RESIDENTIAL ENVIRONMENTAL SATISFACTION, OF ANCIENT AND MODERN NEIGHBOURHOODS IN SLEMANI CITY, KURDISTAN- IRAQ.

SAMIRA TAAEB RASHID

A thesis submitted in fulfillment of the Requirements for the award of the degree of Master of Science in Housing Planning

Faculty of Built Environment
University Technology Malaysia

JANUARY. 2013
All praises to Allah Almighty for the strengths and his blessings in completing my this research

Dedicated to my family especially my beloved Mother(Sabria), Father(Taeeb), my lovely nephew kaka Zhir who suffered a lot for being away from me, and all sisters and brothers, and real friends who supported me and helped me, and all relatives who encouraged me to continue this research. Alhamdwlilah.
ABSTRACT

The concern for the quality of life in urban centres has led to an increasing interest among policymakers and planners on how to measure those variables that influence the perceived neighbourhood satisfaction amongst residents. This study examines the residential environmental satisfaction, of old (Malkendi) and new (Bakhtiari nwe) neighbourhood in Slemani city, Kurdistan-Iraq. A household survey 200 respondents were randomly sampled in each of the two neighbourhoods. Descriptive and Inferential statistical techniques (Chi square, t-test and correlation spearman rank) were used in the data analysis. Findings from the study showed that significant difference exists in the level of neighbourhood satisfaction among the two neighbourhoods. Respondents from the new neighbourhood were more satisfied with the physical environment attributes (road network, building design, open space and green space) and social environment than those from the old neighbourhood. It was also found that the demographic characteristics of the respondents significantly influence to their level of perception of neighbourhood satisfaction except for gender. Also, the respondents’ choice of neighbourhood with respect to safety and provision of facilities/services was found to be significantly related to their level of neighbourhood satisfaction. Policy makers and planners should try to revitalize the infrastructures especially road networks, green space and building structures in the old neighbourhood to ensure that residents’ welfare and satisfaction are met. Further research should probe in reasons why there are variations in neighbourhood satisfaction among the demographic sub-groups as this would help planners during planning and designing of neighbourhoods to ensure that the needs of every group in the population is met. Increasing the sample size for the future research to more than two neighborhood will equally give a better representation of the city.
ACKNOWLEDGEMENT

IN THE NAME OF ALLAH THE MOST (MECIFULL AND GRACIOUS)

First and foremost, I gratefully acknowledge Allah’s support and assistance for me in all my life. Many thanks to the Government of Kurdistan Region/Iraq, Ministry of Higher Education and Scientific Research,(Dr.Dlawar, Dr.Govand , Dr.Sherko and Dr.Amanj) for providing the opportunity to finish my MA degree.

Enormous gratitude goes to my parents, sisters and brothers and my relevant for their endurance, encouragement and great support. I would like to express my deepest thanks and gratitude to my supervisor Prof. Dr. Ibrahim bin Nagah for his profound expertise, his guidance and instructive suggestions without which the present thesis would not have come into its present shape. I am much indebted to the faculty of built environment- Housing Planning Development at the University of UTM in Malaysia, especially, Dr. Nooraini (department’s coordinator), Dr. Zaly, Dr. Tareef, Dr. Fozia, Dr. Nabiil for having offered their rare gifts of intellectual generosity during my research study Really appreciate their helps.

I am mainly grateful to Directorate of statistical in Slemani especially (Mr. Mahmood, the manager, Mr. Omed), and Mr. Nyaz in the Directorate of municipality in Slemani,for their help in gathering sources and useful information and also all friends and all who helped me in any step in my research.

I am also greatly indebted to all residents in (Bakhtiari nwe and Malkandi) who participated and helped me to complete this thesis. my great thanks to their cooperation, facilitation and for offering participators and information during the process of gathering data and questioners, finally great thanks for my sister (Pary), brother (Tahir) and friends (Sawen, Saman and Awat) who gave me their expensive time during gathering the data collection.
ABSTRAK

# Table of Contents

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>DECLARATION</strong></td>
<td>ii</td>
</tr>
<tr>
<td></td>
<td><strong>DEDICATION</strong></td>
<td>iii</td>
</tr>
<tr>
<td></td>
<td><strong>ACKNOWLEDGEMENTS</strong></td>
<td>iv</td>
</tr>
<tr>
<td></td>
<td><strong>ABSTRACT</strong></td>
<td>v</td>
</tr>
<tr>
<td></td>
<td><strong>ABSTRAK</strong></td>
<td>vi</td>
</tr>
<tr>
<td></td>
<td><strong>TABLE OF CONTENTS</strong></td>
<td>vii</td>
</tr>
<tr>
<td></td>
<td><strong>LIST OF TABLES</strong></td>
<td>xii</td>
</tr>
<tr>
<td></td>
<td><strong>LIST OF FIGURES</strong></td>
<td>xiii</td>
</tr>
<tr>
<td>1</td>
<td><strong>INTRODUCTION</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1 Background</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1.2 statement problem</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>1.3 research question</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>1.4 aim and objective of the study</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1.5 scope of study</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1.6 Study area</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>1.7 Research methodology</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>1.7.1 Research approach</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>1.7.2 Units of analysis</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>1.7.3 Sampling method</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>1.7.4 Data analysis technique</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>1.8 Significant of study</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td><strong>LITERATURE REVIEW</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>CONCEPT AND FACTORS FOR RESIDENTIAL ENVIRONMENTAL SATISFACTION</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.1 Introduction</td>
<td>10</td>
</tr>
</tbody>
</table>
2.2 Concept of Residential Environmental satisfaction  

2.3 Factors That Determine Residential Environmental Satisfaction  
   2.3.1 Social characteristics  
      2.3.1.1 Household characteristics  
      2.3.1.2 Social and recreation facilities  
      2.3.1.3 Crime and safety  
   2.3.2 Physical Environment  
      2.3.2.1 Environmental Condition (Water)  
      2.3.2.2 Land use and density  
      2.3.2.3 Transportation and Road network  

2.4 Factors That influence the choice of Residential area  

2.5 The Role of Physical Planning in Residential Environmental Satisfaction  
   2.5.1 The concept of neighborhood planning  
   2.5.2 Perry neighborhood concept  
   2.5.3 The Raeburn Idea  
   2.5.4 New urbanism  
   2.5.5 The concept of smart growth  

2.6 Conclusion  

3 STUDY AREA  

3.1 Introduction  
3.2 Kurdistan region  
3.3 Slemani city  
   3.3.1 Historical account  
   3.3.2 Special growth of Slemani (1925-2003)  
   3.3.3 Planning context in Slemani  
3.4 Land use pattern in Slemani  
   3.4.1 Housing  
   3.4.2 Recreation  
3.5 The study area of Neighborhoods  
   3.5.1 Malakndi Neighborhood  
   3.5.2 Bakhtiarinwe Neighborhood  
3.6 Conclusion
## LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE NO</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Physical and social attributes of the neighbourhoods</td>
<td>45</td>
</tr>
<tr>
<td>5.1</td>
<td>demographic characteristics of respondents</td>
<td>60</td>
</tr>
<tr>
<td>5.2</td>
<td>Level of satisfaction according to Physical and social environment attributes of Malkandi and Bakhtiari new</td>
<td>73</td>
</tr>
<tr>
<td>5.3</td>
<td>correlation between demographic characteristics and Satisfaction with physical environment</td>
<td>75</td>
</tr>
<tr>
<td>5.4</td>
<td>correlation between demographic characteristics and Satisfaction with social environment</td>
<td>76</td>
</tr>
<tr>
<td>5.5</td>
<td>Factors for the choice of living in the neighborhoods Malkandi and Bakhtiari new</td>
<td>78</td>
</tr>
<tr>
<td>5.6</td>
<td>Correlation between neighbourhood satisfaction (safety) and choice of neighbourhood</td>
<td>79</td>
</tr>
<tr>
<td>5.7</td>
<td>Correlation between neighbourhood satisfaction (appearance) and choice of neighbourhood</td>
<td>80</td>
</tr>
<tr>
<td>5.8</td>
<td>Correlation between neighbourhood satisfaction (service/ facilities) and choice of neighbourhood</td>
<td>81</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>1.1</td>
<td>Iraq map display location of Sleman</td>
<td>5</td>
</tr>
<tr>
<td>1.2</td>
<td>Map appear location of the location of case study neighborhood</td>
<td>6</td>
</tr>
<tr>
<td>2.1</td>
<td>Residential environmental satisfaction framework</td>
<td>13</td>
</tr>
<tr>
<td>2.2</td>
<td>Perry concept</td>
<td>25</td>
</tr>
<tr>
<td>2.3</td>
<td>Radburn idea</td>
<td>26</td>
</tr>
<tr>
<td>3.1</td>
<td>Kurdistan map</td>
<td>31</td>
</tr>
<tr>
<td>3.2</td>
<td>Slemani map</td>
<td>32</td>
</tr>
<tr>
<td>3.3</td>
<td>Slemani in the year 1925</td>
<td>34</td>
</tr>
<tr>
<td>3.5</td>
<td>Slemani in 2010</td>
<td>36</td>
</tr>
<tr>
<td>3.6</td>
<td>Big mosque (Mzgawty Gawra) in Slemani</td>
<td>38</td>
</tr>
<tr>
<td>3.7</td>
<td>angled structure old buildings in the core of the city</td>
<td>39</td>
</tr>
<tr>
<td>3.8</td>
<td>New buildings within the quarter’s</td>
<td>39</td>
</tr>
<tr>
<td>3.9</td>
<td>Old angled structure buildings</td>
<td>39</td>
</tr>
<tr>
<td>3.10</td>
<td>Green areas within the city</td>
<td>40</td>
</tr>
<tr>
<td>3.11</td>
<td>Bowling centers a new recreational center in Slemani</td>
<td>41</td>
</tr>
<tr>
<td>3.12</td>
<td>Azadi Park in Slemani</td>
<td>41</td>
</tr>
<tr>
<td>3.13</td>
<td>Sarchnar in western part of Slemani</td>
<td>41</td>
</tr>
<tr>
<td>3.14</td>
<td>Malkandi neighborhood</td>
<td>42</td>
</tr>
<tr>
<td>3.15</td>
<td>Shops, Parking lots and Buildings in Malkendi</td>
<td>43</td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>3.16</td>
<td>Bakhtiarı new neighborhood</td>
<td>44</td>
</tr>
<tr>
<td>3.17</td>
<td>Green areas Bakhtiarı new</td>
<td>44</td>
</tr>
<tr>
<td>3.18</td>
<td>Green area in front the residential</td>
<td>44</td>
</tr>
<tr>
<td>4.1</td>
<td>Research Framework</td>
<td>48</td>
</tr>
<tr>
<td>4.2</td>
<td>Research Design</td>
<td>50</td>
</tr>
<tr>
<td>4.3</td>
<td>Methodology Framework</td>
<td>56</td>
</tr>
<tr>
<td>5.1</td>
<td>Distribution of occupation in Malkandi and Bakhtiarı new</td>
<td>61</td>
</tr>
<tr>
<td>5.2</td>
<td>Duration of stay in neighbourhood</td>
<td>62</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

1.1 Background

Residential environment quality and satisfaction is among the basic conditions for quality of life, as well as the main support for the economic activities, culture and society. Due to the diversity of personal senses of looking at things as well as the varied lifestyles, people’s demands, preferences and evaluations of their neighbourhood environment are equally becoming more diversified (Ge and Hokao, 2005). The focus on urban neighbourhoods by decision makers has caused a renewed interest in neighbourhood quality of life and satisfaction (Parkes et al., 2002). Policy makers are now looking at those attributes that contribute majorly in predicting satisfaction and how they interact with the physical and social environment. A large body of literature exists on neighbourhood satisfaction (Bonaiuto et al., 1999; Bonaiuto et al., 2003; Coker et al., 2007; Gidlow et al., 2010; Lovejoy et al., 2010). However, Permentier et al., (2010) noted three main groups of determinants on neighbourhood satisfaction: subjective evaluations of neighbourhood attributes and evaluation of the dwelling, personal/household characteristics and objective neighbourhood characteristics. Parkes et al., (2002) observed that subjective evaluations of neighbourhood attributes are much more important in explaining neighbourhood satisfaction than personal/household
characteristics and objective neighbourhood attributes. What people perceive of an environment rather than what the environment is most times determining their level of satisfaction. Although neighbourhood satisfaction could be seen as a universal concept since it bothers on the environmental quality of life relevant to physical, and social aspect of a geographic location, Westaway (2009), noted that knowing the most important aspects in assessing neighbourhood satisfaction is difficult to arrive due to the fact that studies vary in the range of variables they incorporate and their sample population. However, assessing environmental quality of life and neighbourhood satisfaction has become a basis for initiating public policies and fund disbursement through identification of those areas in the community that need improvement of services, facilities and revitalisation (Sirgy and Cornwell, 2002). Changing residential landscape, environment and functions impact on the quality of life and the resident satisfaction in any neighbourhood (Temelová and Dvorakova, 2011). Neighbourhood feeling in the present day urban environment does not depend much on sharing of common physical residential environment rather the individual activities of dwelling occupants that shape the social environment (Gokhan, 2005).

Studies have shown that communities do not have the same level of infrastructure likewise individuals who reside in them and that individuals with a varied cultural background may live in a neighbourhood and yet not share similar views regarding environmental features (Schell and Ulijaszek, 1999; Caughy et al., 1999). The study of urban quality of life is best conceptualized at the neighbourhoods because they represent the immediate living environment where people live most of their lives (Slavuj, 2011). Chapman and Lombard (2006) observed that neighbourhoods that are unable to address and adequately satisfy perceived needs of residents are liable to losing their inhabitants to those areas that can address their needs. The present study, will examine the level to which there are differences in neighbourhood satisfaction of the neighbourhood by residents. The probable outcome will be examined of those factors that are important in resident’s view of their neighbourhood.
1.2 Statement of problem

The importance of neighbourhood environment to urban dwellers cannot be overemphasized, it remains the most fundamental basis of life because where people live or spend the majority of their lives affect their economic, social, health, and mental well-being. As a result, neighbourhood can affect one’s educational attainment, life expectancy, and income and so on. Neighbourhood is a major aspect of our daily lives and a less than satisfactory neighbourhood may result in poor health outcomes and can compel residents to relocate elsewhere (Chapman and Lombard, 2006). Neighbourhood satisfaction helps residents in evaluating the difference between the actual and desired situations (ideal). Most people in developing countries are still lacking the basic necessities of life such as water, shelter, health facilities, good road network, electricity etc. The lack of basic needs of live by many in the developing countries could be due to mismanagement of public funds by leaders, lack of adequate manpower to harness the resources available, political instability and lack of planning by local authorities. Since the fall of the last military regime some years ago, cities in the Kurdish region of Iraq have been facing a series of problems such as electric, water, roads, noise and air pollution. Also ethnic tensions, violence crime and tension among the political groups have helped in increasing the problems. All these affect both the social and physical environment in the different neighbourhoods across the cities in Iraq, including Slemani.

1.3 Research questions

1) Are there any differences in level of satisfaction among the residents of the new and old neighbourhood?
2) Is the background of the residents influence their level of environmental neighbourhood satisfaction with their neighbourhood.
3) Is there any relationship between residents’ levels of satisfaction and neighbourhood choice factors?

1.4  **Aim and objectives of the study**

The overall aim of the study is to evaluate the neighbourhood satisfaction of residents in old and new residential areas of Slemani city, Iraq. To make it easier the aim is divided into three objectives.

**Objectives**

1) To examine the social and physical level of environmental neighborhood satisfaction of the new and old neighbourhood of Slemani city.
2) To compare the level of neighborhood environmental satisfaction between the old and new neighborhood, and also to examine how the background of residents influence the level of satisfaction.
3) To analyze the relationship between residents level of satisfaction and neighborhood choice factors.

1.5  **Scope of study**

1- To identify the indicator or attributes to be use in measuring environmental satisfaction. This will be based on the literature review on the previous study done as were.
2- Conduct empirical study on two neighbourhoods in Slemani city one is the old and the others is new neighbourhood.
3- To compare the level of residential environmental satisfaction between the old and new neighbourhood; and also examine how the factors related to the background of the residents influence the level of satisfaction.

4- The factor of the choice of neighbourhood is also examined and relate to the level of satisfaction.

The concept of quality of life has many domains which could be investigated in an urban centre; the present study will focus on physical, social and environmental domain of quality of life only. The physical environment will focus on roads, green areas, noise pollution, architectural, town planning and sanitary condition. For the social environment, crime, recreation, health and education will be examined.

1.6 Study area

Figure 1.1 Map display the location of Slemani city in Iraq
The present study will be carried out in two neighbourhoods of the city of Slemani. The first neighbourhood Malkandi is located in the old (core) of the city while the second Bakhatiari nwe is located in the newer part. Malkandi is the oldest neighbourhood in Slemani. It was established in 1784 and it forms the nucleus of Slemani. It has a pentagon shape and consists of eight districts divided mainly by straight roads which were designed in the 1950s and 60s. Within the districts are a number of historical networks of irregular and winding roads. Most of the historical buildings here are preserved as the origins of Kurdish culture. Due to the land use mix in this neighbourhood, heavy vehicular traffic is always experienced. Bakhtiyari nwe located in the western part of the city has a well laid road network, street arrangement and green areas. The present study seeks to gain useful insight into the neighbourhood satisfaction of residents in the old (Malkandi) and (Bakhatiyari nwe) modern residential neighbourhoods in Slemani city of Kurdistan-Iraq.

Figure 1.2  Map appear the location of the two neighbourhoods in Slemani
1.7 Research methodology

1.7.1 Research Approach

The study adopted a quantitative approach which involves the collection, analysis and interpretation of data using statistical techniques. A cross-sectional survey using a well-structured questionnaire was used in eliciting information from respondents. The first is the theoretical base of the study through which domains are defined and indicators developed. This phase involves setting up criteria through the use of questionnaires. The second involves carrying out survey, data collection, analysis and making conclusions about resident satisfaction in the area under consideration. In this study, past research carried out on neighbourhood satisfaction formed the basis upon which indicators were developed for questionnaire design. After the designing of the questionnaire, the next stage involved the data collection, analysis and making some deductions. The secondary data came from the Urban Planning department at Slemani.

1.7.2 Units of analysis

The unit of analysis that was used for this study is individual. Male and female household heads were sampled during the survey. Children were not sampled. The reason for choosing household heads is based on the fact that decisions regarding relocation, renting, purchasing of plots and buildings of the house in any particular neighbourhood are largely determined by the household head.
1.7.2 Sampling method

The stratified random sample approach was adopted in selecting the sample size of the entire Slemani city. This involves the stratifying the city in two, the ancient and modern neighbourhoods. In the ancient neighbourhood, Malkandi was selected while Bakhatiyari nwe was selected in the modern neighbourhood. In each of these two neighbourhoods, 200 respondents were sampled making a total of 400 for both neighbourhoods.

1.7.3 Data analysis/techniques

The data was analyzed using the special package for social science statistics (SPSS) 16 version. Both inferential and descriptive statistics will used during the analysis. The descriptive statistics include: frequency, percentages, mean, standard deviation and charts. For the inferential statistics, (t-test, correlation, chi square) were used. The detail description and the methodology are described in chapter four.

1.8 Significance of study

This study provides an insight and understanding of the feelings of residents in Slemani city towards their neighbourhood. The current level of deprivation and insecurity in Iraq has affected all facets of life making it difficult for people to clearly define their needs. This is because of the long years of military dictatorship which the citizenry has passed through under the regime of the late Saddam Hussein. Slemani and other cities in the Kurdish region, had suffered longer years of neglect during this period. Secondly, the study will reveal the current level of infrastructural development as perceived by respondents in the old and new neighbourhoods with a view to knowing the causes of satisfaction or dissatisfaction among residents. This information is
necessary as it will help in guiding policy makers and urban planners on ways of creating a better living environment for the city dwellers.
ABBREVIATIONS


Bonaiuto, M., Fornara, F and Bonnes, M (20030). Indexes of Perceived residential environment quality and neighbourhood attachment in urban environments: a confirmation study on the city of Rome. Landscape and urban planning 65 41 52.


C. A. Perry, “‘The Neighborhood unit, a Scheme of Arrangement for the Family-Life Community,”” 106

Chapman D.W (2007). Analysis of determinants in neighbourhood satisfaction between defended and defensible communities with general and urban housing environments. A dissertation to the faculty of Old Dominion University in partial fulfilment of the requirements for degree of doctor of philosophy.


City of Saskatoon Community Services Department City Planning Branch (2004). Neighbourhood Design Options Study.


Carmona, M; Magalhaes, C; and Hammond, L. (2008). Public space: The management dimention. First publishd 2008 by Rootledge, 2 park square Milton park, Abingdon, Oxon ox14 4RNSimultaneously published in the USA


Friedman, B; Gordon, P and peers,J (1994). Effect of non-traditional neighborhood design on travel characteristics. Res Rec.1466, pp.63-70


Second Edition
Environments: An Investigation of Occupants’ Perception. MPRA Paper No
.22481
Residents of three Housing Types . Social Indicators Research 19 303-315
Hipp, J., (2009). What is the Neighbourhood in Neighbourhood satisfaction ?
Comparing the effects of structural characteristics measured at the micro-
neighbourhood and tract levels . Urban studies 47(12) 2517-2536.
with neighbourhoods . Environment and Behaviour 40 :619
adult participation in physical activity. A review. Am J.prev. Med.22, PP. 1993-
1812
Kahrik, A., Leetmaa, K., and Tammaru, T. (2011). Residential decision-making and
satisfaction among new suburbanites in the Tallinn urban region, Estonia.
Cities Volume 29 Issue 1 pages 49-58.
satisfaction: impacts of density and nearby nature. Environment and Behavior,
38(1), 112–139.
Publications, Second edition
Koponen, P., Maki-OPas, and Tolone, H. (2011). Questionnaire design and
administration . EHES Manual Volume 7
Lovejoy, K., Handy, S., and Mokhtarian, P. (2010). Neighbourhood Satisfaction in
Suburban versus traditional environments: An evaluation of contributing
characteristics in eight California neighbourhoods. Landscape and Urban


Majedi, H., Davoudpoor, Z., and Kermani, (2011). The Comparison of Physical, economic and social characteristics of two residential sports: A former village recently shifted to city and a new city. 5thSASTechKhavaran higher – education Institute, Mashhad, Iran


Topcu, E. U., and Dokmeci, V. Neighbourhood satisfaction in modern and old neighbourhood in Istanbul, Turkey. Faculty of Architecture, University of Bahcesehir, Istanbul Turkey.


Wineman, J. D. (1979). Resident Response to living in water front communities: Implications for Planning and Design. Housing and Society Vol. 6 N03