RESIDENT’S SATISFACTION OF ENVIRONMENTAL RESIDENTIAL QUALITY IN JOHOR BAHRU, MALAYSIA

YAHYA KANANPOUR

A thesis submitted in fulfillment of the
Requirement for the award of the degree of
Master of Science in Urban and Regional Planning

Faculty of Build Environment
University Technology Malaysia

JANUARY 2012
To my beloved my lively wife and daughters
ACKNOWLEDGMENT

Fist and for most, I thank God Almighty for enabling me to complete my Master Project in due time. In preparing this thesis, I was contact with many people, researcher, academician, and practitioners. They have contributed towards my understanding and thought.

In particular, I wish to express my since appreciation to my thesis supervisor Dr. Anuar bin Amir for encouragement, guidance, critics, and friendship. Without his continued support and interest, this thesis would not have been the same as presented here would like to thank all the lecturers in faculty of Built Environment especially my coordinator Assoc. Professor Dr. Foziah Johor, she remained open, tolerable and accessible to me throughout the period of my study here and made me become a better urban planning student. Without her continued technical and academically support ,this thesis would not have been the same time as presented here.

I would also like to express my grateful to Skudai Parade and Mewah View Condominium residents for collection data.

I am truly grateful towards my parents, my wife, and my daughters who have always been my sources of encourage during my studies.
ABSTRACT

To achieve quality environmental residents, require measuring residential satisfaction. Qualities of communities meet to needs and aspire habitants and dwellers. It can be enhance to improve the condominium management. The objective of this research is to evaluate environmental quality live place in term of residential satisfaction. We measured the Residential Satisfaction (RS) contribute to evaluate environmental quality of live place of two high rise building condominium Skudai Parade and Mewah View dwellers, Johor Bahru, Malaysia. A questionnaires consisting of 24 attributes that grouped into five residential satisfaction factors including: Safety, Accessibility, Healthy, Convenience and Social interaction. 81 residents were expected their evaluation about five residential satisfaction of their condominium. The Analysis Hierarchy Process (AHP) multiple decision-making method was conducted to analysis primary data and measuring residential satisfaction. The AHP resulting indicated that the residents who live in the Skudai Parade more satisfactory in term of accessibility to shopping, public transportation, workplace and easy access to other part of the city. Another word, transportation and commercial service are considered as important scale for Skudai parade residents in compare with Mewah View residents. the residents who live in the Mewah View indicated more satisfactory in term of healthy safety and convenience. Welfare and recreation services are considered as important evaluative scale for Mewah View residents in compare with Skudai Parade residents the main resulting of this research is considerable that Mewah View condominium has crated good environmental quality and livable place for their residents by score (1.664) in term of safety, accessibility, convenience, social interaction and healthy in compare with Skudai Parade condominium by score (1.026).
ABSTRAK

Untuk mencapai penduduk alam sekitar yang berkualiti, memerlukan mengukur kepuasaan kediaman. Sifat masyarakat memenuhi keperluan dan bercita-cita habitants dan penduduk. Ia akan dapat meningkatkan untuk memperbaiki pengurusan kondominium. Objektif kajian ini adalah untuk menilai kualiti alam sekitar tempat tinggal dalam jangka kepuasaan kediaman. Kami diukur Kepuasan Kediaman (RS) menyumbang untuk menilai kualiti alam sekitar tempat tinggal dua tinggi kenaikan bangunan kondominium Skudai Parade dan penduduk View mewah, Johor Bahru, Malaysia. Satu soal selidik yang terdiri daripada 24 ciri-ciri yang dikumpulkan ke dalam lima faktor kepuasaan kediaman termasuk: Keselamatan, Akses, Sihat Convenience, dan interaksi Sosial. 81 penduduk dijangka penilaian mereka kira-kira lima kepuasaan perumahan kondominium mereka. Proses Hierarki Analyis (AHP) membuat keputusan pelbagai kaedah telah dijalankan untuk analisis data utama dan mengukur kepuasaan kediaman. AHP yang terhasil ditunjukkan bahawa penduduk yang tinggal di Skudai Parade yang lebih memuaskan dari segi akses untuk membeli-belah, pengangkutan awam, tempat kerja dan mudah akses ke bahagian lain bandar. Satu lagi perkataan, pengangkutan dan perkhidmatan komersial dianggap sebagai skala penting bagi penduduk perbarisan Skudai di bandingkan dengan penduduk View mewah. penduduk yang tinggal di View mewah menunjukkan lebih memuaskan dalam tempoh keselamatan dan kemudahan yang sihat. Kebajikan dan perkhidmatan rekreasi dianggap sebagai skala penilaian penting bagi penduduk View mewah di bandingkan dengan penduduk Parade Skudai utama kajian ini adalah agak bahaya kondominium mewah View telah crate kualiti alam sekitar yang baik dan di tempat yang sesuai didiami untuk penduduk mereka dengan skor (1,664) dalam jangka keselamatan, akses, kemudahan interaksi sosial dan sihat di bandingkan dengan Skudai Parade kondominium dengan skor (1,026).
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DECLARATION</td>
<td></td>
<td>ii</td>
</tr>
<tr>
<td>TITLE PAGE</td>
<td></td>
<td>iii</td>
</tr>
<tr>
<td>AUTHOR’S DECLARATION</td>
<td></td>
<td>iv</td>
</tr>
<tr>
<td>DEDICATION</td>
<td></td>
<td>v</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td></td>
<td>vi</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td></td>
<td>vii</td>
</tr>
<tr>
<td>ABSTRAK</td>
<td></td>
<td>viii</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>LIST OF TABLE</td>
<td></td>
<td>xiv</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td></td>
<td>xvi</td>
</tr>
<tr>
<td>LIST OF APPENDICES</td>
<td></td>
<td>xviii</td>
</tr>
</tbody>
</table>

## 1 INTRODUCTION

1.1 Background of the Study  
1.2 Statements Problems  
1.3 Purpose of Study  
1.4 Research Question  
1.5 Objective of the Study  
1.6 Signification of the Study  
1.7 Scope of the Study
1.8 Research Methodology 6
1.9 Research Outline 6

2 LITERATURE REVIEW
2.1 Introduction 8
2.2 Residential Satisfaction 9
2.3 Over view literature of Residential Satisfaction (RS) 10
2.4 Residential Choice 11
2.5 Environmental Quality 11
2.6 Brief review of variable 15
   2.6.1 Connection and Safety 15
   2.6.2 Mobility 15
2.7 Conclusion 16

3 RESEARCH METHODOLOGY
3.1 Introduction 18
3.2 Study Area 18
   3.2.1 Skudai Parade Condominium 19
   3.2.2 Mewah View Condominium 20
3.3 Data Collection 21
   3.3.1 Primary Data 22
   3.4 Analysis Data 22
   3.5 Hierarchy Analysis Process (AHP) Method 28
3.6 Guideline of AHP 29

4 ANALYSIS AND DISCUSSION
4.1 Introduction 35
4.2 Individual Attribute Respondent 36
   4.2.1 Skudai Parade Condominium 36
   4.2.2 Mewah View Condominium 37
4.3 Analysis Residential Satisfaction Factors 38
  4.3.1 Social Interaction 40
  4.3.2 Safety 41
  4.3.3 Accessibility 44
  4.3.4 Healthy 48
  4.3.5 Convenience 50

4.4 Summary

5 CONCLUSION AND RECOMMENDATION
  5.1 Introduction 54
  5.2 Overall Finding 55
  5.3 Recommendation for further study 59

REFERENCES 60
APPENDIX A 65
APPENDIX B 85
## LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE NO.</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Definition of Livability</td>
<td>12</td>
</tr>
<tr>
<td>2.2</td>
<td>Definition of Environment Quality</td>
<td>13</td>
</tr>
<tr>
<td>2.3</td>
<td>Definition of Quality Live</td>
<td>14</td>
</tr>
<tr>
<td>3.1</td>
<td>The subjective variables and attribute residential satisfaction</td>
<td>32</td>
</tr>
<tr>
<td>3.2</td>
<td>The objective variables residential satisfaction</td>
<td>33</td>
</tr>
<tr>
<td>3.3</td>
<td>Pair-wise comparison scale for AHP preference</td>
<td>33</td>
</tr>
<tr>
<td>3.4</td>
<td>Average random consistency (RI)</td>
<td>34</td>
</tr>
<tr>
<td>4.1</td>
<td>Individual attributes respondents of the Skudai Parade</td>
<td>36</td>
</tr>
<tr>
<td>4.2</td>
<td>Individual attributes respondents Mewah View</td>
<td>37</td>
</tr>
<tr>
<td>4.3</td>
<td>Factors and Attributes Study areas CI/RI &gt; O.1</td>
<td>39</td>
</tr>
<tr>
<td>4.4</td>
<td>The scores of Social Interaction Factors</td>
<td>41</td>
</tr>
<tr>
<td>4.5</td>
<td>The scores of Safety Factors</td>
<td>42</td>
</tr>
<tr>
<td>4.6</td>
<td>The scores of Accessibility Factors</td>
<td>47</td>
</tr>
<tr>
<td>4.7</td>
<td>The scores of Healthy Factors</td>
<td>48</td>
</tr>
<tr>
<td>4.8</td>
<td>The scores of Convenience Factors</td>
<td>51</td>
</tr>
<tr>
<td>5.1</td>
<td>Overall evaluation of environmental quality of Skudai and Mewah</td>
<td>58</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE NO.</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Johor Baharu in Malaysia</td>
<td>19</td>
</tr>
<tr>
<td>3.2</td>
<td>Johor Stats in Malaysia</td>
<td>19</td>
</tr>
<tr>
<td>3.3</td>
<td>Skududai Parade and Mewah View condominiums location</td>
<td>19</td>
</tr>
<tr>
<td>3.4</td>
<td>Skudai high way</td>
<td>20</td>
</tr>
<tr>
<td>3.5</td>
<td>The Aerial Skudai Condominium</td>
<td>20</td>
</tr>
<tr>
<td>3.6</td>
<td>Two block Skudai Parade Condominium</td>
<td>20</td>
</tr>
<tr>
<td>3.7</td>
<td>The Aerial photo of Mewah View Condominium</td>
<td>21</td>
</tr>
<tr>
<td>3.8</td>
<td>The 4 blocks of Mewah View Condominium</td>
<td>21</td>
</tr>
<tr>
<td>3.9</td>
<td>Hierarchy multi-attribute index system</td>
<td>23</td>
</tr>
<tr>
<td>3.10</td>
<td>Relationship between objective and subjective attributes…</td>
<td>25</td>
</tr>
<tr>
<td>3.11</td>
<td>Goal and Criteria used in AHP</td>
<td>31</td>
</tr>
<tr>
<td>4.1</td>
<td>The security gate in the Mewah View</td>
<td>42</td>
</tr>
<tr>
<td>4.2</td>
<td>The inside street Mewah View</td>
<td>43</td>
</tr>
<tr>
<td>4.3</td>
<td>The walkable place inside Skudai Parade</td>
<td>43</td>
</tr>
<tr>
<td>4.4</td>
<td>The walkable rout in the Mewah View</td>
<td>44</td>
</tr>
<tr>
<td>4.5</td>
<td>The Skudai High Way</td>
<td>44</td>
</tr>
</tbody>
</table>
4.6  Arterial picture of Skudai Parade and Mewah View  
4.7  Skudai High Way  
4.8  Jalan Bukit Mewah  
4.9  Skudai high way  
4.10 Green space in the Skudai Parade  
4.11 The green area in the Mewah View  
4.12 The swimming pool in the Skudai Parade  
4.13 The swimming pool in the Mewah View  
4.14 The tenses court in the Skudai Parade  
4.15 The tenses court in the Mewah View  
5.1 Overall evaluation of Skudai Parade and Mewah View
CHAPTER 1

INTRODUCTION

1.1 Background of Study

Most large cities in the world are characterized by high-density residential area. Under this circumstance, environmental residential quality became significant challenge and big issue in the urban planning domain. To achieve the quality environmental residential communities, urban planner need to assess livability according to residential perception. Urban planners have significant vision on environmental residential quality that contribute to livability (Corbusier, 1935; Howard, 1898; Jacobs, 1961; Dantzig and Saaty, 1973; Irene van Kamp, et al., 2003).

Despite several outstanding researches carried out to asses residential environmental quality, but the further study need to remark. Most of researchers consider residential satisfaction (RS) in term of neighborhood relationship, the local physical environment especially its function such as (safety, access to urban service, facilities, and infrastructure, public transport), aesthetic (appearance), healthy feature (air quality, pollution, cleanliness) (Rioux and Werner (2011).

An assessment was carried out on residential satisfaction in public low housing dweller of Kuala Lumpur, Malaysia, with forty-five variables grouped into five
components, (i) dweller unit feature, (ii) dweller unit support service, (iii) public facilities, (v) social environment, and (iv) neighborhood facilities. Using MLR it found that residential satisfaction of public low cost housing can be enhance to improve the management of security control, perimeter road, cleanliness and garbage collection by local government KLHC (Abdul Mohit, 2010). Other study was carried out in Hong Kong found relationship between current density control and environmental quality (Edwin H.W, et al 2002).

Some efforts have been made to investigate relationship between landscape structure and neighborhood environmental quality living space. Lee et al (2008) have measured the environmental quality neighborhood of College Station city on eight question including “good place to live” “pride in neighborhood”, “physical condition” “safety” “cleanness” “appearance of house” “quality of park” and “overall neighborhood satisfaction” (Sang – woo Lee, et al 2008).

A quality community is one which meets the need and aspires of its visitor and inhabitants. Smith, et al (1997) an investigation of physical criteria that contribute to quality community of three communities in Toronto, HighPark, and Parkdale, six categories and 28 sub-categories of community quality were developed. The matrix analysis showed that the highest respect relate to physical form, and the top physical form criteria was, a walkable, outdoor amenity, lots of seating, barrier free, and open space in residential area.

Measuring the perceived quality of residential environment issue is the other research that carried out in Istanbul, Turkey. Six factors were studied, (i) size and physical condition, (ii) accessibility to city center, work place, hospital, shopping center (iii) climate control, (iv) availability and maintenance of social, recreational, and educational services, (v) social and environmental problem, (vi) satisfaction with neighborhood (Turkoglu, 1997).

In summary the recent research was concerned with residential environmental quality issue in diverse communities, and each study has identified critical factors and
dimension residential satisfaction perceived its residents. The residential satisfaction are useful reference for this research, but it seems will not be sufficient and comprehensive to answer research question, the people who living in high residential building, different concerns about their surrounding environment. In this research we are trying to ignore this limitation research or the questionnaire will be distributing some expertise who live in the case study.

1.2 Problem Statement

Among the most important topic for research in urban planning field are assessment of urban environmental residential quality especially in high-density residential. This concern raises the question on what is inhabitant preference and satisfaction.

The main issue, in fact is providing satisfactory living environment. Urban professional planners consider that comprehensive development has the advantages of providing greater design flexibility, better neighborhood environment, exclusive open space, and community facilities (Cullingworth & Nadin, 1997). Prospective homebuyer are attracted to this distinctive physical feature (Suen & Bo-sin Tang, 2002). Recent research result of Wang and Chien (1999) indicate that 51.61% of residents of high-density complex are not satisfied with their living environment in the areas of Taiwan (Shu-Chun Lucy Huang, 2005).

In general, developers are responsibility for planning, layout design and construction of housing development. The other issue and problem base on some observation, developer attempt to maximize use of land and generate more housing units with less consideration quality living space for dweller in stance of, accessibility, convenience, safety and security, healthy, sense of place, social interaction.
Johor Bahru has under one rapid population growth and urban expansion in its metropolitan areas with high-density urban residential. This study is concerned with environmental residential quality issue in Skudai Parade and Mewah View in Johor Bahru as a case study by Analysis Hierarchy Process (AHP) method. The research variable will be 5 factors including, Accessibility, Convenience, Social interaction, Safety and Security, Healthy. The analytical hierarchy process is increasingly used to process perception, for deriving relative importance weights among assessed attributes, which are needed to aggregate criteria assessment result into combine score (H.K. Lai, 2009). This research wants to exam which there is less considered of quality environment in high-density condominium driving of satisfaction residential in the case study of Johor Bahru.

1.3 Purpose of the Study

The purpose of this study is to assess residential quality criteria that contribute to the residential quality of community, or will contribute essential qualities of high-density residential.

1.4 Research Questions

1. What are the residential environmental quality issues?
2. What are the levels (score) of residential satisfaction perceived?

1.5 Objective of the Study

i) Literature review of assessment residential satisfaction.
i) To investigate the level of residential satisfaction perceived and preference by residents Mewah View and Skudi Parade in Johor Bahru Malaysia

iii) Applying AHP for measuring residential satisfaction and assessment residential preference.

1.6 Significance of the Study

The result of this research will be useful for government who want to better control urban growth, high-rise condominium are built by statutory requirement imposed by government as well as important for urban planner who want to provide public service and better environment for urban population. The architecture and engineer who want to better design, banks who want to finance, planner who want to approve it, house owner who want to move in and developer who want to build it by understanding the variety of residential satisfaction and residential preferences.

1.7 Scope of Study

This research provides literature review of different type method assessment residential satisfaction, how useful measuring residential satisfaction in urban planning and development by understating residential environment diversification, residential preference in Skudi Parade and Luxury Mwah View high-density condominium case study of Johor Bahru, Malaysia. The AHP method will use the measuring residential satisfactions that contribute to assess environmental residential quality. The residents who live in the both case study were asked on, safety and security, accessibility, healthy, social interaction and convenience.
1.8 Research Methodology

Research methodology is the main aspect of research, in order to achieve to objective. This research wants to implement Analysis Hierarchy Process (AHP) which develop by Saaty (1969), for measuring residential satisfaction that contributes to assessment environmental residential quality. More detail elaborate discussion in chapter 3. The primary data for this research is based on case study. The date for literature review and secondary date are collected from article, books, journal, newspaper, to understanding background of research as well as various opinion on research.

1.9 Research Outline

Chapter 1: introduction; introduction covered research of background, statement problem, and continued by objective, research question. This chapter in fact highlights the issue of the environmental residential quality perceived.

Chapter 2: literature Review, the second chapter consist from many research carried out various place with different type issue, also understanding shortcoming and strongest previous method.

Chapter 3: Research methodology; The third chapter covers the method use for measuring residential satisfaction.

Chapter 4: Analysis; The formulate the method for environmental residential quality, collected and analysis data will elaborate. The result will determine what level of residential satisfaction perceived inhabitant and how is current condition of environmental residential quality in Skudi Parade and luxury Mewah View condominium of Joho Bahru, Malaysia.
Chapter 5: Conclusion and Suggestion; the final chapter will conclusion and proposes another alternative will be implemented to improve environmental residential quality.
References


Jacob, J. (1961), the death and life of great Americana cities, New York Random House


Masnavi, Mohamed Reza, (2000), the compact city in practice: The new millennium and the new urban Paradigm. In achieving sustainable urban form, pg 64. London; New York