



APPRAISAL OF RESIDENTIAL SATISFACTION IN  
TWO DOUBLE-STOREY TERRACE HOUSING  
NEIGHBORHOODS IN GREATER KUALA  
LUMPUR, MALAYSIA

BY

ADEL MAHFOUDH MUBARAK AL-KHANBASHI

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Kulliyyah of Architecture and Environmental Design  
International Islamic University  
Malaysia

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## **ABSTRACT**

Since 1970s, Malaysia has experienced rapid urbanization which is associated with growing urban population and increasing households' income. Thus, Malaysian government has facilitated various types of housing units in order to accommodate different income groups. Even though, double-storey terrace housing is considered as popular housing type among the middle income people particularly in urban areas, some empirical studies identified that, increasing in crime rate in urban areas and lack of ventilation and natural lighting in this type of housing units led to residents' dissatisfaction. As a result, double-storey terrace house is found as the most modified house in Malaysia. Therefore, this research aims to appraise residential satisfaction in two double-storey terrace housing neighbourhoods- Taman Sri Rampai and Taman Keramat Permai in Greater Kuala Lumpur. The research data was obtained from a random sample of 220 survey questionnaires distributed equitably among the residents of two neighbourhoods. Descriptive and inferential statistics were used to examine the levels of satisfaction and to explore residents' behaviours. The findings of the research indicate that the levels of residential satisfaction are generally low with physical features, housing support services, and social environment in two neighbourhoods. On the other hand, residents' satisfaction level is high with public facilities. While the level of residential satisfaction is high with neighbourhood facilities in Taman Keramat, it is moderate in Taman Sri Rampai. The findings also explore that the most modified spaces are essential spaces followed by complemental spaces and special spaces. Finally the findings show that two-thirds of the residents in Taman Keramat Permai prefer to stay in their current area other than half of residents in Taman Sri Rampai prefer to stay. Recommendations generally seek to increase the low levels of satisfaction among residents in two neighbourhoods.

## خلاصة البحث

منذ عام 1970 تشهد ماليزيا تمدنا حضريا سريعا ساهم في زيادة عدد سكان المناطق الحضرية و كذلك زيادة في دخل الاسر. لهذا وفرت الحكومة الماليزية أنواع مختلفة من الوحدات السكنية من أجل أستيعاب فئات الدخل المختلفة. وبالرغم من أن مساكن الشرفة ذات الطابقين تعتبر واحدة من أكثر المساكن انتشارا بين متوسطي الدخل في المناطق الحضرية الا أن بعض الدراسات التجريبية تشير الى أن زيادة معدل الجريمة في المناطق الحضرية و كذلك انعدام التهوية و الاضاءة في هذا النوع من الوحدات السكنية أدى الى عدم رضاء السكان . ونتيجة لذلك وجد أن مساكن الشرفة ذات الطابقين أكثر المساكن تعديلا في ماليزيا لهذا السبب يهدف هذا البحث الى تقييم الرضا السكني بين سكان هذا النوع من المساكن في وحدتي جوار والتي هي تمان سري رامباي و تمان كرامت برماي في كوالا لمبور الكبرى. تم الحصول على البيانات للبحث من عينة عشوائية مؤلفة من 220 أستبانة وزعت بالتساوي بين سكان وحدتي الجوار. وقد تم استخدام الاحصاء الوصفي و الاستنتاجي لتحليل ودراسة مستويات الرضاء السكني واكتشاف أنماط السلوك لدى السكان. النتائج التي توصل اليها البحث تشير الى أن مستويات الرضا السكني منخفضة بصفة عامة بالنسبة للخصائص الفيزيائية و خدمات دعم الاسكان وكذلك البيئة الاجتماعية في وحدتي الجوار. من ناحية أخرى كان مستوى الرضا السكني مرتفعا بالنسبة للمرافق العامة. بينما كان مستوى الرضاء السكني مرتفعا بالنسبة لمرافق وحدة الجوار في تمان كرامت برماي, كان معتدلا في تمان سري رامباي. النتائج أيضا تشير الى أن معظم التعديلات كانت تتم في الفراغات الرئيسية ثم الفراغات الثانوية ثم الخاصة. اخيرا أظهرت النتائج أن ثلثي سكان تمان كرامت برماي يفضلون البقاء في منطقتهم وان نصف سكان تمان سري رامباي يفضلون ذلك. التوصيات بشكل عام تسعى الى رفع مستويات الرضاء السكني المنخفضة بين سكان وحدتي الجوار.

## APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Urban and Regional Planning.

.....  
Mohammad A. Mohit  
Supervisor

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Urban and Regional Planning.

.....  
Rustam Khairi Zahari  
Examiner

This dissertation was submitted to the Department of Urban and Regional Planning and is accepted as a fulfilment of the requirement for the degree of Master of Urban and Regional Planning.

.....  
Mariana Mohamed Osman  
Head, Department of Urban  
and Regional Planning

This dissertation was submitted to the Kulliyyah of Architecture and Environmental Design and is accepted as a fulfilment of the requirement for the degree of Master of Urban and Regional Planning.

.....  
Khairuddin Abdul Rashid  
Dean, Kulliyyah of  
Architecture and  
Environmental Design

## DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Adel Mahfoudh Mubarak Al-Khanbashi

Signature .....

Date .....

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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STOREY TERRACE HOUSING NEIGHBORHOODS IN GREATER KUALA  
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# CHAPTER ONE

## INTRODUCTION

### 1.1 INTRODUCTION

Housing environment is multi-dimensional phenomena. It includes socio-economic and physical factors. This complexity is characterized by a significant dynamic interaction between resident and his/her residential environment. Indeed, this dynamic interaction is defined as residential satisfaction/dissatisfaction (Amerigo, 1990). It is determined by a mix of factors that include not only the house and its physical qualities but the surrounding neighborhood and social quality (Robert, 1997). Thus, social psychologists generally categorize people's responses to any social-physical object into three categories: cognitive, affective and behavioral (Rosenberg & Hovland, 1960). As a result, residential satisfaction is not merely a predictor for socio-physical aspects of residential environment but also for behavioral aspect as well (Morris and Winter, 1978).

In Malaysia, the dynamic interaction between residents and their residential environment is through more than one indicators. Due to rapid industrialization and urbanization associated with growing urban population and increasing household incomes, the need for proper housing in Malaysia has enhanced (Raja Noriza et al., 2010). Thus, Malaysian government has facilitated the provision of different types of housing units such as Condominiums, Apartments, Detach houses, Terrace houses and etc. instead of traditional Malay houses and Chinese shop-houses in order to attain the needs and wants of Malaysians particularly in urban areas such as Greater Kuala Lumpur. As a case study of this research, Greater Kuala Lumpur, however, has a total

population of six million in 2010 (Teck-Hong, 2011) and is contributed more than 45% of the total number of constructed houses in the country (Ministry of Finance's Valuation and Property Service Department, 2009).

Double-storey terrace house, however, is considered as the most popular form of landed property in Malaysia. It is a type of mass housing initiative, developed by either the government or private developers in Malaysia (Omar et al., 2010). It was adopted from the British terraced house design (Hashim et al., 2006). Malaysian government provided double-storey terrace housing as adequate, affordable and quality housing for all Malaysians particularly the middle-income group.

Therefore, this study seeks to examine the level of satisfaction/dissatisfaction (a dynamic interaction) perceived by residents of double-storey terrace housing in Malaysia, particularly, in Greater Kuala Lumpur area. For better understanding, the researcher selected two study areas which are different in terms of location and age, such as Taman Sri Rampai which is considered as a mature neighborhood with double-storey terrace housing of less than ten years and Taman Keramat Permai which is considered as an old neighborhood with double-storey terrace housing of more than ten years.

## **1.2 PROBLEM STATEMENT**

Since 1970s, Malaysia has experienced rapid industrialization and its economy has undergone major structural changes. Instead of depending only on agriculture and assembly-type industries such as textiles, Malaysia's industrialization efforts shifted to manufacturing sector, and Information and Communications Technology (ICT) sector. Those strategies led Malaysia to achieve rapid economic growth internationally. As a result, rapid urbanization has grown parallel with industrialization in Malaysia. One of

the main aspects of Malaysia's urbanization is expansion of the urban areas in the country, particularly, in Greater Kuala Lumpur area.

However, rapid growth in urban areas such as Greater Kuala Lumpur has led to increasing in urban population and household income. With the implementation of the Malaysian New Economic Policy (NEP) from 1970 onwards, which specifically encouraged the involvement of the Bumiputeras (indigenous Malaysians), who previously rural based, in the industrial and commercial sector of the economy, has a profound effect on the rate of urban population (Siti Zobidah et al., 2008). Thus, the rural population by 2030 is projected to decline to 7.9 million compared to 27.3 million people in urban areas (Belinda et al., 2010). Conversely, with the increase of manufacturing sector and foreign investments which play a major source of job opportunities besides government's efforts, Malaysians' per capita income has increased as well. Today, just 4 percent of Malaysians live in poverty, and GDP per capita has reached \$ 8,100 (MR 24,300), almost doubling each decade. Indeed, Malaysia has transformed from a poor, colonial plantation economy into a modern, upper-middle income country (Nina et al., 2011).

Thus, over the past forty years, Malaysia has experienced a rapid construction of terrace housing units all over the country through either by the government or private developers in the country, in order to meet the increasing demand of middle-income group housing need (Omar et al., 2010). There are approximately 425,324 (2-3) storey terrace houses distributed in Greater Kuala Lumpur as a highest percentage among other types of housing units (Residential Property Stock Table Q3, 2011).

Indeed, these figures indicate that, Malaysians are satisfied with double-storey terrace housing because its demand is very high. Conversely, there are some empirical studies which demonstrate different facets such as, the study done by Amar Singh

Sidhu (2005) reports that crime rate in Malaysia has got worse more than 300% since 1991 in urban areas particularly Greater Kuala Lumpur which affects satisfaction level of the residents of landed housing like double-storey terrace houses (as a social indicator), Secondly, a study done by Said et al. (n.d) show that double-storey terrace houses in Malaysia lack ventilation because its design is not suitable for tropical weather which also affects satisfaction level of the residents (as a physical indicator), finally, a study done by Omar et al. (2010) report about six distinct modifications adopted in double-storey terrace houses in Malaysia such as extension, addition, reduction, division, removal and relocation which indicate dissatisfaction level perceived by the residents (as a behavioral indicator). Thus, double-storey terrace house is considered as the dominant type of housing in Malaysia that demonstrates the dynamic interaction (satisfaction/ dissatisfaction) between residents and their residential environment.

### **1.3 SCOPE OF THE STUDY**

The scope of this research is confined to studying the dynamic interaction between the middle-income residents and their residential environment (double-storey terrace housing) in Greater Kuala Lumpur, Malaysia. Indeed, the dynamic interaction is classified into three main categories namely, cognitive process, affective process, and behavioral process (Amerigo, 1990).

Cognitive process, however, refers to negative or positive perceptual attitudes toward residential environment which is double-storey terrace housing of two study areas namely, Taman Sri Rampai which is considered as a mature neighborhood with double-storey terrace houses of less than ten years old and Taman Keramat Permai which is considered as an old neighborhood with double-storey terrace houses of

more than ten years old. These differences in terms of location and age of two study areas are to obtain clear perceptual attitudes from the residents.

Affective process, on the other hand, refers to satisfied or dissatisfied attitudes towards socio-physical double-storey terrace housing of two study areas which are residential satisfaction/dissatisfaction with housing environment components such as physical features of double-storey terrace houses, double-storey terrace housing support services, public facilities, social environment, and neighborhood facilities.

Finally, behavioral process which refers to all adaptive or non-adaptive behaviors that resident demonstrates in order to make the physical setting satisfactory. Thus, the study covers the types of modifications which have been done by the residents in two study areas as a result of overall satisfaction / dissatisfaction level. In addition, the study covers residential mobility or in other words, the decision to move out or stay in the study areas as behavioral indicator of overall satisfaction/dissatisfaction level as well.

#### **1.4 RESEARCH OBJECTIVES**

Literature on the dynamic interaction between residents and their residential environment reveals that residential satisfaction/dissatisfaction is a complex construct. Thus, they depend on a number of factors which take place into different process such as cognitive, affective, and behavioral. This research intends to investigate those factors and examine their effects on the overall residential satisfaction, with the following objectives:

- 1) To determine the factors influencing the overall residential satisfaction/dissatisfaction with double-storey terrace housing in two study areas (cognitive objective).

- 2) To examine and compare the levels of residential satisfaction/dissatisfaction perceived by the residents of double-storey terrace housing in two study areas (affective objective).
- 3) To explore and compare behavioral characteristics of the residents of double-storey terrace housing in two study areas (behavioral objective).
- 4) To provide recommendations that will help improve the level of residential satisfaction with residents of double-storey terrace housing.

### **1.5 RESEARCH QUESTIONS AND HYPOTHESIS**

Based on the objectives of the study, a few research questions have emerged as stated below:

- 1) What are the variables and factors influencing the level of residential satisfaction/dissatisfaction with the residents of double-storey terrace housing in two study areas?
- 2) What are the levels of residential satisfaction/dissatisfaction perceived by the residents of double-storey terrace housing in two study areas?
- 3) What type of the behaviors which may emerge as a result of overall residential satisfaction/ dissatisfaction with double-storey terrace housing in two study areas?

In general, the hypothesis of this research is based on that; there are significant relationships between residential satisfaction components of housing environment and residents' characteristics.

## **1.6 SIGNIFICANCE OF THE STUDY**

Significance of residential satisfaction study, generally, depends on the place, time, and the purpose of assessment (Bardo and Dokmeci, 1992). Thus, Malaysia (as a place of the study) is experiencing rapid urban growth (urbanization) which is due to rapid industrialization and economic growth since 1970s until now (as time of the study). Therefore, the government has been facilitating different types of housing projects for different income groups, particularly, middle-income which is considered as a majority in the country. Double-storey terrace housing, however, is the most popular type of middle-income housing in Malaysia. Thus, the purpose of residential satisfaction assessment is:

- 1) To increase residential satisfaction levels among the residents (either owners or renters) of double-storey terrace housing.
- 2) To improve the performance of professionals who contribute in double-storey terrace housing projects such as urban planners, architects, and engineers.
- 3) To assist policy makers in formulating their future policies and strategies such as local authorities and municipalities.

## **1.7 LIMITATIONS OF THE STUDY**

Limitations of the study usually constrict the scope and the findings of the research. This study, however, has some limitations in data collection, time, finance and findings of the research.

In primary data, for instance, the limitations were due to three main things. First, the study covers different geographical locations which are different in terms of size, distance and age as well. This reason consumes the time and expenditures of the

researcher. Second, the lack of communication skill between the researcher (foreign student) and the residents (either Malays or other races) which, however, were overcome by support from some undergraduate Malaysian students. This reason also affected the time in terms of monitoring and coordinating between the researcher and the students in conducting the questionnaires. Finally, due to the privacy and time limitation in two study areas, the researcher could not document internal modifications in double-storey terrace houses which limited the findings of the research.

With respect to secondary data, on the other hand, the limitations were due to the delay in finding some references such as articles, books and maps of the study areas which affected the time of completing the research.

## **1.8 ORGANIZATION OF THE STUDY**

This research study on residential satisfaction with double-storey terrace housing is based on data collection in two neighborhoods in Greater Kuala Lumpur. Empirically, it investigates the different age of double-storey terrace housing in two neighborhoods and examines whether double-storey terrace housing at different times has made differences in residents' satisfaction. Theoretically, this research tests the residential satisfaction conceptual framework developed in western studies from Malaysian perspective. Thus, the organization of the study basically involves six chapters as following:

Chapter one is introduction of the research which states the problem statement, and scope of the study. Then, it determines the research objectives which lead to research questions and hypothesis. After that, it addresses the significance of the study and limitations of the study as well. Finally, it describes the organization of the study.

Chapter two is literature review of the research which is divided into two main parts. The first part, introduces the definitions, theories, measurements, empirical studies, and conceptual models of residential satisfaction. The second part, introduces an overview of Malaysian Housing, definition, physical features and modifications of double-storey terrace housing in Malaysia.

Chapter three is methodology which involves the methods used in the research in order to achieve the research objectives and questions. Thus, the chapter includes research design, sampling frame and design, sample selection, data collection, and techniques of data analysis as well.

Chapter four is study area which consists of location background, land use, existing condition of neighborhoods, and existing condition of double-storey terrace housing of two study areas for further understanding of the sites.

Chapter five is analysis and findings which starts with reliability test. Then, it presents residents' characteristics. The chapter also analyzes the residential satisfaction levels with housing environment components. Next, it explores residents' behaviours in two study areas. Finally, it tests the research hypothesis and conclusion is drawn based on the findings.

Chapter six is conclusion and recommendations which summarize, firstly, the research findings. Then, it presents the recommendations. Finally, it concludes by mentioning the suggestions for future research.

## **1.9 CONCLUSION**

This chapter presents an overview of the research on residential satisfaction with double-storey terrace housing for two study areas in Greater Kuala Lumpur, Malaysia. Thus, it has started with identifying the issues and problems which led to formulating

objectives, questions and hypothesis of the research. Then, it determines the scope of the research with taking into consideration the significance of the study. After that, it has recognized the limitations of the study. Finally, it has illustrated the organization of the study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This chapter presents a review of the theoretical and empirical studies which cover the subject of this research. Due to the complex construct of this subject, we divided the review mainly into two parts. First, residential satisfaction which involves definitions, theories, measurements, empirical studies, and conceptual models. Second part, double-storey terrace housing in Malaysia which involves an overview of Malaysian housing, definition, physical features of double-storey terrace house and modifications as well.

#### **2.2 RESIDENTIAL SATISFACTION**

##### **2.2.1 Definitions of Residential Satisfaction**

Residential satisfaction is a complex term as its precise meaning depends on the place, time and purpose of assessment and on the value system of the assessor, involving an extensive range of people: architects, planners, sociologists, psychologists and urban geographers (Bardo & Dokmeci, 1992). In order to understand, however, the concept of residential satisfaction or housing satisfaction as some researchers usually use it, we should, firstly, take the term apart as Housing and Satisfaction and define them separately and secondly, we should define the concept of residential satisfaction or housing satisfaction together.