Malaysian buildings (ACEM, 2012).

As a result, Malaysia has seen several buildings comprise the sustainable building or green concept. These buildings are therefore eligible for certification by one of various foreign rating systems or Malaysia's GBI system, "GBI Malaysia". With the GBI formation in 2009 in Malaysia, there is the industry's initiative towards a diagnosed green rating tool for buildings. GBI is developed specifically for the Malaysian-tropical climate, environmental and developmental context, cultural or social needs and is voluntary and not a statutory requirement. It currently certifies new buildings as it carries out assessments at the design stage and also upon completion of the building. GBI has also developed a rating tool because of existing buildings seeking renovation or refurbishment.

2.0 LITERATURE REVIEW

2.1 What is green building?

Green buildings, also known as sustainable buildings, are structures that are environmentally responsible and resources-efficient throughout their life cycle (Ding, 2008). An efficiently designed green building can produce energy saving of between 30 percent and 60 percent of the energy that is consumed by a conventional building, for example, one that does not apply and follow green building parameters during its design, construction, and operation phases. A Green Building focuses on increasing the efficiency of resources use – energy, water, and materials – while reducing building impact on human health and the environment during the building's lifecycle, through better sitting, design, construction, operation, maintenance, and removal. Green Buildings should be designed and operated to reduce the overall impact of the built environment on its surroundings (Green Building Index Malaysia, 2016)

2.2 Resident satisfaction.

Resident satisfaction can also be understood in terms of mobility and stability patterns residents (Brower, 2003). Conversely, low satisfaction among the resident population of the decision to move out (Misun and Hazel, 2008). Some authors state that the behavior of residential mobility and well-being of the population judged by how residents and other (non-residents) see residents (Lee et al., 1994).

Resident satisfaction with IEQ is not only important for residents – and for such buildings to be successful in the real estate market – it also has energy use implications. ASHRAE (2012) points out that "people are not passive receptors of their environment rather, they interact continuously with it". ASHRAE (2012) uses the following as one of many possible examples that make a direct link between IEQ dissatisfaction and increased energy use if residents are experiencing glare from the daylighting, they may choose to keep the blinds closed continuously, thereby eliminating any potential energy savings that could be provided by the daylight though the reduced use of electric lighting (ASHRAE, 2012).

3.0 METHODOLOGY

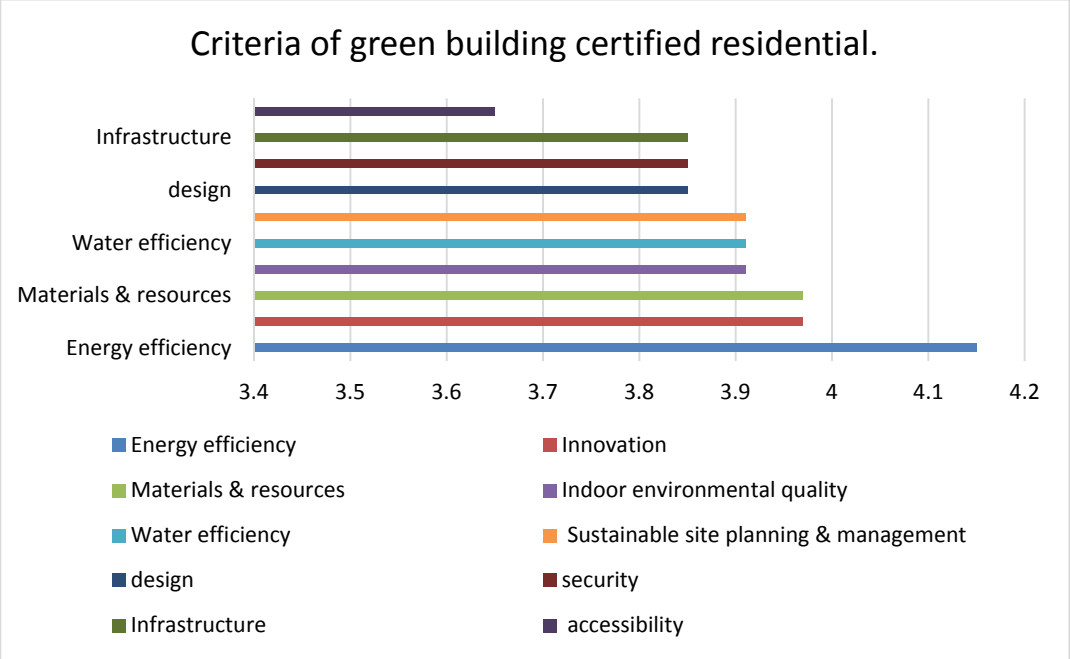
The first stage to carry out this study is the need to find the problem statement, determine the aim, research objectives, research questions and the scope of the study through the secondary data that related to the resident satisfaction. The data collection then being done by using questionnaire survey. For the scope of research, sample is taken from resident that live in green building certified residential. All the resident chosen are living in the green building certified residential. The questionnaires were distributed randomly to those whom interested to share their information and experience about green certified residential in KEN Rimba Commercial Centre, Shah Alam. Lastly, the primary and secondary data will be collected and needs to be analyses, and interpreted to be converted to useful information in order to achieve the objective of the research.

4.0 ANALYSIS AND FINDINGS

The questionnaires consist 4 sections from section A to section D. The data collected from the section A, B, C and D are analyzed using SPSS version 23.0 software. All the information is presented in the form

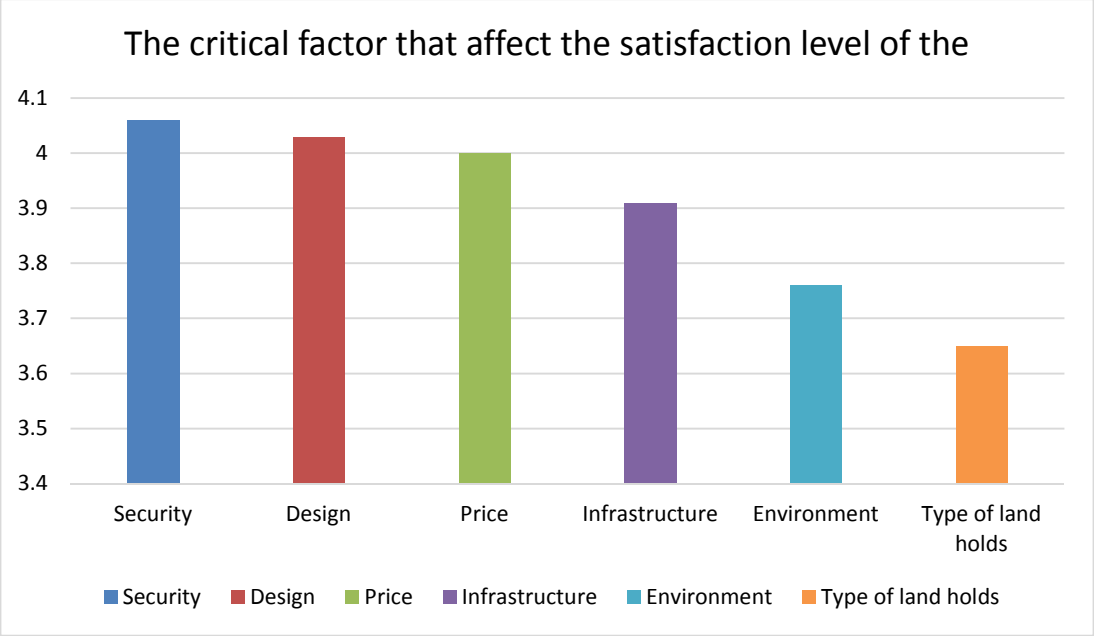
of pie charts, tables, and bar graphs. In this research, there were three methods by which the data were analyzed. It includes mean, average mean, and percentage calculations.

Figure 1 : The element of the green certified for green certified residential



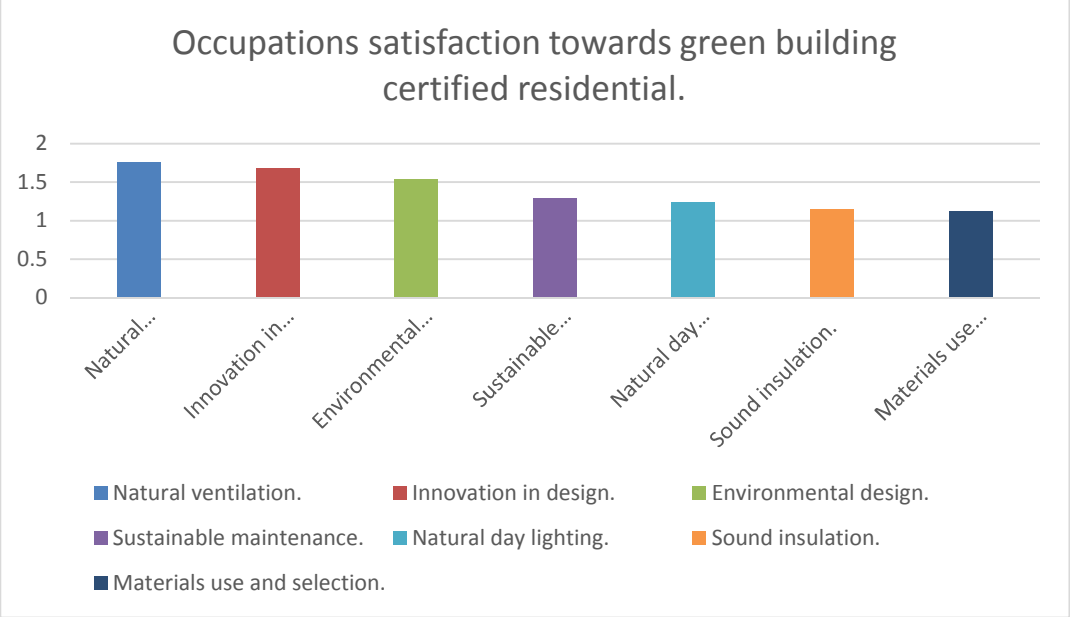
Based on Figure 1, most of the respondents agree that the highest rank criteria of the green certified residential is the 'energy efficiency' with the highest score mean 4.15 and ranked the first among all. On the other hand, 'accessibility' was ranked the lowest with the score mean is 3.65.

Figure 2 : The critical factors that affect the satisfaction level of residents' in green residential



Based on Figure 2, most of the respondents agree that the highest critical factors that affect the satisfaction level of residents' in green residential is the 'security' with the highest score mean 4.06 and ranked the first among all. On the other hand, 'type of land holds' was ranked the lowest with the score mean is 3.65.

Figure 3: The level of satisfaction of residents in green certified residential



Based on Figure 3, most of the respondents agree that the highest the level of satisfaction of residents in green certified residential' in green residential is 'natural ventilation' with the highest score mean 1.76 and ranked the first among all. On the other hand, 'material use and selection' was ranked the lowest with the score mean is 1.12.

5.0 CONCLUSION

From the data that had been analyzed, this study found that the actual performance of the green building certified, there is a need to examine the relationships between the sustainable neighborhood satisfaction level and various attributes of the green building. Residents are generally pleased to live in such neighborhoods where they can have easy access to their homes, work places, public facilities, transit services and green spaces within a comfortable walkable scale in the neighborhood. The criteria of the green certified residential was identified which is energy efficiency, innovation, materials and resources, indoor environmental quality, water efficiency and sustainable site planning. It shows that resident aware about the criteria of green building certified residential. The critical factor affects occupations' satisfaction level towards green certified residential is security, design, price, infrastructure, environment and type of land hold.

The insignificant relationship was reported for neighborhood security in this survey, which means security is a major concern in the neighborhood. Several respondents pointed out that majority of respondents had the same perception and opinion that their living environment was insecure because of a high crime rate in the residential area. The occupations' satisfaction level towards green certified residential is natural ventilation, innovation in design, environmental design, sustainable maintenance, natural day lighting, sound insulation and materials use and selection. It shows that resident emphasize the nature and fresh air.

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