

# Neighbourhood Choice Factors And Residents Satisfaction In Old And New Neighbourhoods Of Slemani City, Kurdistan-Iraq.

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## Abstract

The concern about 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 perception of residential environmental satisfaction, of old (Malkendi) and new (Bakhtiari nwe) neighbourhood in Slemani city, Kurdistan-Iraq. Through a household survey, 200 respondents were randomly sampled in each of the two neighbourhoods. Spear man rank correlation technique was used to test the relationship that exists between some neighbourhood choice factors and level of satisfaction of residents. Findings showed that the respondents' choice of neighbourhood with respect to safety, provision of facilities/services and social environment was significantly related to their level of neighbourhood satisfaction. This suggests that the quality of physical and social environment to a certain level fulfill the intentions of residents in choosing to live in the neighbourhoods, but the new neighbourhood tended to perform better. There is need for policy makers and planners to revitalize the infrastructures especially road networks and building structures in the old neighbourhood to ensure that residents' welfare and satisfaction are adequately met.

**Keywords:** Neighbourhood satisfaction, Physical environment, Social environment, Old and New neighbourhood

## 1. Introduction

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. 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. 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, 2006). 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). 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 residential satisfaction is a relative rather than an absolute term whose precise meaning depends on the place, time and the purpose of the assessment and on the value system of assessor. 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.

Most people in developing countries are still lacking the basic necessities of life such as shelter, health facilities, good road network, portable water, regular supply of electricity to mention but a few. The lack of these basic needs of live by many could be attributed to poor management 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 in Iraq, cities in the Kurdish region have been facing series of problems ranging from epileptic power supply, bad road networks, lack of portable water, noise and air pollution. Also ethnic tensions, violence crime and tension among the political groups have helped in aggravating these problems. 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.

This study provides an insight in to the relationship that exists between residents level of satisfaction and neighbourhood choice factors. Therefore, we hypothesized that residential choice factors with respect to physical and social environment are strongly related to neighbourhood satisfaction. Sequel to this introduction, the paper is structured as follows: The literature is reviewed in section 1 while a brief description of the study area is presented in section 2. The materials and method used are discussed in section 3. Section 4 presents the findings while the last section forms the conclusion.

## 2. Literature Review

The study of neighbourhood satisfaction dates back to the 1940s and is currently used in many disciplines such as landscape architecture, housing, marketing, health and medical fields (Potter and Chicoine, 2001). Earliest studies on neighbourhood satisfaction focused mainly on household characteristics, however, this individual approach is giving way to studies that look at the local environmental context (Hipp,2009). There is wide range of factors that determine residential environmental satisfaction. Chapman (2007:15) categorized it into individual/ demographic factors, external/environmental and the mixture of individual and environmental factors, while Basolo and Strong (2002) categorized it in to two domains - Individual-household characteristics and neighbourhood quality characteristics.

The rate of crime is higher in neighbourhoods that are characterized by poverty with dilapidated infrastructure such as roads, housing, electricity, etc. This is due to the fact that crime and other social vices thrive under such conditions (Sampson, 2001, Vacha and McLaughlin, 2000). Ferraro (1995) noted that a positive relationship exists between neighborhood incivilities (vandalism, rudeness, bad manners, etc.) and perceived risk of crime. The higher the physical and social disorganization disorder in a given society, community or neighborhood, the more residents feel vulnerable to crime and other social vices (Ferguson and Mindel 2006). The physical features in an environment influence the probability of a crime taking place. Offenders may decide either to engage in crime in a location or not after determining how visible, vulnerable and attractive targets appear, what chances are there that they may be seen, how easy is it to enter the area, any quick and direct route for leaving an area after crime is committed (Taylor and Harrell, 1996).

The way land uses and landscaped components are arranged may bring about an improved well-being for residents and their neighbourhood satisfaction (Suk Kweon et al., 2010). According to Kaplan (1985), trees and natural areas are the major contributors to neighbourhood satisfaction. Those neighbourhoods with natural areas and green spaces are seen to have a positive impact on residents' perceived satisfaction. The presence of forest views, shared natural areas and green landscapes have a positive impact on neighbourhood satisfaction (Kearney, 2006), while abandoned buildings, unkempt property and underprivileged housing conditions have a negative impact on residents' perceived satisfaction with their neighbourhood (Basolo and Strong, 2002).

Having a new road infrastructure has a positive effect on accessibility, but there are some undesirable impacts associated with living closer to the road which may affect the residential satisfaction of households. For example, air pollution, visual impacts, congestion, noise, and barrier effects are some of the negative external effects of traffic associated with road networks within a neighbourhood. The level of influence of these negative effects on households' neighbourhood satisfaction is largely dependent upon the distance between the road and the location of a house. Those residents whose houses are located adjacent to the road suffer most (Maloir et al., 2010).

Neighbourhood choice factor and preference in an environment is crucial in understanding the effective direction toward addressing neighbourhood life styles and human habitation. Neighbourhood choice factor can be categorise into physical and social environment (Roux, 2003). Social and physical features are both crucial in determining the neighbourhood environmental choice. The social environmental factors include the perceived level of satisfaction of residents with respect to crime and social support from neighbours (Coleman, 1990). However, the physical environment has the potential to influence the social environment. According to Carmona et al. (2008) people prefer associating with a natural and aesthetically appealing environment and this has an influence on neighbourhood choice.

The various factors that people take in to consideration while making neighbourhood choice have been researched upon (Frank and Piro 1994; Ewing and Carveno, 2001; Zhang, 2004), accessibility factor influence the choice of neighbourhood (Zhang,2004).Roux (2003) maintained that accessibility to neighbourhood facilities like public spaces and open greenery enhance social interaction among residents in a neighbourhood hence, people tend to make green environment a factor in the choice of their neighbourhood. Westaway (2009) in a study on black and white suburbanites in South Africa found that housing and personal safety were the most important predictors of neighbourhood satisfaction among residents. The author noted that

high rate of crime in the country made people to be living in fear. Using a housing survey in America, Chapman and Lombard (2006) studied the neighbourhood satisfaction of residents residing in non-gated and gated neighbourhoods. The authors equally found that lack of knowledge of the crime and age of respondent had a positive relationship with neighbourhood satisfaction. In other words, how residents rated or evaluated their neighbourhoods was influenced by their age and lack of knowledge of the crime. They maintained that knowledge of residents of a particular neighbourhood on crime has implications for crime prevention.

### 3. Study Area

The Kurdistan Region is an autonomous region in a federal Iraq. It borders Syria to the west, Iran to the east, and Turkey to the north. The area of Kurdistan Region is about 40,643 square kilometres with a population of about 5 million people. Slemani is one of the beautiful cities in Kurdistan region and is located between latitude 34-36° and longitude 45-46°, and is about 355km north-east of the capital city Baghdad. Slemani was founded in 1784 in a village called Malkandi (which is today a neighbourhood or quarter). Slemani developed without any planning control resulting to irregular housing layout and narrow streets, and this is still prevalent in the core area up till now. However, through the master plan of 1957 and later reviews in the 1980s, the city experienced unexpected growth and a structured pattern in urban development. Malkandi is an old neighbourhood that is located in the Slemani. It is situated in the core of the city (near CBD) and south east of Shekhan. It is the oldest quarter right from the time Slemani was founded. It covers an area of about 41 hectares with over 1000 families. It grew around the palace that was constructed by Mahmud Pasha the late uncle of Ibrahim in Malkandi (present day urban quarter). Land use pattern in Malkendi reflects a mixture of residential and commercial activities. Green areas and open spaces are few while majority of the roads have poor network. The reason for this is based on the fact that this neighbourhood is an old neighbourhood and at the time of its establishment there was no master plan used in construction of structures and creation of road networks. On the other hand, Bakhtiari nwe which is located in the western part of Slemani city is a new neighbourhood that was planned right from its inception. It covers an area of about 41 hectares with over 800 families resident in it. The land use shows a discernable pattern with laid out streets, buildings, green areas, recreational, health and other facilities.



Bakhtiari nwe neighbourhood



Malkendi neighbourhood

#### 4. Materials and Method

The instrument used for data collection questionnaire was modified from those used by earlier researchers, physical and social environment (Bonaiuto et al. 1999.) The items were measured on a 5 point likert scale where 5= strongly agree, 4 = Agree, 3 =Undecided, 2 =Disagree, 1= strongly disagree. 200 respondents were randomly selected in each of the two neighbourhoods, making a total of 400 in all. Only persons above 18 years were administered and one respondent for each household. The SPSS software was used for the data analysis and spear man rank correlation test was conducted to test whether there are any relationships between residential choice factors and residents' perceived satisfaction with their neighbourhoods.

#### 5. Results

Majority (53.5%) of the respondents' age ranged from 41-60 years, followed by those whose age ranged from 20 - 40 years (30.5%) and those that were above 60 years (16%). In terms of variations in age distribution across the two neighbourhood, the chi-square test indicates that there is no significant different in age distribution of respondents ( $X^2= 3.254, P>0.05$ ). 60 % of the respondents were females while the rest were males. A significant variation exists in the educational qualification of respondents across the two neighbourhoods ( $X^2=31.9, P< 0.05$ ) . More respondents (30.5%) from the old neighbourhood (Malkendi) never attended school (illiterate) compared to new neighbourhood (Bakhtiari nwe ) 13.5%. In contrast, more (38.5%) of respondents from the new neighbourhood had either Diploma or first degree compared to those from old neighbourhood (18.5%). One reason that could be adduced for high number of respondents with diploma or first degree from the new neighbourhood is the fact that the neighbourhood is well planned with facilities, hence, tended to attract those with higher level of education.

In terms of income distribution, more than half of the respondents across the two neighbourhoods earned more than 351,000 Dinar monthly while the rest earned between 15,000-200,000, and 201,000-350,000. The chi -square result shows that there is no significant difference in income distribution across the two neighbourhoods ( $X^2 =3.795, P >0.05$ ) .About 30% of respondents across the two neighbourhoods were full housewives while the rest engaged in civil service work, trading, and other occupations. A significant difference exists in the occupational distribution of respondents across the neighbourhoods ( $X^2 =27.2, P<0.05$ ). For instance, the number of civil servants recorded in the new neighbourhood was higher (39%) in comparison to the old neighbourhood (22 %). For the fact that the new neighbourhood is planned and has some facilities needed for human welfare, most civil servants tend to reside in it. On the other hand, the proximity of the old neighbourhood to the central business district (CBD) makes it better choice for traders and artisans who would want to reside very close to their shops. As shown by the results, 22 % of the respondents from the old neighbourhood engaged in trading compared to 6% from new neighbourhood. On duration of stay in the neighbourhood, about half of the respondents (50%) stated that they had lived more than 15 years in their respective neighbourhoods while the rest had lived between 1-5 years (26.5%) and 6-15 years (23.5%).

#### 6. Neighbourhood Choice Factors

The main thrust of this study is to examined whether any significant relationship exists between residential satisfaction of respondents and some neighbourhood choice factors. The purpose is to find out whether environmental and social conditions of the two neighbourhoods fulfill or not the desire of residents.

**Table 1 Choice factor**

	<b>Mlakendi</b>	<b>Bakhtiari nwe</b>
<b>Factor</b>	<b>Mean</b>	<b>Mean</b>
Safety /security	2.08	4.18
Appearance	1.06	3.72
Services/facilities	1.70	2.64
Social condition	1.98	3.60

Respondents were asked to tick the factors that influenced their choice of staying in the neighbourhood. The mean values obtained (Table. 1) show they varied in their reason(s) for choosing each of the neighbourhoods.

In Malkendi (old neighbourhood), the number one reason as shown by the results is safety /security with a mean value of 2.08 followed by social condition (1.98), services/ facilities (1.70) and appearance (1.06). Similarly, in the new neighbourhood (Bakhtiari nwe), safety/security (4.18) topped the list followed by appearance of the neighbourhood (3.72), social condition (3.60) and services /facilities (2.64). The results reveal some things that are peculiar with each of the neighbourhoods . For the old neighbourhood, the respondents ascribed their staying there to the relative peace they have been enjoying over the years. Also the social relation with neighbours was another major reason given by the respondents for choosing this neighbourhood. As earlier stated this neighbourhood is the oldest in Slemani dating back to the 17th century; hence most of the inhabitants are indigenous people who would like to maintain the social ties with family members. In this regard, social relation is seen as necessary condition when making decision on neighbourhood choice. Security/safety was equally considered important in neighbourhood choice by respondents from the new neighbourhood followed by the appearance of neighbourhood. Since the new neighbourhood is planned with modern facilities, well designed buildings, street networks etc, residents attached importance to this attribute when making choice of neighbourhood. Also social condition within the neighbourhood was equally another factor respondents in this neighbourhood considered before making their choice. The findings is in agreement with that of Bonaiuto (1999) who observed in his study that sense of belonging ( social relations) is a relevant factor for neighbourhood satisfaction. Ferguson and Mindel (2006) observed that the higher the physical and social disorganization disorder in a given society, community or neighbourhood, the more the likelihood those residents will feel more vulnerable to crime and its consequences .As could be seen from the results, respondents from both neighbourhoods attached great importance to safety / security and social relations in their neighbourhood choice. Taylor (2001) noted that physical and disorderly social conduct prevents residents from attaching to their environment. In this regard, it could be said that a link exists between social condition, safety/security and residents level of satisfaction with their neighbourhood .

## 7. Examining the Relationship that Exist Between Neighbourhood Choice Factors and Residents' Satisfaction

This section analyzes further the relationship between the main reasons for choosing to live in neighbourhood and residents level of satisfaction. The purpose is to find out whether environmental and social conditions of the two neighbourhoods fulfill or not the intentions of residents. Each of the neighbourhood choice factors has some questions (items) that captured it in the questionnaire. Their breakdown is presented in the tables below.

**Table 2. Correlation between neighbourhood satisfaction and security/safety choice factor**

Variables	Safety			
	Malkandi		Bakhtiari new	
	Correlation coefficient	Sig	Correlation coefficient	Sig
Low crime rate	0.674	0.00	0.722	0.00**
Free movement at night	0.766	0.00	0.815	0.00**
Low burglary rate	0.808	0.00	0.833	0.00**
Efficient street light	0.760	0.00	0.778	0.00**

### 7.1 Safety/Security Factor

The results (Table .2) show that a significant relationship exists between safety and security factor of residential choice in the two neighbourhoods and the level of satisfaction with regard to crime rate, free movement at night, house burglary and efficient street lighting ( $P < 0.05$ ). This result shows that the two neighbourhoods have fulfilled the needs for safety and security as desired by the residents but relatively Bakhtiar nwe tended to have stronger correlation coefficient indicating its better ability to fulfill the desire for safety/

security. Hur and Morrow-Jones (2008) in their study on two groups of home owners - satisfactory and unsatisfactory neighbourhood found that safety and social problems were much more significant influences than physical factors in neighbourhood satisfaction in unsatisfactory areas. Based on the results safety choice factor has strong influence on neighbourhood satisfaction of respondents across the two neighbourhoods.

### 7.2 Physical Appearance Factor

Results (Table.3) show that a significant relationship exists between physical appearance of residential choice in the two neighbourhoods and the level of satisfaction with regard to building design and open space ( $P < 0.05$ ). What this result has shown in essence is that the two neighbourhoods have fulfilled the needs of the residents with respect to their physical appearance. However, Bakhtiar new tended to have a stronger correlation coefficient showing that it has stronger ability in meeting the resident's desire compared to Malkandi. The reason for this slight variation in correlation coefficient values in the two neighbourhoods is not far-fetched because Bakhtiar nwe is a new neighbourhood that is planned right from its inception, so it is expected that its physical appearance is one of the driving forces that make people to choose living in it. Similarly, Lovejoy et al (2010) found in a study that safety, good design and appearance of houses are the most important features for neighbourhood satisfaction

**Table 3. Correlation between neighbourhood satisfaction and physical appearance factor**

Variables	Good appearance			
	Malkandi		Bakhtiar nwe	
	Correlation coefficient	Sig	Correlation coefficient	Sig
Building design	0.739	0.00	0.795	0.00**
Open space	0.733	0.00	0.828	0.00**

### 7.3 Service / Facilities Factor

Results (Table.4 ) show that a significant relationship exists between services and facilities factor of residential choice and the level of satisfaction of respondents with regard , proximity to school, health centre, presence of stores/supermarket and road networks ( $P < 0.05$ ). Hence, it could be said that the two neighbourhoods have fulfilled the need for facilities and services as desired by the residents but relatively, Bakhtiar nwe tended to have stronger correlation coefficient for three variables (road network, presence of stores/super market, proximity to school, ) while Malkandi has a stronger correlation coefficient on health facilities.

**Table 4. Correlation between neighbourhood satisfaction and services /facilities factor**

Variables	Service and facilities			
	Malkandi		Bakhtiar new	
	Correlation coefficient	Significant	Correlation coefficient	Significant
Road network in neighbourhood	0.79	0.00	0.83	0.00**
Variety of stores/super market within neighbourhood	0.81	0.00	0.88	0.00**
Schools are located close to neighbourhood	0.89	0.00	0.904	0.00**
Health facilities within neighbourhood	0.82	0.00	0.48	0.00**

#### 7.4 Social Condition Factor

In the two neighbourhoods, results (Table.5) show that the level of satisfaction of respondents with their neighbourhoods is significantly related to the social condition ( $P < 0.05$ ). In essence, it could be said that the social condition is a factor that residents of the neighbourhoods take in to consideration while making choice on where to reside and this to a certain level determines their perceived satisfaction with the neighbourhood. Respondents from the new neighbourhood recorded higher coefficient values than those from the old neighbourhood, which suggests that they are more satisfied.

**Table 5. Correlation between neighbourhood satisfaction and social condition factor**

Variables	Social relations			
	Bakhtiari new		Malkendi	
	Correlation coefficient	Significant	Correlation coefficient	Significant
Cordial relationship with neighbours	.486	0.00	.324	0.00**
Neighbours are sociable	.459	0.00	.221	0.00 **

#### 7. Conclusion

Satisfaction and welfare of residents in any community is the major thrust of governments around the world. Hence, governments at various levels place more emphasis on provision of those facilities that will better the lives of their citizenry. Iraq has seen a lot of political turmoil in the last three decades or more, therefore little attention has been given to infrastructural provision. With the end of the military dictatorship in the last couple of years ago, it is expected that attention should be given to provision of those infrastructures that enhance the welfare of the citizen. By doing this, residents' neighbourhood satisfaction will be improved.

Findings from the study showed that a significant relationship exists between safety and security factor in the neighbourhood choice with regard to crime rate, free movement at night, house burglary and efficient street lighting and neighbourhood satisfaction ( $P < 0.05$ ). Also significant relationships exist between the physical appearance factor in the neighbourhood choice with regard to facilities/services and the level of neighbourhood satisfaction of the respondents. Findings further showed that a significant relationship exists between social conditions factor, services and facilities factor of residential choice in the two neighbourhoods. These findings infer that the quality of social and physical environment in the two neighbourhoods fulfil the intentions of the residents in choosing to live in them but the new neighbourhood (Bakhtiari new) tended to show better performance. However, the physical environment tended to have much more influence on neighbourhood choice than the social environment. This corroborates the findings of past studies (Kaplan, 1985; Langdon, 1988, 1997; Sirgy & Cornwell, 2002). Based on the available records, Malkandi (old neighbourhood) is the first in the city of Slemani. As at the time of its establishment in 1784, there were no urban planning laws in the city. The road networks are narrow, winding and in some instances buildings have no direct access to the road. The new neighbourhood has a master plan that guides the erection of structures and layouts. The master plan developed during the 70's in Iraq was adopted during the construction of this neighbourhood. Hence, provision of facilities in this neighbourhood could be adjudged to be fair, based on the findings of the study.

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