Neighborhood satisfaction, sense of community, and attachment: Initial findings from Famagusta quality of urban life study

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Abstract

The concern about the quality of urban life in cities has led to an increasing interest in findings from surveys aiming to measure the quality of life in particular places. A major research project in measuring the quality of urban life that utilizes a model from both a conceptual and empirical perspective has been launched in metro Detroit (Marans, 2003). This project has formed the core of the "International Program of Research on Quality of Urban Life" coordinated at the University of Michigan, USA. As part of this program, parallel studies are underway in several world cities including Famagusta (Gazimagusa), N. Cyprus, a dynamic city of approximately 50,000 residents including many university students. Within the context of the Famagusta Area Study (FAS), both objective and subjective measures of quality of life was compiled. Using face-to-face interviews, 398 residents were interviewed in eight Famagusta neighborhoods during the summer and fall 2007.

The paper first presents a brief overview of the methodology and then reviews findings covering 191 respondents living in four neighborhoods which represent the four different growth patterns and differ in terms of their social-spatial character and their housing types. The four neighborhoods are: the Walled City (Surici in Turkish), Baykal, Karakol, and Tuzla. The paper mainly explores the impacts of certain social-spatial factors such as satisfaction with neighbourhood safety, walkability in the neighbourhood, satisfaction with parks and recreational facilites, the maintenance of houses in the neighbourhood, the maintenance of streets and open spaces, the availability of trees, the vehicular circulation, car parking and the accessibility of common public spaces, the density of traffic in the neighbourhood, the level of noise, the level of crowding, and the length of residence and the 'satisfaction with the neighbourhood as a place to live'. In addition, factors influencing the sense of neighbourhood as home, the degree of attachment to place, and the degree of belonging to community are examined. The major findings reveal that satisfaction with neighbourhood does not necessarily associate with place attachment, and similarly, despite realization of lacking certain social-spatial qualities in the neighbourhood, people may feel attached to the place because of certain attributes. However, there is a positive relationship between satisfaction and feelings of neighbourhood as home.

Keywords: Social-spatial environment, quality of urban life, neighbourhoods, sense of community, satisfaction, attachment, Famagusta.

1. Introduction

Throughout the history of research on housing and urban environments, there have been attempts to describe neighbourhoods with summary measures of their overall quality. Satisfaction and attachment are the two major summary measures which have an important influence on the overall quality of respondents' lives.

While satisfaction has been studied frequently in neighbourhood research (Butler et al., 1969; Campbell et al., 1976; Hall and Ring, 1974; Atkinson, 1977; Michelson, 1977; Marans and Wellman, 1978; Gollin, et al., 1975; Galster and Hesser, 1981), several other indicators have also been used to measure perceived neighbourhood quality. Among those are various indicators tapping at people's sense of attachment to their housing environment. For example, several researchers have asked residents whether they think of their neighbourhood as their home or just a place to live in (Barton, 1975; Rodgers et al., 1975; Fried and Gleicher, 1961; Kasarda and Janowitz, 1974), and whether they feel attached to the local area (Gollin et al., 1975; Hunter 1974). Although there is no strong empirical evidence to make a conclusive statement both of these items appear to serve the purpose beacuise "feeling at home" probably expresses a sense of rootedness to a specific place that means the same thing as feeling attached to that place (Connerly and Marans, 1985: 30).

The level of satisfaction or dissatisfaction with a place is thought to be governed by a wide range of factors including both social and physical attributes of the residential environment. Personal and experiential factors such as previous housing experience, the degree of integration of the individual into society, the individual's reference group, the person's sociopsychological attitude to society in general, people's traditions, and the individual's aspiration level (Pacione, 2001) may also affect residential satisfaction. In addition to the characteristics of the house, the neighbourhood and the resident, the habitability of a residential setting can be affected by attributes of the management system, such as the standard of garbage collection and other local services.

There are many examples in the literature considering resident satisfaction as a dependent variable, or as a residential quality indicator. Most of these studies are related to developed western countries, and were carried out using either national size samples (Marans and Rodgers, 1975; Campbell et al., 1976; David and Fine-Davis, 1981), or city size samples (Galster and Hesser, 1981). There are few studies concerning the housing environments in developing countries. One of them is the study of Potter (1993) on the perception of migrants of their rural house and urban squatter in Ankara, Turkey, and another one is the study of Türkoğlu and her colleagues (1997) on the respondents' satisfaction of housing environments in Istanbul, Turkey.

Building on the working of Campbell et al. (1976), Marans and his colleagues began to explore the issue of quality of housing environments from a conceptual and empirical perspective (Marans, Rodgers, 1975; Lee, Marans, 1980; Connerly, Marans, 1988). It was asserted that quality of a place or geographic setting (city, neighbourhood, dwelling) was a subjectibe phenomenon, and that each person occupying that setting may differ in

his/her views about it. Furthermore, those views would reflect their perceptions and assessments of a number of setting attributes that could be influenced by certain characteristics of the occupant, and his or her needs and past experiences (Marans, 2005).

The most explicit definitions of community attachment are proposed in the literature on place attachment where place attachment is defined as an affective bond between people and place or setting (Tuan 1974). This basic definition has been extended by other researchers to include a person's perceptions and feelings. In line with this, place attachment can be defined as the effective positive bond between a person and a place that embodies an emotional content; more specifically, a strong tendency of that person to maintain closeness to such a place (Hidalgo & Hernandez, 2001: 274; Riley (1992: 13). In most of the publications, place attachment is considered an integral part of human identity (Jörgensen & Stedman, 2001; Low & Altman, 1992; Mazumdar, Mazumdar, Docuyanan, & McLaughlin, 2000; Stedman, 2002; Stewart, Liebert, & Larkin, 2004; Twigger-Ross & Uzzell, 1996) or is used interchangeably with concepts directly referring to identity, such as 'place identity' or 'community identity'. Place attachment is also assumed to be beneficial for the neighbourhood since it facilitates involvement in local affairs, and therefore serves both the individual and larger community. Studies demonstrate that place attachment contributes to civic activity on behalf of one's place of residence, in the form of sustainable behaviour (Guardia & Pol, 2002; Uzzell, Pol, & Badenas, 2002) and ecological behaviours (Vorkinn & Riese, 2001). As such place attachment serves both the individual and larger community.

According to Connerly and Marans (1985), it is possible to distinguish satisfaction from attachment in terms of the degree to which each taps the cognitive and effective quality of life components. Because neighbourhood satisfaction is thought to be linked to the evaluation of specific neighbourhood attributes, relative to one's expectations, it is therefore expected that it will primarily tap the cognitive component of well-being. On the contrary, it is expected that attachment to the neighbourhood will be more closely related to the affective component of perceived neighbourhood quality. Such involvement is often produced through interaction with friends, relatives, and acquaintances living in the neighbourhood. As such, one may feel satisfied with the neighbourhood but still feel little attachment if she or he has not developed any ties to the place or its inhabitants. Or, despite realization of certain spatial qualities in the neighbourhood, one may feel attached to certain attributes of that neighbourhood.

In this study, people's satisfaction and attachment in four identical neighbourhoods of Famagusta, namely the Walled City, Baykal, Karakol, and Tuzla, will be examined using data from a survey of the adult population carried out during the summer and fall of 2007. The areas were deliberately chosen so they would clearly differ from each other in the sense of development periods, density, and resident profile.

2. Overview of Famagusta and four neighbourhoods

The city of Famagusta (Famagusta), the second largest city of the Turkish Republic of Northern Cyprus, with a historic core but also with a harbour, has a population of 35,381 (TRNC 2006 Population & Dwelling Census). The city was an important trade and tourism centre and served as a regional centre before the division of the island. Today, despite some restrictions on

its capacity owing to the new circumstances of the island, the harbour still plays an important part in the trade activities of the northern region. In addition to the port, the Eastern Mediterranean University (EMU), with a student population of nearly 15,000 from 67 different countries (in addition to the de-facto population), has been a major factor in the overall economic and social structure of the city in the last few decades. Today, Famagusta accommodates a wide diversity of residents, including the local Turkish-Cypriots, the immigrants of 1974 coming from the southern part of the island and different parts of Turkey, and university staff and students from many countries (Oktay 2005).

Certain aspects of the city of Famagusta through which we perceive an overall urban quality can be identified as the following: Demographic movements following the growth of the Eastern Mediterranean University, declining quality of the old core of the city where functional and physical deterioration prevail, uncontrollable and unplanned growth (sprawl) of the city, haphazard development of housing and commercial areas, and the felt increase in life standards.

Among the four neighbourhoods, the Walled City (*Surici* in Turkish) is the historical core of the city where many remarkable remains of historical, architectural and cultural heritage are embedded. The other neighbourhoods developed outside the Walled City in consecutive periods are Baykal, Karakol, and Tuzla. Their locations in the city and the location of sample households can be seen in Map 1, and their characteristics are included in Table 1.

3. Famagusta Area Study

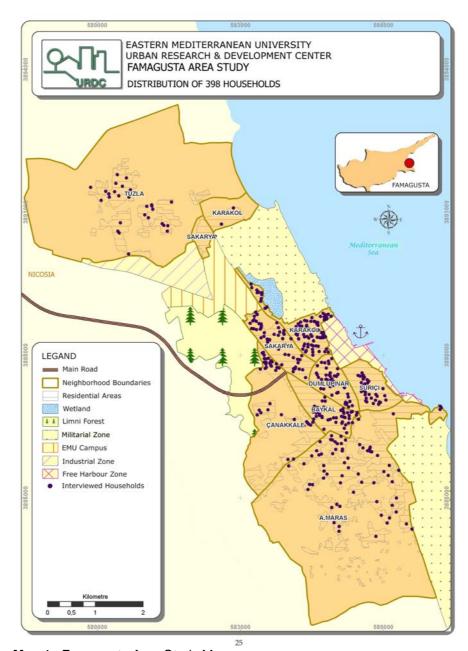
The Famagusta Area Study, titled "Measuring the Quality of Community Life in Famagusta" and directed by one of the authors of this article, is one of the partner cities included in the International Program of Research on Quality of Life coordinated at the University of Michigan, USA (Figure 1).

The study has five purposes:

- To assess both local residents' and university students' perceptions of various dimensions of quality of urban life
- To explore the explanatory power of respondents' perceptions of various dimensions of quality of life in relation to the overall quality of urban life
- To explore relationships between perceptions of urban conditions and measures of the actual conditions
- To create baseline information so that changes in quality of life in Famagusta can be assessed in the future.
- To develop a quality of urban life database to create opportunities for international comparison across the world cities that have undertaken similar studies.

Table 1. Survey areas and neighborhood characteristics

Table	1. Survey areas and neighborhood cha Urban Pattern	General View	Neighborhood Characteristics
SURIÇI (WALLED CITY)			 Old / historical High density in 3-d framework 1-2 storey houses (courtyard houses dominant) Partial mixed-use Middle-to-high / low income
BAYKAL			 Complete development Relatively higher density Mixed building forms (apartments + detached houses) Mixed use Middle-to-high / lower middle income
KARAKOL			 Semi-complete development Medium density Mixed building types (apartments + detached houses) Mixed use buildings Middle-to-high / lower middle income + students
TUZLA			 Newly constructed / Peri-urban Ongoing development Low density Single-function Diversed building types (Row houses / Detached houses dominant + apartments) Middle-to-higher income



Map 1. Famugusta Area Study Map

3.1. Method

The Sample The survey was conducted among housing units in Famagusta using a multistage sampling procedure. First, the total number of housing units (13,455) within the the city limits was determined by counting the parcel plots. Eight neighbourhoods of the city were identified and housing units with each was determined. Using a systematic sampling procedure, a sample of housing units within each neighbourhood was selected. A total of 540 units was selected. Each household was contacted (in fall 2007) and

resulted in 398 completed face-to-face interviews resulting in a 75 percent response rate. Reviewed in this paper are the preliminary results from the survey including 191 residents' responses in four identical neighbourhoods (the Walled City, Baykal, Karakol, and Tuzla). The other four neighborhoods were not included in these analyses in order to highlight the possible differences among the neighbourhoods of diverse characters.

The data show differences among the four neighbourhoods in the respondents' place of origin (birth place). The neighbourhoods Tuzla, Walled City, and Baykal are predominantly inhabited by the local people, born in Cyprus, whereas nearly a half of the respondents in Karakol area were born in Turkey. The majority of respondents living in Karakol, Baykal and Tuzla were born outside of Cyprus and Turkey. The neighbourhoods also differed with respect to the ages of their residents. For example, the majority (%53) of the elderly (over the age 60) were living in the Walled City, and the majority (%51) of younger respondents (ages between 16-30) including university students were living in Karakol.

According to the TRNC 2006 Census, 48 percent of the local people of Famagusta have a higher education degree, and 3 percent have graduate degree. The findings of the Famagusta Area Study also reflected this high level educational profile. Sixty-three percent of the households had at least a high school degree. In Karakol, Tuzla and Baykal, more than 25 percent had higher education or graduate degrees. The lowest educational level was recorded in the Walled City where more than half of the respondents were over 60. Income and occupation were two other variables along which the neighbourhoods differed. More then one half of the households in the total sample had at least a monthly income of 1,500 TL (about 1,000 US dollars), whereas almost one half of Tuzla and Baykal respondents had a minimum income of 2,500 TL. The neighbourhood with the lowest income level was the Walled City where one fifth of the households had a monthly income of 850 TL or less.

In Baykal and Tuzla, more than half of the household representatives had works at the time of interviewing. In the Walled City, retired people were dominant, and in Karakol, student community made a significant proportion.

The interview schedule

The Famagusta Area Study, titled "Measuring the Quality of Community Life in Famagusta" and directed by one of the authors of this article, is a part of an International Research Program on Quality of Life coordinated by the University of Michigan, USA (Figure 1). The interview schedule included questions that tap at people's feelings and behaviours in reference to their households and their attributes.

The survey framework for Famagusta Area Study (FAS) was closely related to that of the Detroit Area Study (DAS) 2001 model. However, as quality of life considerations are not universal and are likely to vary from one city to another (Mazumdar, 2003), local cultural relativity of certain ideas were highlighted through modifications in the survey questions. In this study only a portion of the questions were employed. In addition to demographic variables, the schedule had questions on residential history, public services and transportation, schools, parks, recreation and children's play environments, shopping, community participation and involvement, neighbourhood and neighbouring, housing and residential mobility, safety,

health and health care facilities, and people's perceptions of quality of urban life.

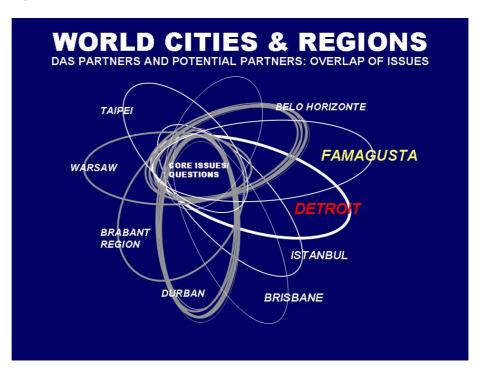


Figure 1. World cities and partners

4. Results

4.1. Neighbourhood satisfaction

Empirical studies suggest that a number of attributes contribute to overall neighbourhood satisfaction. These attributes may be related to neighbourhood characteristics and individual characteristics, and no doubth the direction and the magnitude of these attributes, as variables, vary across studies. In this study,the general neighbourhood satisfaction was measured by a single question. The respondents indicated their degree of endorsement for the question "All things considered, how satisfied or dissatisfied are you with this neighbourhood as a place to live?" using a five-point response scale that ran from "very satisfied" (5) to "very dissatisfied" (1).

Table 2 shows the means of satisfaction with their neighbourhood "as a place to live" in the city. These means suggest that respondents are not dissatisfied with their neihgbourhoods. As shown Table 2, the mean valus are close to each other indicating equal levels of satisfaction with the neighbourhood (F = 1.01, df = 3, 187).

Table 2. Means of satisfaction with neighbourhood as a place to live across neighbourhoods

Satisfaction with neighbourhood	Walled Ci	ty E	Baykal I	Karakol	Tuzla Fama	agusta
Mean	3.46	3.52	3.29	3.60	3.42	
Standard deviation	.93	1.04	.94	.77	.94	

The respondents also indicated their level of satisfaction with some socialspatial characteristics of the neighbourhood. These were satisfaction with neighbourhood safety, walkability, parks and recreational facilites, maintenance of houses in the neighbourhood, maintenance of streets and open spaces, availability of trees, vehicular circulation, density of traffic in the neighbourhood, level of noise, and level of crowding. The questions on social-spatial attributes of the neighbourhoods were answered by either one of the three response categories; "satisfied", "neither satisfied nor dissatisfied", "dissatisfied". In order to determine which of these aspects contribute to satisfaction with the neighbourhood as "a place to live in" and to what extend, the data were subjected to a multiple regression analysis employing neighbourhood satisfaction as the dependent variable and the social-spatial attributes as the independent variables or the predictors. Age and years of residence in the neighbourhood were also included in the analysis as predictors. As can be seen on the Table 3, only four of the independent variables had significant effects on neighbourhood satisfaction. Satisfaction with safety and walkability of neighbourhood had almost equal and positive contributions to overall neighbourhood satisfaction. Similarly, respondents who were satisfied with maintenance of streets were also satisfied with thier neigborhood (t = 2.31, p < .03). Finally, satisfaction with density of the environment also produced positive effect on neighbourhood satisfaction (t = 2.22, p < .03).

Table 3. The result of regression analysis for neighbourhood satisfaction

Variable	Standa Coeffic	rdized Beta cient	t Significance	
Age	.062	.73		
Length of residence	.090	1.06		
Satisfaction with safety	.181	2.42	.02	
Satisfaction with walkability	.192	2.44	.02	
Satisfaction with recreational facilities	002	.03		
Satisfaction with maintenance of streets	.173	.31	.03	
Satisfaction with availability of trees	.041	.56		
Satisfaction with vehicular circulation	154	1.77	<u>—</u>	
Satisfaction with density of traffic	215	2.22	.03	
Satisfaction with level of noise	.054	.54		
Satisfaction with level of crowding	.109	1.20	_	

4.2. Perception of neighbourhood as home, neighbourhood attachment, feelings of belonging

The feelings about and the attachment to the neighbourhood was achieved by three questions/statements;

- Do you think of this neighbourhood as your "home" or just a place to live?"
- "There is a strong attachment to place in this neighbourhood"
- "I can't feel I belong to a community"

Perception of neighbourhood as home

Fifty-three percent of the respondents rated their neighbourhoods as "home". Percentages of respondents who judged their neighbourhoods as "home" in The Walled City, Baykal, and Tuzla were very close and averaged 60 percent, whereas the percent at Karakol area where student proportion was dropped down to %46. Chi-square analyses indicated that employment satatus did not relate to respondents' perception of neighbourhood as home. Length of residence, perceived friendliness of the neighbourhood, and perceived similarity all related to whether a resident feels his/her neighbourhood as "home" or "just a place to live in". The longer the resident has been living in the neighbourhood, the more the environment is perceived as friendly and others as similar, the more he/she perceives neighbourhood as home.

Neighbourhood attachment

The attachment measure was the resppondents' response to the statement "There is a strong attachment to place in this neighbourhood". The response categories were "strong attachment", "moderate attachment", and "lack of attachment". Results indicated that there was a high degree of attachment among the respondents of Famagusta (average 2.46). Table 4 shows the means and the standard deviations of attachment measures in the neighbourhoods. As seen on the table, the means for The Walled City, Karakol, and Tuzla are close to each other, whereas the average for Baykal area is high. One-way analysis of variance indicated that the differences among these means are significant (F = 2.87, df =3, 173, p < .04). Paired comparisons of the means revealed that the mean for Baykal was significantly higher than the means for the Walled City and Karakol.

Table 4. Means of Attachment by Neighbourhood

Means of attachment	Walled City	Baykal	Karakol	Tuzla	Famagusta
Mean Standard deviation	2.24 .83	2.95 1.34	2.33 1.32	2.41 .93	2.46 1.20
Standard deviation	.00	1.54	1.32	.93	1.20

Further analyses on attachment measure revealed that home ownership is positively related to attachment feelings; home owners were more attached to their neighbourhoods than renters. An interesting point in respect to the relationship between attachment and ownership was that respondents who neither owned nor rented the house/flat they lived in were no less attached to their neighbourhoods than the owners. (This was probably so, because most people like those in Northern Cyprus live in their parents/close relatives houses). As to the length of residence, although there was a tendency that the longer the person lived in the neighbourhood the higher was the attachment, the data was not so clear. Employment status was also related to attachment; employed residents and students were similar to each other in attachment, whereas unemployed/retired/homemakers had the highest level of attachment. This might be so because this category of respondents spent more time in neighbourhood that the other two categories. The data indicated no relationship between attachment and perceived friendliness and perceived similarity.

Feelings of belonging to community

Table 5 gives the means and standard deviations of respondents' feelings of belonging to the neighbourhood by neighbourhood. The results of the analysisi of variance on the means indicated no difference among the means (F = 1.16, df = 3, 174, p > .05).

Table 5. Means of sense of belonging by neighbourhood

Means of attachment	Walled City	Baykal	Karakol	Tuzla	Famagusta
Mean	3.00	3.32	2.92	3.41	3.10
Standard deviation	.97	1.61	1.57	1.25	1.43

Since there was no difference among the neighbourhoods, we pool the data across neighbourhoods and checked for the relationship between the measure and the objective variables. Ownership was found to relate to belonging; a significantly lower percentage of renters (%30) had a strong sense of belonging than both the owners and the other group (neither own nor rent), the percentages being 60 and 62 in that order. Employment status did not relate to sense of belonging.

The more they are living in the neighbourhood, the more they have sense of belonging to community. However, the most negative responses came from the group who lived for 1-4 years. In respect to length of residence a significant relationship was observed with sense of belonging; as years of residence increase feelings of belonging also increased. Similarly, increased perceived similarity of others in the community associated with inceased level of belonging.

Correlational analysis indicated a significant relationship (r = .35, p < .01), meaning that the higher the sense of community the higher is the feelings of

belonging. Attachment also correlated with feelings of belonging (r = .18, p < .05). Sense of community and degree of attachment were not related.

Figure 2 provides a summary of the findings on the relationship between sense of community, degree of attachment, and sense of belonging as dependent and house ownership, employment satatus, length of residence, perceived friendliness of the environment, and finally perceived similarity of other residents as independent variables. Compared to employment and to a smaller extend ownership status, the other three variables play a more important role about how the respondents of a neighbourhood feel and think about their environment.

5. Conclusion

In the study reported in this article the roles of social-spatial factors on the 'satisfaction with neighbourhood as a place to live' were examined. In addition, factors influencing the perception of neighbourhood as home, the degree of attachment to place, and the degree of belonging to community were examined.

Four neighbourhoods in Famagusta, North Cyprus, were selected on the basis of their development patterns, housing types, and socioeconomic composition. 191 residents were sampled with varying numbers in each neighbourhood, in proportion to the neighbourhood population. Research methods included a questionnaire survey. Regression analysis and Chisquare test were used to analyze the co-variances between the different factors. The results indicated differences between the four neighbourhoods in terms of attachment to place, with only some differences in terms of "satisfaction with neighbourhood as a place to live", and some differences in terms of sense of belonging to community.

The findings of the survey reveal that satisfaction with neighbourhood does not necessarily associated with place attachment (the case of Baykal), and similarly, despite realization of lacking certain social-spatial qualities in the neighbourhood, people may feel attached to the place because of certain attributes such as good neighbours and neighbourly relations, and convenience for raising children (the case of the Walled City). The same also applies to the relationship between satisfaction and the degree of belonging to the community. It appears that except for one neighbourhood (Tuzla), the degree of belonging to the community is much weaker than the level of satisfaction in the other three neighbourhoods. However, the findings reveal that there is a positive relationship between satisfaction and feelings of neighbourhood as home.

Certain subjective and objective factors have influence on the degree of attachment to place. These are housing tenure (ownership and living in son's/parents' house), employment status (spending longer time at home), and length of residence. Perceived friendliness of neighbours and perceived similarity of respondents do not have influence on satisfaction.

Factors that have influence the degree of belonging to community are ownership and living in parents' or son's house, being retired/homemaker/unemployed - local residents (spending longer time at home), and longer time of residence. Perceived friendliness of neighbours

and perceived similarity of residents do not have influence on the degree of belonging.

Factors that were related to the measures of attachment are satisfaction with neighbourhood safety, satisfaction with walkability, satisfaction with maintenance of streets, and satisfaction with density of traffic. Age, length of residence, satisfaction with recreational facilities, satisfaction with maintenance of streets, satisfaction with avaiability of trees, satisfaction with vehicular circulation, satisfaction with level of noise, and satisfaction with level of crowding were not related to the measures of attachment.

Further analysis will consider other variables including neighbourhood travel, residential mobility, overall neighbourhood satisfaction, housing preference, neighbourhood problems, and safety, and how responses vary for residents of the four neighbourhoods and having different socio-demographic characteristics. Furthermore, objective environmental measures for the residential environments of the respondents will be compiled using Geographic Information System (GIS) mapping techniques. Environmental and community measures will be analyzed together with survey data.

The results of this study will first provide information that can inform governmental, corporate, and institutional and community policy makers as they plan for and implement programmes designed to enhance the quality of life of their constituents. Second, they will produce indicators that will be a baseline for assessing societal changes in the city that occur throughout the 21st century. Third, they will determine how much perceptions and behaviours about quality of urban life correspond to the (objective) community and environmental conditions.

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