SOCIAL SUSTAINABILITY OF URBAN HIGH-RISE COMMUNITY

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A dissertation submitted in fulfilment of the requirements for the award of the degree of Master of Architecture

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Specially dedicated to my beloved family and friends.
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ABSTRACT

Since recent years, the issue of social sustainability in urban high-rise housing developments has become one of the major concerns in the field of urban studies, psychology and architecture. The failure to address the social sustainability in dense living conditions not only causes negative emotions in the individual; but the lack of social sustainability has caused a social deficit in the urban community. This social issue has resulted in living conditions that mimic living in pigeon holes. Eventually, this phenomenon could lead to the formation of a generation conditioned to isolation. Hence, the purpose of this dissertation is to identify strategies to promote social interactions in urban high-rise housing. This study is conducted through literature review of other related studies, and by conducting a critical analysis of architectural solutions that contribute in enhancing social sustainability in high-rise residences. Several studies have shown the inclusion of social spaces in high-rise housing could improve social sustainability in community living. However, the success of this inclusion does not only depend on the layout design of social spaces. It also involves the sense of belonging to a home boundary based on the social setting. A field observation of a squatter settlement in Kampung Pengkalan Rinting, Tampoi, Johor Bahru was conducted to identify the sense of belonging that is based on social settings. The study has shown that the design of transitional spaces near the dwelling’s doorstep has positive contributions to the social setting of the community such as in providing a social platform for interaction with neighbours. Beside this, the maintenance of social spaces and community strategies are one of the deciding concerns for the success of social spaces included in high-rise residences. At the end of this study, a set of architectural-based guidelines is proposed that are supported by relevant arguments for the inclusion of social spaces in high-rise dwellings.
ABSTRAK

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<td>The first aspect, relationship to place, consists of the way people relate to places, or the type of bonds we have with places. The second aspect, community attachment, consists of the depth and types of attachments to one particular place.</td>
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<td>a residential environment whose physical characteristics (building layout and site plan) function to allow inhabitants themselves to become key agents in ensuring their security</td>
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CHAPTER 1

INTRODUCTION

1.1 Introduction

Housing is a basic need to everyone. To house greater number of people in smaller land footprint is the main challenges in urbanization of future city throughout the world, including Malaysia. As houses are rising far above the ground, less intermediate space has been allocated for social interaction to happen. Social gap is getting worse especially for the urban high-rise community. The hectic lifestyle and the advance of technological gadgets have limited the physical communication within the neighbourhood. This phenomenon is expected to gets worse with the increasing number of one person households in the world.

The lack of social interactions within the neighbourhood will endanger a person both mentally and physically. The depression and loss of confidence to talk to people face to face will affect one’s working performance. As a community, the lesser the social interactions happen, the lesser the neighbourhood bonding. Natural surveillance within the housing compounds would not happen. Architects have to bear certain responsibilities towards this social issue. Architects often assume that housing is simply a physical need but it is actually also a psychological need. Our willingness to improve living conditions, how we psychologically attached to the surroundings, and how much we invest in the neighbourhood are the factors that differentiate a house from a home (Sinno, 2012).
The study will first redefine the home based on social setting in urban mass housing. Besides, it investigates the form of community in high rise housing as compared to landed housing, and how these are different in their social settings. The study examines the instrumental dynamics of the neighbourhood at place-making and enriching the quality of life. Home, in this paper, is about a habitat that invests in social capital. Such living environment will also include the attainment of happiness and wellness as part of its urban metric. Lastly, this paper will explore the design of social platform in diverse dimension and scale integrated in high-rise residential tower.

1.2 Problem Statement

Social sustainability is regarded as an important pillar of sustainability in general, especially at the era where solo living has become common for working adults in urban areas. Social sustainability is a critical concern alongside mankind’s withdrawal from traditional social structure. The invention of electronic social networking and the diminished of social platform in which neighbours interact has been the key factors for the lack of social interaction. A deficit of social support, reduced exposure to divergent views, the lack of ability to consider opposing viewpoints and the gestation of mistrust or general disengagement from the community are all results of reduced physical interaction (Modi, 2014). It happened exceptionally often in high-rise communities. A generation conditioned to isolation could have devastating effects on society.

There are many research papers written about social sustainability. Most of these researches focused on the social dimension in the urban context, such as a pilot study defining urban social sustainability by using case study in United Kingdom (Nicola Dempsey, 2009). Some researcher has investigated the role of density and housing type in relation to urban form and social sustainability (Glen Bramley S. P., 2009). However, there is not much research done on social sustainability in high-rise community. This has encouraged the author to study the implication of social spaces in high-rise housing and their contribution towards social sustainability.
1.3 Research Aim and Objectives

The aim and objectives of this research is to identify the design strategies of social platform that are applied in high-rise residential in urban areas that leads to social sustainability in community. This research was derived from a global issue concerning the increasing population in high-rise urban housing due to urbanisation. The study can help to clarify relevant criteria to implement suitable design strategies to improve social sustainability in urban high-rise residential housing proposed in the Design Thesis. The aim and objectives that need to be fulfilled are:

i) To identify the definition of a home beyond the physical boundary for the urban community.

ii) To verify the lack of social interaction of urban community in high-rise housing in relation to the housing layout design.

iii) To outline design strategies that can be implemented in current practice which aim to improve social sustainability in both high-rise and low-rise housing community.

1.4 Research Question

Based on literature studies, the research questions arising are:-

i) What is the definition of home for community living in urban high-rise housing?

ii) What kind of housing layout design contribute to the lack of social interaction in high-rise housing community?

iii) What are the similarities and differences of social platform design strategies in high-rise and low-rise housing community? How can these strategies be implemented in order to improve social sustainability in urban high-rise housing?
1.5 Literature Review

The author discusses the findings from the reading mainly based on publications, journals and relevant thesis. It is important because this qualitative research is based on literature findings and analysis. Literature reviews will expose to author the basic underlying criteria of research which will help to better formulate the research methodology to achieve research objective. This chapter will focus on subject matters which emerge repeatedly throughout the literature reviewed. These subject matters are social sustainability specifically in high-rise residential, the focus population will be based on urban community and further discuss about their lifestyle, their definition of home and their need for social interaction in their neighbourhood compound.

Firstly, this Chapter explains the definition of home for urban community in high-rise housing. This study will analyse the need for social attachment and current social issue within their community.

Secondly, the literature will further elaborate on idea, principle and theory of social sustainability in high-rise residential. This will give a thorough understanding of urban high-rise community and what is the key factor in the forming of this community. This is essential because the communities in high-rise urban residential are different from the low-rise residential with regards to their identity, age group, life style, interest, and others.

Thirdly, this study analyses the strategies being adapted in order to improve social sustainability in current urban high-rise housing. This will help to understand the home-making in social attachment in relation to architectural space making solution.

The fundamental of literature review is to harvest the results of previous studies related to the proposed subject matter. All the studies summarizes in in search for the relationship to build suitable design attributes in architectural solution.
1.6 Research Methodology

Research methodology is a way to systematically achieve the research objectives. It may be understood as a science of studying how research is done scientifically. There are many methodologies to carry out a research. However, the notion of this chapter is the discussion of the methodology chosen in conducting a qualitative study; where this method is useful when it comes to human and social science research.

The author further explains in detail every aspect of the process how the study will be done and identify the process of selection, recruitment, and delineation of the subject pool used for the study. The aim of this chapter is to suggest recommendations for interested researchers to replicate the study. The research begins with choosing a topic and set an aim to achieve. This chapter also analyze each theory, based on literature review, and discussing their differences and similarity. The studies will synthesis into architectural design solution.

1.7 Expected Findings

From this research, it is expected that the quality of social spaces in various scales are the main contribution towards social sustainability in high-rise community. Based on several readings, it was mentioned that the better the quality of social spaces, the better the social interaction within community, the higher the attainment of happiness in high-rise living.

The research involved comparison of social living in high-rise and low rise community. It is expected that certain factors contributed to good social living in low rise community does not exist in high-rise community. By doing so, the findings of this research will establish the relationship of architectural approach towards social sustainability in term of spatial design.

The author will further list down the potential strategies in designing quality social spaces especially for younger generation of high-rise community in urban area.
Based on this research, the principles are to be applied in the author’s design thesis. However, the evaluation of effectiveness for these principles are to be verified through real projects by case study.

1.8 Structure of Dissertation

In general, the dissertation is divided into five main Chapters. Chapter 1 demonstrates an overview of study. This chapter outlines the study framework which includes background of issue, research objectives, research questions, methodology chosen to achieve research objective and the expected findings of the study.

Chapter 2 is a collection of related studies done by other researchers. It is to provide the basic understanding of research background and subject matters. Chapter 2 includes the definition of home and housing in social setting, community building, housing trend in urban area, social sustainability in high-rise housing and comparison of social spaces in low-rise as well as high-rise housing.

Chapter 3 presented the methodology chosen to conduct this study. The main research strategy is based on literature review about case study on high-rise housing development which focuses on social living. Besides, this chapter provides research paradigm and research procedure and the outline of overall research framework.

Chapter 4 discussed the findings based on the collected data. In this study, data is assembling for analysis purpose. The analysis of the data will be used to suggest relevant design strategies to achieve research objectives.

Lastly, Chapter 5 will conclude the study with a summary of research and the significant of this study. Besides that, this chapter will discussed the limitations and outline the potential further study regarding this subject.
1.9 Summary

This study is an extension from previous related researches. It is specifically focusing on the social sustainability issue in urban high-rise community. The author's concern is not limited to the perspective of social spaces design only but also how people define their home based on the attachment to the social setting. The solutions would contribute to rectify the lack of sense of community in urban high-rise housing in the country. It is to outline strategies architecturally for current practice to promote social sustainable urban high-rise living.
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