

MEASURING THE QUALITY OF URBAN LIFE AND NEIGHBOURHOOD SATISFACTION: FINDINGS FROM GAZIMAGUSA (FAMAGUSTA) AREA STUDY

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Abstract

During the last few decades, measuring the perceived quality of urban life and residential environments has been one of the areas of inquiry for researches in the field of urbanism. The Famagusta Area Study (FAS) is one of those survey studies, through which objective and subjective measures of quality of urban life and neighbourhoods have been compiled using face-to-face interviews. Within the context of the Famagusta Area Study, both objective and subjective measures of quality of life were compiled. Using face-to-face interviews, 398 residents were interviewed in eight Famagusta neighbourhoods during the summer and fall 2007. This paper first presents an overview of the demographic, geographic, and urban context in Famagusta (N. Cyprus) where the study was conducted. It then reviews the methodology used in carrying out the research. Next, selected findings covering overall quality of urban life, neighbourhood satisfaction and factors influencing it, assessment of neighbourhood attributes, neighbouring and community issues, and other topics are presented. Finally, the uses of the findings for policy, planning and design are discussed along with key lessons learned from the project, and opportunities will be explored for further analysis of the data.

Key Words: *quality of urban life, neighbourhood satisfaction, user survey, Famagusta.*

JEL Classification: J1, O18

1. INTRODUCTION

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 Programme 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.

The paper first presents a brief overview of the methodology and then reviews findings of a major household survey conducted in Famagusta in 2007. The survey was intended to produce information covering aspects of urban life from the perspective of Famagusta residents. In addition to survey responses, the Famagusta Area Study (FAS) aimed at compiling contextual information

or data about the communities and environments associated with each respondent. Contextual information includes housing and demographic characteristics, land use characteristics, physical environmental characteristics, and other characteristics of the communities where respondents live (i.e. employment, school information, etc.).

2. BRIEF INFORMATION ABOUT FAMAGUSTA

Famagusta (Gazimagusa) is the second largest city of Northern Cyprus and has a population of 35,381 (TRNC 2006 Population & Dwelling Census). The city is located on the eastern coast of the island has a historic core including a harbour. The history and urban development of Famagusta date back to the first century AD and the contemporary city has been developed over seven periods: the early period (648-1192 AD - the foundation period); the Lusignan period (1192-1489); the Venetian period (1489-1571); the Ottoman period (1571-1878); the British period (1878-1960); the period between 1960-1974 (the Greek & the Turkish), and the the period after 1974 (the Turkish).

The city was an important trade and tourism destination and served as a regional centre before Cyprus was divided in 1974. 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 Turkish region (Fig. 1). However, changes in the last two decades in Famagusta, result largely from the establishment and growth of the Eastern Mediterranean University (EMU). The development of the university with a student population of nearly 14,000 from 67 different countries (in addition to the de-facto population) has led to remarkable changes in the socio-demographic characteristics of the city. It has also benefited property owners throughout the city as the demand for housing has increased. Famagusta has experienced uncontrollable and rapid urban development in the form of multi-storey housing, haphazard additions to existing houses, and incompatible land-uses. The construction and commercial sectors, and new housing in the form of multi-storey apartments or 'villas', are shaped in a spontaneous way without following a coordinated master plan. In this context, traditional family and kinship patterns that led to lively and well-connected neighbourhoods have therefore broken down and social life has been deteriorated (Oktay, 2005).

The decaying character of the historic Walled City is another problem in Famagusta, as the measures undertaken for its conservation and revitalization have not led to the attainment of a satisfactory state in terms of cultural or economic sustainability (Fig. 2). Finally, the uncertain future of the unoccupied Varosha (Maras) district, previously a prosperous tourism and residential area vacated by its Greek inhabitants in line with the UN demarcation decision in 1974, has affected urban development by preventing the city from growing towards the south.

Because Famagusta has a dynamic socio-economic structure, a problematic pattern of urban development, and an uncertain future due to the political situation of Cyprus, evaluating the quality of life of its residents is crucial to the understanding of policy makers and planners who will shape the city's future.

Figure 1. Air view of the Famagusta Harbour, the Walled City and surrounding districts
(<http://www.emu.edu.tr>)



Figure 2. View of the Walled City of Famagusta.



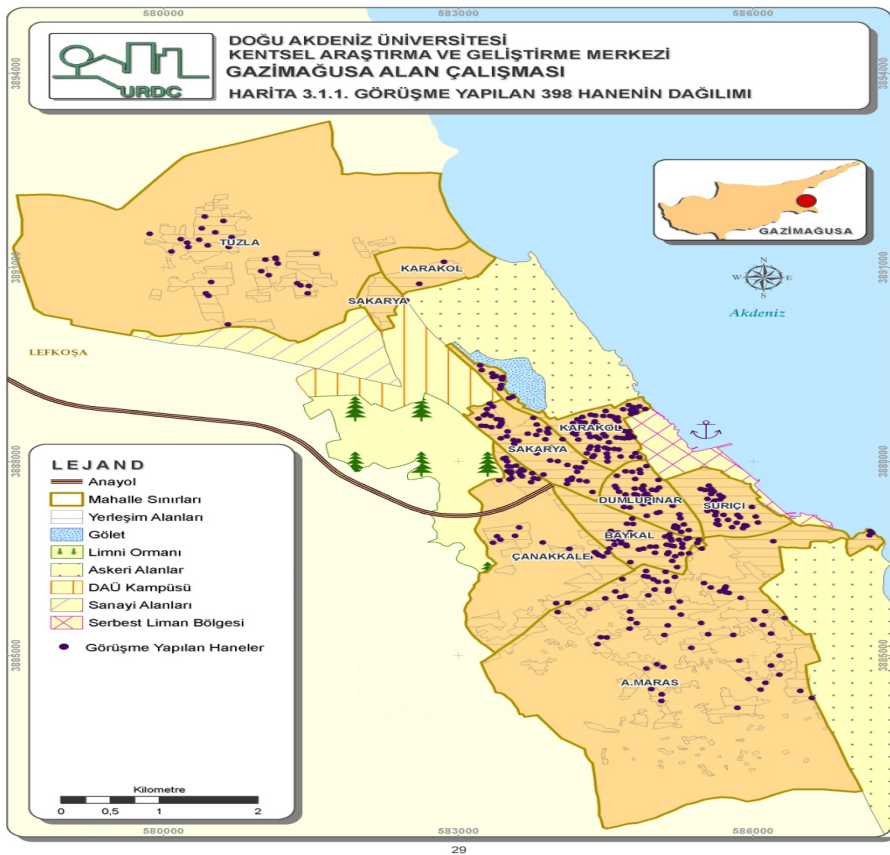
3. METHODOLOGY

The collection of survey information was achieved essentially by a structured questionnaire administered to a sample of housing units selected from Famagusta neighbourhoods. Within each housing unit, a resident was selected and interviewed by trained graduate students. The interviews were conducted between spring and fall 2007.

3.1. Sampling approach

The survey was conducted within housing units using a multi-stage sampling procedure. First, the total number of housing units (13,455) within the city limits was determined by counting the parcel plots. Eight neighbourhoods of the city were identified and the number of households in each neighbourhood were determined. The selection process followed a methodology of random sampling and involved several steps. First, the appropriate sampling fraction was determined for each neighbourhood. In some cases, the neighbourhood was divided into several sections according to their inherent characteristics, and these sections were further divided into smaller pieces from which random samples were selected. The number of households taken from each neighbourhood was proportionate to its size in the total number of households in the city. With each selected household, an adult 18 years old or older was asked to participate in the survey. Five hundred and forty households were contacted of which 398 occupants, volunteered to participate (74% response rate). Nonresponse was largely due to no one being at home when the interviewers made their visit.

Map 1. Distribution of 398 households



3.2. Data collection

The interview schedule included questions that tap at people's feelings and behaviors in reference to their households and housing attributes. Many of the questions were drawn from the questionnaire used in the Detroit Area Study (see Chapter 7). A summary of the quality of urban life topics included in the questionnaire is shown in Table 1.

However, as quality of life considerations are not universal and are likely to vary from one city to another (Mazumdar, 2003), DAS survey questions were modified and new questions were added to reflect the local situation. In the next section findings are reported for only a portion of the questions. These deal primarily with the overall quality of urban life in Famagusta, neighbourhood satisfaction, and assessments of neighbourhood social attributes including safety, social ties, neighbors, and several measures of neighbourhood attachment. Several environmental attributes (accessibility, attractiveness, greenery, public transportation, recreational facilities (parks, playgrounds, etc.) along with physical attributes (traffic density, noise level, crowding, and street maintenance) are analysed as the factors that potentially influence the neighbourhood satisfaction.

4. FINDINGS

4.1. Overall Quality of Life (QOL) in Famagusta

The Famagusta survey asked respondents to assess seven specific domains using a 5-point satisfaction scale ranging from completely dissatisfied (1) to completely satisfied (5). The domains considered were the individual's overall standard of living, job/school, family life, friends, health, leisure, and the amount of time to do the things they want to do.

Table 2. Overall Quality of Life Domain Satisfaction Scores for Famagusta (n=398)

Domain	Mean score	Standard deviation
Family life*	4.24	.63
Friends	4.09	.58
Health	3.78	.90
Job/school**	3.70	.97
Standard of living	3.69	.79
Life as a whole	3.46	.93
Leisure	3.29	.97
Time to do things	3.05	1.01

* The relevant question was responded by those who live with their families (n= 242)

** The relevant question was responded by those who have work or who are students (n= 372)

Table 2 shows the mean satisfaction scores for the overall sample. Satisfaction scores for family life and friends were somewhat higher than satisfaction scores for health, job/school, standard of living, and life as a whole. People were least satisfied with the amount of time to do the things they want to do and the way they spend their spare time.

4.2. Quality of Urban Life (QOUL) in Famagusta

In the Famagusta area study, the residential environment was considered at three levels: the individual home or dwelling, the immediate (micro-scale) neighbourhood, and the overall (macro-

scale) neighbourhood. Consideration was also given to attributes of each of these place domains. At the city level, respondents were asked to evaluate several attributes and then give a summary satisfaction score to a single question: *“In general, how would you rate the quality of urban life in the city of Famagusta today?”*. Using the same 5-point response categories, they were also asked to express their overall satisfaction with their dwelling, their immediate neighbourhood, and their overall neighbourhood.

Table 3 presents overall satisfaction scores for dwelling, immediate neighbourhood, overall neighbourhood, and overall urban life for the entire sample. The mean score are fairly comparable for the first three domains but somewhat lower for the overall quality of urban life (QOUL) (3.51 versus 3.29). Indeed, while 40% of the respondents were either satisfied or very satisfied with the overall quality of life in the city, 14% were either dissatisfied or very dissatisfied. The remaining respondents said they were neither satisfied nor dissatisfied.

Table 3. Dwelling, Immediate Neighbourhood, Overall Neighbourhood, Urban Life Mean Satisfaction Scores for Famagusta (N = 398)

Domain	Mean score	Standard deviation
House/Dwelling	3.50	1.002
Immediate neighbourhood	3.48	.90
Overall neighbourhood	3.54	.87
Urban life	3.29	.77

* = value out of 5.

However, when the respondents were asked about specific attributes of their city, Famagusta was seen as place with serious environmental problems such as lack of effective public transportation, unprotected natural resources, lack of ‘green city’ image, ineffectiveness in environmental problem solving, a lack of cultural amenities, and a little sense of historical values. On the other hand, most of the respondents agreed that "Famagusta is a safe city", and that having “a strong economy for Famagusta will depend on developing the city as a better place to live and work”, and that "public transit that is reliable and safe can be important to the quality of life of Famagusta area residents”.

Findings indicate that the overall quality of life scores are comparable among local Cypriots, immigrants from Turkey, and students from various countries. Similarly, employment status had no bearing on quality of life scores.

4.3. Overall satisfaction with neighbourhood

An important area of exploration in the Famagusta study is neighbourhood satisfaction. Neighbourhood satisfaction has been studied frequently in housing research, and is seen as having a significant influence on the overall quality of residents’ lives.

In the survey, neighbourhood satisfaction was measured by a single question, *“How satisfied are you with the overall neighbourhood quality?”* with respondents given the opportunity to indicate they were “very dissatisfied” (1) , “very satisfied” (5) or some value in between. Nearly two-

thirds (63%) said they were satisfied, 25% were neither satisfied nor dissatisfied, and 12% were dissatisfied.

Empirical studies suggest that a number of specific attributes of a neighbourhood contribute to residents' overall satisfaction. In line with this, three sets of questions were asked: satisfaction with the social environment, satisfaction with urban environmental attributes, and satisfaction with the physical environment. Table 4 presents the means and the standard deviations covering the responses to these sets of questions.

The mean scores in Table 4 reveals that the respondents tended to be more satisfied than dissatisfied with the attributes; scores above 3.0 represent some level of satisfaction while scores below 3.0 represent a level of dissatisfaction. Attributes with the highest average scores were satisfaction with safety (mean= 4.08), and satisfaction with friendliness of neighbors (mean= 3.90). The mean scores for satisfaction with recreational facilities, greenery, maintenance of streets, and traffic density reflects a level of dissatisfaction with these aspects of urban life. However, an important point needs to be attended when one interprets the mean values in Table 4. Considering the limited range of responses, the standard deviations are high.

In order to determine the degree to which these attributes determine the overall quality of life measure, a regression analysis was employed. In this analysis, the attribute variables were entered in blocks as shown in Table 5. The whole set of variables explained 23.5 percent of the total variance in QOUL measures (Multiple $r = .485$). Two of the five social attributes had significant effects on the QOUL measure. Safety and sense of belonging contributed positively to overall quality of urban life, t values being 3.58, $p \leq .001$, and 2.26, $p \leq .03$, in that order.

Satisfaction with environmental attributes also produced significant effects on QOUL measure. In this category of attributes, satisfaction with public transportation contributed most to quality of urban life ($t = 4.80$, $p \leq .001$) but negatively. Satisfaction with greenery on the other hand had a positive effect on QOUL ($t = 2.99$, $p \leq .003$). Satisfaction with accessibility, attractiveness of the environment, and recreational facilities did not relate to quality of urban life.

Table 5 shows that satisfaction with noise level and maintenance of streets as two physical features of the urban environment had comparable effects on quality of urban life evaluations, the higher the satisfaction the higher the QOUL. Indeed, those two variables had zero order correlations with QOUL scores that are very close, $r = .21$ and $r = .24$. Satisfaction scores for traffic density and crowding did not relate to quality of urban life measure.

4.4. Prospects for the future

As a way of examining prospects about the future of residents' neighbourhood and QOUL in Famagusta, three sets of questions were asked: one dealt with moving intentions, another with expectations about the quality of their neighbourhood, and another with QOUL in Famagusta in the next ten years. With respect to moving intentions, more than half of the respondents (61%) indicated that they did not want to move from their current residence, and a half (52%) said they would "definitely not move" within the next two years. When the respondents were asked where they would like to move, 45% said they would prefer another neighbourhood in Famagusta, and another 40% mentioned the new low-rise residential estates that were being built outside the city.

In response to the question about a desirable place to live, half (49%) of the respondents preferred to live in an environment which had effective public transportation, available shopping, parks, and schools within a 10-15 minutes walk distance, and accessible to other places within 5-10 minutes by car. They also said that an environment with 4-5 stories apartment blocks and less urban open spaces was desirable. On the other hand, more than a third (38%) of the respondents preferred a residential environment where a car was a necessity, where there was no public transportation, and there were single family houses with gardens and with access to natural areas. The remaining 13% said they preferred an environment with row houses and single family housing, shopping facilities, entertainment, parks, and schools within 10-20 minutes walking distance, and the opportunity to walk to nearby open spaces.

Table 4: Satisfaction Scores for Social, Environmental, and Physical Attributes

Attributes	Mean*	Standard Deviation *
<i>Social</i>		
Safety	4.08	0.95
Social network	3.18	1.43
Friendliness of neighbors	3.90	0.93
Perceived similarity of others	3.43	1.14
Sense of belonging	3.09	1.35
<i>Urban Environmental</i>		
Accessibility	3.62	1.47
Attractiveness of place	3.19	1.40
Greenery	2.34	1.24
Public transportation	3.62	1.06
Recreational facilities	2.35	1.07
<i>Physical</i>		
Traffic density	2.79	1.07
Level of noise	3.34	1.41
Crowding	3.30	1.34
Maintenance of Streets	2.69	1.35

*The higher the mean value, the greater the level of satisfaction.
 N = 398.

In order to understand how people felt about their neighbourhood and Famagusta in the future, they were asked whether the quality of life would get better, stay about the same or get worse over the next 10 years. On average, respondents were more optimistic than pessimistic about the future of their neighbourhoods. Those who believed quality of life in their neighbourhood would improve outnumbered respondents who said it would get worse by three to one (64% versus 21%). Only 15% said their neighborhood would not change over the next decade.

Table 5: Zero-order Correlation Coefficients between QOUL and the Environmental Attributes and the Results of the Regression Analysis

Domain Prob.		Zero-order Corr. Coefficient	Standardized Beta Coefficient	t
<i>Satisfaction with social attributes</i>				
Safety	.19**	.19	3.58	.000
Social support (no. of rel. and fr.)	.10	.09	1.61	-
Friendliness of neighbors	.11*	.06	1.17	-
Perceived similarity of others	.08	.03	0.58	-
Sense of belonging	.15**	.13	2.26	.024
<i>Satisfaction with urban/env. attributes</i>				
Accessibility	.05	.00	0.06	-
Attractiveness of place	.08	-.04	-0.65	-
Greenery	.22**	.16	2.99	.003
Public transportation	-.34**	-.26	-4.80	.000
Recreational facilities	.08	.08	1.29	-
<i>Satisfaction with physical attributes</i>				
Traffic density	.05	-.02	-0.35	-
Level of noise	.21**	.19	2.71	.007
Crowding	.11*	-.02	-0.28	-
Maintenance of streets	.24**	.14	2.59	.010

* Significant at alpha .05

** Significant at alpha .01

Survey respondents were less optimistic about the city's future. Nearly half (48%) said the quality of urban life in Famagusta would get better over the next decade while 12% felt it would deteriorate; the remaining 40% believed there would be no change. In fact, these figures can still be interpreted positively, as nearly half of the respondents are optimistic about the city's future despite various environmental problems noted by the majority of respondents.

5. SUMMARY / CONCLUSIONS

The findings of the study reveal that, compared to satisfaction with an individual's dwelling and the immediate neighbourhood and its attributes, satisfaction with overall quality of urban life in Famagusta is lower. While almost two-thirds (66%) of the overall sample were satisfied with their neighbourhood, just 40 percent were satisfied with the QOUL.

In general, people in Famagusta are more likely to be dissatisfied than satisfied with recreational facilities, greenery, maintenance of streets, and traffic in their city. However, an important point needs to be attended when one interprets the mean values. Considering the limited range of responses, the standard deviations are high. This means that there were high degrees of differences among the city dwellers in respect to satisfaction domains of the city and the urban life, and a preliminary study by the authors have proved the existence of these differences (Oktay, Rustemli, and Marans, 2009).

According to the results of the multiple regression analysis on QOUL in Famagusta, safety and sense of belonging as two of the social attributes, and satisfaction with noise level and maintenance of streets as two physical features of the urban environment have comparable effects on 'quality of urban life' evaluations. When the satisfaction scores for these four variables were examined, safety was not a concern for the great majority of the respondents including the old core of the city (the Walled City), and there is no problem with the social attributes.

Concerning the prospects for the future, respondents were more optimistic about the future of their neighbourhood, than they were about the city's future. In fact, these findings can still be interpreted positively, as nearly half of the respondents are optimistic about the city's future despite various environmental problems agreed by the majority.

Famagusta residents tended to be unhappy with their neighbourhoods and when asked if they would like to move most said they would move elsewhere under the right conditions. Of those expressing a desire to move elsewhere, about half mentioned another Famagusta neighbourhood with high rise buildings and the other half preferred the low-rise residential estates located outside the city. Many said they wanted an environment which has effective public transportation, available shopping facilities, parks, schools within a 10-15 minutes walk distance, but accessible by car to other places. Surprisingly, they also indicated a preference for living in apartment blocks with relatively little open space between them. Others preferred an environment which was auto dependent, characterised by single family houses with gardens and accessibility to natural areas while a small minority preferred row houses or single family where shopping facilities, entertainment, parks, and schools were within a 10-20 minutes walk from their homes. These findings suggest that the future development policies should consider the creation of urban housing schemes with full services (shopping, parks, and other services) that are easily accessible.

On the other hand, the interest of a significant percentage of respondents (40%) to move to housing estate outside Famagusta, and the insignificant effect of public transportation as a measure of QOUL, brings about the urgency of preparation of a master plan in order to take urban sprawl under control and to provide better life environments in both urban and peri-urban areas.

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