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Residential satisfaction and mobility
in Göktürk peripheral neighbourhood

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Abstract

Among the main factors that affect residential mobility, satisfaction of households from their living environment and dwelling is outstanding since it covers most of the related variables. The extent to which households expectations are met by their residential environment depends on the socio-economic features matching the physical and spatial qualities of their living environment. This paper aims to contribute to theory and practice concerning residential satisfaction in housing through an assessment of the Göktürk residential neighbourhood and its housing, and its relationship to households' residential mobility. Göktürk, which is located in the northwestern periphery of Istanbul, is

a significant residential area, with the majority of its inhabitants live in houses with luxury lifestyle while other households are living in informal settlements with the lowest quality of housing and neighbourhood. In the first section of this paper, an overview of the residential texture of the Göktürk neighbourhood is discussed. Following this, the methodology and analysis of findings covering 210 households' views living in two main segments in terms of their socio-economic characteristics are reviewed. Finally, the physical features of neighbourhood such as housing and status of its quality are discussed to explore the overall satisfaction of respondents with their current situation. The importance of this research is that, in this area, two income groups of households which are very different from each other are living side by side. The major findings reveal that most households are satisfied with the quality of neighbourhood while a significant number of high-income households are dissatisfied with the environmental quality of neighbourhood and are satisfied with their housing, whereas some middle- and upper-class households are dissatisfied with their housing. It should be noticed that low-income households continue to admit that they are satisfied with their homes, despite the fact that they are living in squatter settlements, indicating that they do not want to lose their houses even with the least level of quality.

1.   Introduction

Residential mobility through its connections to housing profile (Fattah et al., 2015), housing market, governmental policies, economic changes, land use value (Jordan et al., 2012), and rearrangement of neighbourhoods is the main axis of housing theory in micro and macro scales. Based on W. J. McAuley and C. L. Nutty (1982) the concerned needs of individuals and families are; housing size, neighbourhood amenities, school quality, distance to stores or services, employment opportunities, and climate, with the requirements depending on the current life-cycle stages. During the 1950s, residential mobility found its roots in geography and sociology while distinguishing its borders by factors like household characteristics, satisfaction, residential history, market forces, and family structure (Coupe, Morgan, 1981; McAuley, Nutty, 1982; Davies, Pickles, 1985; Hedman 2011; Coulton, Turner, 2012).

The presence of attractive neighbourhoods in the proximity of housing units may motivate households to move. Inversely, households resist moving because of attachment to the current neighbourhood as social ties and sense of belonging (Poortinga et al., 2017). The other definition that is associated with mobility is disequilibrium that regarding this model no mobility decisions occur unless the current

living arrangements become suboptimal (Benenson, Omer, 2004; Rabe, Taylor, 2009; Fattah et al., 2015; Falkingham et al., 2016). So, a composition of push and pull factors determine both when and where the households move, or become subject to various constraints or barriers to mobility (Dane et al., 2014). The aforementioned factors are considered as a combination of adequacy of urban public facility centres (recreational, open and green spaces, parking lots, educational, cultural and health centre, local shops and shopping malls), household income, and tenure status, convenient accessibility to the aforementioned centres and public transport system, social environment including noise, crime, family's security and emotional attachment to the residential environment (Lu 1999; Mohit, Al-KhanbashiRaja, 2014; Egercioğlu et al., 2015; Pudjiwidyastuti et al., 2016; Manaf et al., 2018).

Based on relevant studies, mobility for low-income families occurs not because of reaching better circumstances, but unstable housing arrangements (Gruber, Shelton, 1987). On the one hand, such moves may have negative consequences whilst on the other hand, high-income families move in order to reach a higher quality of life and amenities in new neighbourhoods. Based on empirical evidence, such families even have the ability to change the host neighbourhood, so for them, mobility can be a path to greater opportunity and satisfaction (Benenson 2004; Jordan et al., 2012; Thomas et al., 2013; Morris 2017).

The decision about whether or not to move can be seen as weighting satisfaction with current housing relative to the anticipated satisfaction with alternatives (Dane et al., 2014). To determine the residential area's willingness to relocate, residents' satisfaction levels should be assessed. Mobility experience is one of the most significant assessors in the value system of residential satisfaction (Herfert et al., 2013). Generally, residential mobility would be determined by a complex framework of environmental, socio-economic, households' needs, values and priorities (Etminani-Ghasrodashti et al., 2017). Among the satisfaction determinants factors, housing and neighbourhood are the sources of assessments. Then, in the case of dissatisfaction with status of neighbourhood and housing, a critical motivation for movement of households would be provided (Balestra, Sultan, 2013). One of the most significant indicators affecting households' living status is residential neighbourhood satisfaction (Herfert et al., 2013). Residential satisfaction is considered as a mixed

framework, referring to the location and time of assessment involving a wide range of households (Mohit, Al-KhanbashiRaja, 2014; Abidin et al., 2019). Satisfaction can be explained as compilation of subjective responses to objective circumstances, gained in lived environment (Potter, Cantarero, 2006; Herfert et al., 2013; Mohit, Raja, 2014).

Once the households' expectations from their current houses are far from their desired dwellings, it does not provide their needs, so stress and dissatisfaction are created (Oktay et al., 2009; Salleh, Badarulzaman, 2012; Etminani-Ghasrodashti et al., 2017). In this case the household's reaction to such circumstances may be migration to new housing where they adjust their needs (Gleave, Hays, 1977). For instance, residential dissatisfaction occurs in case accessibility to schools for children, and workplaces for individuals and medical centres for households in emergency situations is not convenient. Among many indicators in assessment of neighbourhood status, there are some critical features such as environment, security and safety, public facilities and housing satisfaction (Egercioğlu et al., 2015; Abidin et al., 2019). In addition to the aforementioned features, accessibility to the public services, their adequacy and security also influence on the overall assessment of residential neighbourhood satisfaction. In order to structure the affecting factors, two main classes are determined as physical and socio-economic features (Tab.1). For the physical features satisfaction about housing and neighbourhood issues are significant (Balestra, Sultan, 2013; Tan 2016). Integration with neighbourhood status of people living in the neighbourhood and crime level explores the social features of neighbourhood. Finally, land value, socio-economic characteristics of households and neighbourhood improvement implementations (Chen et al., 2019).

Table 1. Types of variables

Features of neighbour-hood satisfaction aim	Satisfaction with
Physical	Homes, neighbourhood facilities, quality of environment, quality of streets and roads, crowding and noise level (Oktay et al., 2009; Balestra, Sultan, 2013; Mohit, Raja, 2014; Tan 2016; Abidin et al., 2019).
Socio-economic	Integration with neighbours, people living in the neighbourhood, crime level, home value, cost of living, socio-economic status, homogeneity of social class (Mohit, Raja, 2014; Egercioğlu et al., 2015; Abidin et al., 2019; Chen et al., 2019) .

Neighbourhood satisfaction and housing satisfaction have a mutual relationship so that they are source of satisfaction regarding their elements which lack of any of them influence on overall satisfaction (Gruber, Shelton, 1987; Mohit, Raja, 2014; Etminani-Ghasrodashti et al., 2017). As a result the residential mobility depends on households' satisfaction referring to their perceptions of the residential environment while housing and neighbourhood satisfaction are considered as predictor of residential mobility (Herfert et al., 2012). The aim of this paper is assessment of the households' satisfaction across Göktürk neighbourhood referring to their residential mobility probability in result of the satisfaction from the housing and neighbourhood facilities.

2.   Overview of Gökürk and its neighbourhood segments

Göktürk, located in the northwestern periphery of Istanbul, south of the northern forest of Istanbul and 8 km north of the second beltway, became a gated town of 16,000 in the latter half of the 2000s (Candan, Kolluoğlu, 2008) – (Fig. 1). In the 1920s, the village hosted a mixed population, including Greeks, that refers to the time before exchanging population between Turkey and Greece. Around the 1970s, the main source of income in the village was agriculture until the end of this decade

the spread of the industrial areas from Alibeyköy and Kağıthane also affected Göktürk (Esen, Rieniets, 2005). Göktürk experienced cleared forest for agriculture usage, squatting as a means of settlement and agricultural plots of land were sold to migrant workers, who illegally reorganized them into residential areas (Gül 2017). The majority of the inhabitants of Göktürk live in houses with gardens, maintained with the assistance of domestics, gardeners and drivers. It was only a decade later that the rush to Göktürk actually took off. The increasing pace of development in Göktürk is no exception to the rapid growth of gated towns in other parts of Istanbul (Candan, Kolluoğlu, 2008). In the 1980s, for the first time, Turkey witnessed the emergence of the gated communities as a phenomenon in the shadow (course) of economic liberalization (Özkan, Kozaman, 2006; Akgün, Baycan, 2007; Gül 2017). In the north-western part of Istanbul, on the outskirts of northern forests and close to the Kemerburgaz residential neighbourhood, Kemer country, which is known as one of the first gated communities for high income households is located in this district. After obtaining its brand as high-class American style gated community, Kemer country in Göktürk was not just a residential area as usual, but through construction of a state-of-art infrastructure, golf courses, tennis courts, artificial lakes, multipurpose sport facilities like horse riding and country club stabilized its uniqueness (Esen, Rieniets, 2005; Bozdoğan 2010). Today, Göktürk has witnessed Kemer country spreading over the neighbourhood, while the village is turning into a town. The total developed land of Göktürk is part of the forest and national park that is privatised and rented to the residential usage through the Kemer Construction and Tourism Company (Candan, Kolluoğlu, 2008).
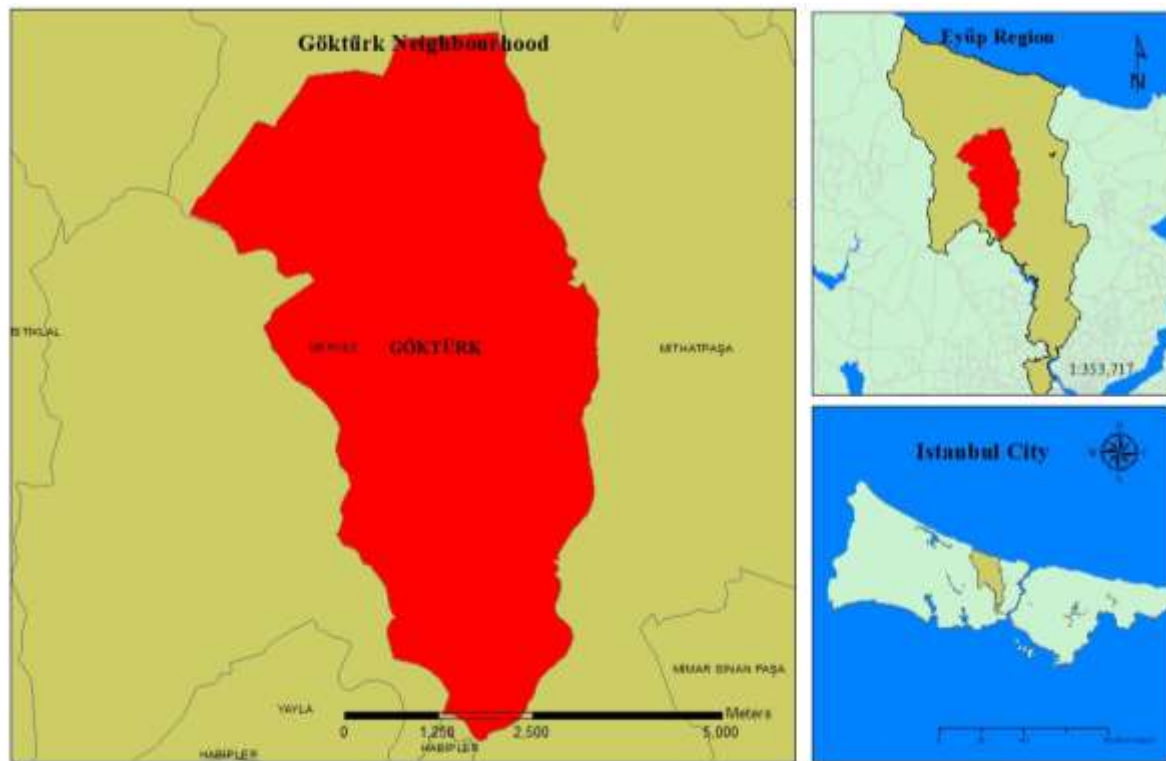
Figure 1. Location of case study
Source: Authors

The remarkable areas of forestland located on the western part of Göktürk, which had informal development background on formerly authorized lands as forest regime, have gained legal private ownership status by recent regulations. Today, in the aftermath of such a course of development, many villagers have sold their land to investors in order to ensure their share of the emerging real estate boom, and the investors launched new projects feeding the growing appetite for luxurious residences. Today, the former village has reached an (urban) density. Göktürk's squatter settlements, so called gecekondus in Turkish urban development, includes a housing pattern with detached buildings in low-density and worse infrastructure quality, are successful to find their way to relocate themselves in the legal market (Esen, Rieniets, 2005; Akgün, Baycan 2007; Bozdoğan 2010; Gül 2017).

The significance of assessing household's satisfaction and residential mobility in the Göktürk neighbourhood is due to the fact that the gated communities and the informal settlements are positioned next to each other. Obviously, having higher-income families and lower income groups settled next to each other, the neighbourhood considers disparate expectations from housing and their residential environ-

ment and living standards of these two income groups which must be addressed (Fig. 2).
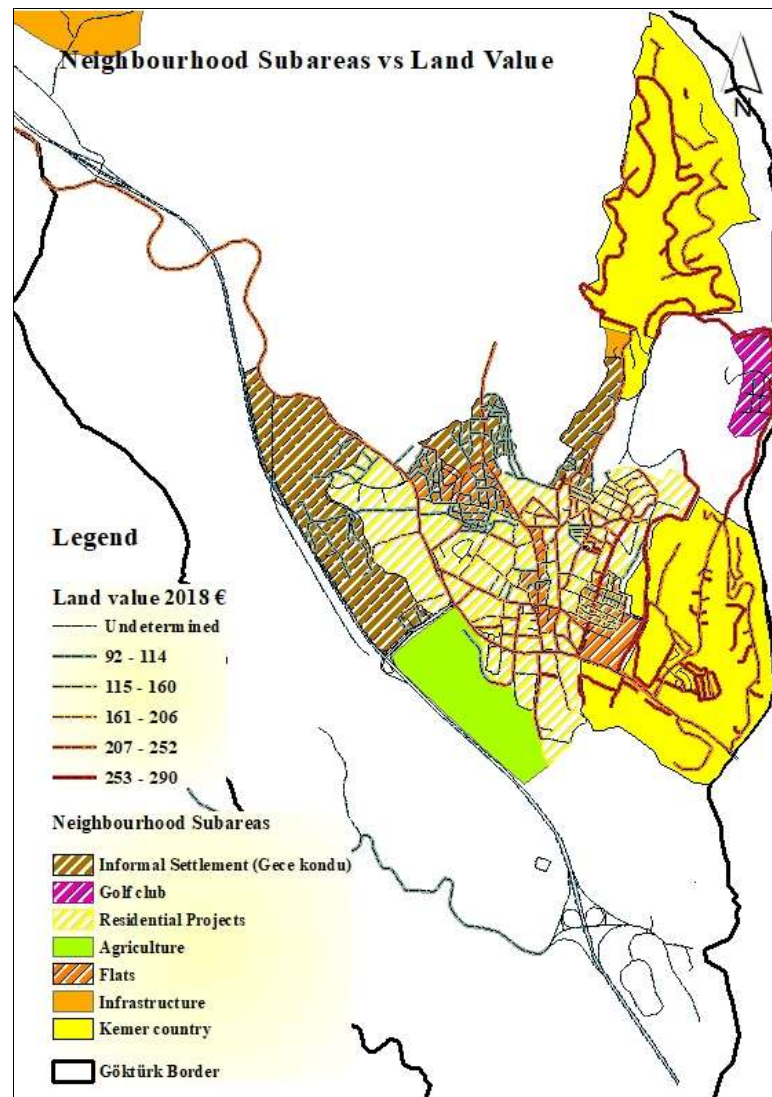
Figure 2. Neighbourhood subareas versus land value
Source: Authors derived from e-Devlet kapısı (2018)

3. Methodology and analysis

3.1. Method and data

The current study is based on collected data through surveys conducted in 2019, which were structured to explore the neighbourhood satisfaction of residential Göktürk neighbourhood. The questionnaire is structured into two groups of questions as socio-economic characteristics of households and assessment of satisfaction with physical features of a neighbourhood. The measurement of satisfaction level

with housing and neighbourhood features is based on a five-point Likert scale where the moderate value is 3, which considers midpoint range that above this point implies satisfied households and lower indicates dissatisfied (1 for very unsatisfied and 5 for very satisfied). Analysis of frequencies and percentages of households' characteristics are provided through descriptive statistics. Using chi-square test through crosstabs analysis, the relationship between housing and neighbourhood satisfaction of households and their income groups are generated.

For spatial sampling of the case study, two factors as neighbourhood zoning and land value are applied and overlaid to explore sampling zones. By exploring the spatial patterns of land use, the neighbourhood of Göktürk can be classified to main fragments as, Kemer country, squatter settlements (known as *Gece kondu*) established on 2B zones, agricultural sites, and housing transformation zones developed with new "residential projects" and "apartment" blocks. Generally, holding three squatter settlements under the ticket of 2B lands and three luxury residential great spots, the neighbourhood of Göktürk is recognized as a heterogeneous region. So, the neighbourhood zoning is considered as the first layer based on the abovementioned statements. In order to overlay two maps (land value dynamics and neighbourhood zoning) common weighting range is dedicated to the variables (intensity of importance on Saaty's scale). Regarding the usage type of land, weights from 3 to 9, respectively, considered for Kemer country to squatter settlements. For the land value factor, in order to reach a relatively constant character of land, the dynamics of values from 2003 to 2018 are investigated and the neighbourhood is classified to four ranges from unstable to stable. Therefore, as the second layer the specified ranges are standardised by weights from 3 to 9. It should be noticed here that the outcome map recognizes subareas which can be the precise stratifying of the neighbourhood to subareas in order to take samples. Referring to above mentioned points the formal surveys are carried out over 210 cases which are randomly chosen throughout the distinguished subareas of the case study.

The outputs of the analysis are presented in the maps illustrating how the variables are distributed. Also, descriptive tables of socio-economic, physical and environmental features and by crosstabs analysis (chi-square test), the research came to the conclusions:

(1) maps, representing the exact locations of responses, and neighbourhood features;

(2) tables of descriptive analysis of households' socio-economic characteristics and chi-square test.

3.2. Physical teatures of neighbourhood satisfaction

In this section physical features of the neighbourhood are analysed regarding respondents' appraisals over environmental features such as existence of areas to be renovated, sense of crime, safety and security level, rent value, and distance to public service centres and workplace. Level of satisfaction from housing and neighbourhood features are weighted through Likert scale. According to the respondents' view, safety and security threats in the area are as presence of addicts, alcoholics, and hooligans that are found mostly on Çamlık Street (located in mid-eastern part of the area, covered with low-income housing), which decreased the security quality of area up to 64.7%. On the other hand, under construction projects, located in the north nearby the forest zone have provided low level of safety sense which threats security of area by 29.4% concern (Tab. 2). Based on what has been discussed in the security situation of the neighbourhood, people are not very satisfied because of the presence of alcoholics and addicts sauntering through the area and the existence of buildings in construction scattered around the area (Fig. 3).

Figure 3. Threats to security of neighbourhood
Source: Authors

The buildings and residential areas in which these units are located require renovation and improvement. These circumstances go on in the squatter settlements, roads nearby the stream and the border between the centre of neighbourhood and Kemer Country. Open public spaces also need renovation, improvement, and completion. Generally, the centre and the northern parts of the neighbourhood need infrastructural renovations in terms of electrical installations, buildings, and environmental quality (Fig. 4). Quality status of residential buildings, 74.7% of households are in desirable condition and do not need urgent renovation and repair, as reported in the survey results. And only 25.2% share the need for renovations in their current residential buildings. More than half of the sample population is satisfied with the ease of access to public transport.

Figure 4: Need to be renovated
Source: Authors

Regarding the size of the houses, 5.3% of the households are satisfied with their living space and only 5% are dissatisfied. 0.4% of the population resides in homes that are 50 m² or less, while 32.5% of households live in houses that are 50-99 m². In addition, 33.4% of households reside in units having 100-129 m² space, whereas the left other shares belong to houses which are larger than 130 m² that belong to high-income households (Tab. 2). Due to the mean size of houses which is 136.9 m² (Fig. 5), and satisfaction of the housing unit size, which is illustrated in Figure 6 can be acceptable that most of the households are satisfied with their space of living. Among the surveyed households, 79.0% are completely or relatively satisfied, 13.8% are completely or relatively dissatisfied, and 7.1% have no idea about their housing size.
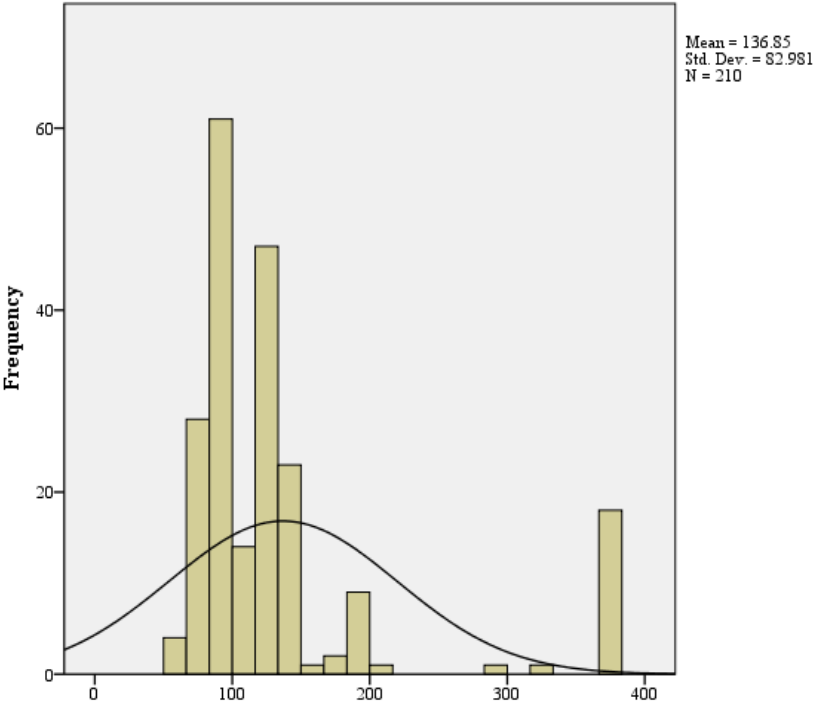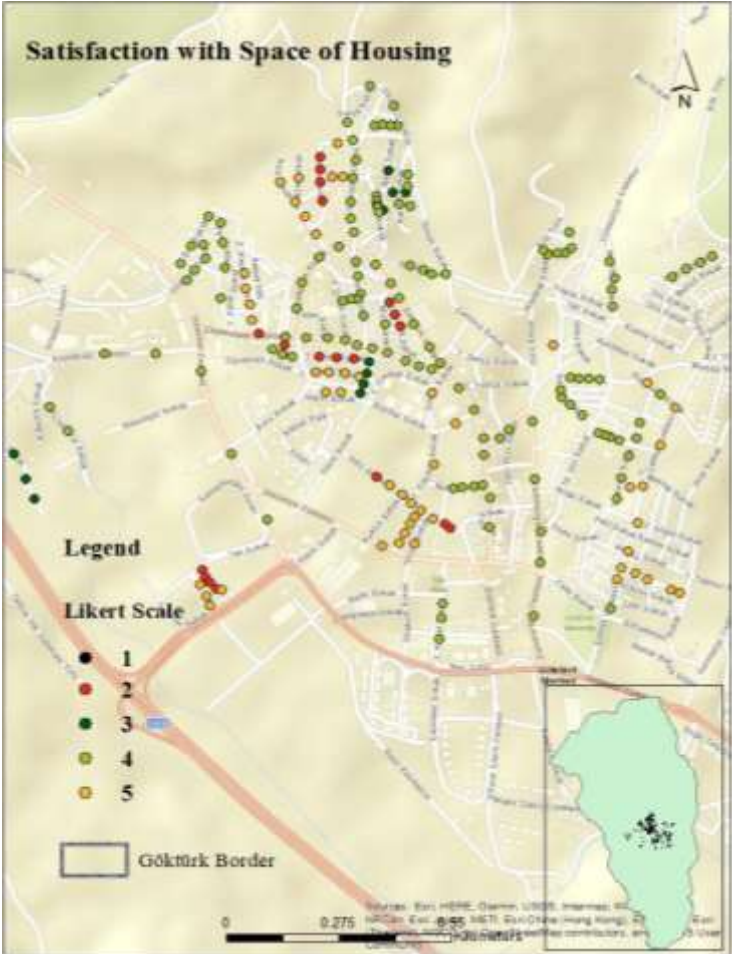
Figure 5. Size of house
Source: Authors

Figure 6: Satisfaction from size of the housing unit
Source: Authors

According to the responses of inhabitants, the majority of costs of housing rent is within the range of 174.82-349.65 EUR by 72.2% share of all and the higher rent value that is more than 349.65 EUR covers 27.8% of samples. According to these figures, households with income levels lower than 349.65 EUR monthly, constitute the poor group (Tab. 2). The residents of the wealthy housing quarters in the centre and east of the neighbourhood are satisfied with their current housing while dissatisfied and very dissatisfied households reside as they move north and west of the area. Regarding the following figures, access to the public and commercial service centres are easy reach for households. The density and convergence of households in the centre of the residential neighbourhood has created the condition that households from different income groups have access to these centres (Fig. 7).
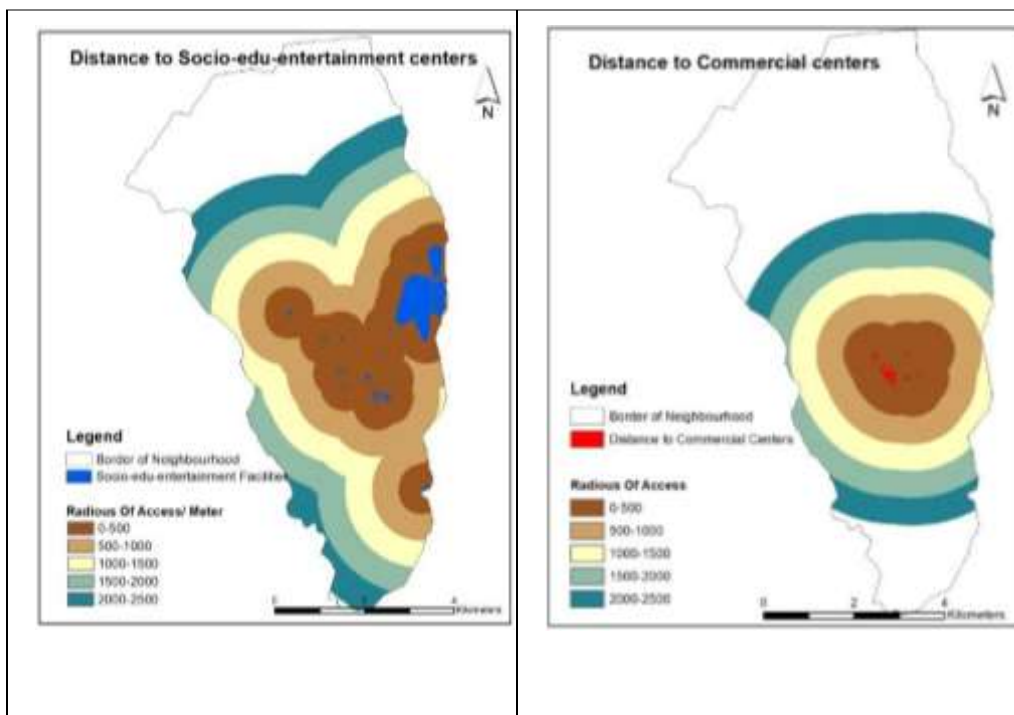

Figure 7: Distances to public service centres
Source: Authors

Regarding the tenancy of the residential units, it can be seen that 16.9% of the units are lower than 157 EUR rental groups. Like 55.3% of rent value belongs to 157-314 EUR, while 15.3% refers to 314-471 EUR, around 6.1% covers the 471-550 EUR values, and finally 6.1% belongs to more than 628 EUR.

Table 2. Responses to physical features of Göktürk

	Variable	Percent
Status of neighbourhood security	Urban security threats (addicted, alchoholic persons, …), Çamlık street	64.7
	Gece kondu area	5.9
	Under construction lots within forest	29.4
Quality of buildings and neighbourhood	Old houses (Gece kondu),	40.0
	Infrastructure needs to be repaired (road, lightening)	27.5
	Low quality of environment	10.0
	Building of public services	22.5
Size of house	<50 m²	0.4
	50-99	32.5
	100-129	33.4
	130-250	24.2
	251-380	1.5
	>380	8.0
Rent value (EUR)	<157	16.9
	157-236	16.9
	237-314	38.4
	315-393	10.7
	394-471	4.6
	472-550	6.1
	551-628	0.0
	>628	6.1

Source: Authors

3.3. Socio-economic features of neighbourhood satisfaction

Households expressed their level of satisfaction from social features of the Göktürk neighbourhood such as household's income, mobility experience, location of their previous house, living years in the current house, households' origins, and attachment to the neighbourhood. By looking at the distribution of income groups

throughout the area, it would be obvious that 18.3% of the households are from low-income level whereas 35.3% and 46.5% respectively belong to middle and high income groups (Tab. 3). According to the survey results, households' income can be predominantly between two groups of 710-860 EUR and more than 1311 EUR. Given the low, medium and high income categories for households, it can be seen that the majority of residents belong to the two groups of low-income and high-income residents who live in the neighbourhood. The average rental price is 392.50 EUR, which is almost equal to the income level of lower income households.
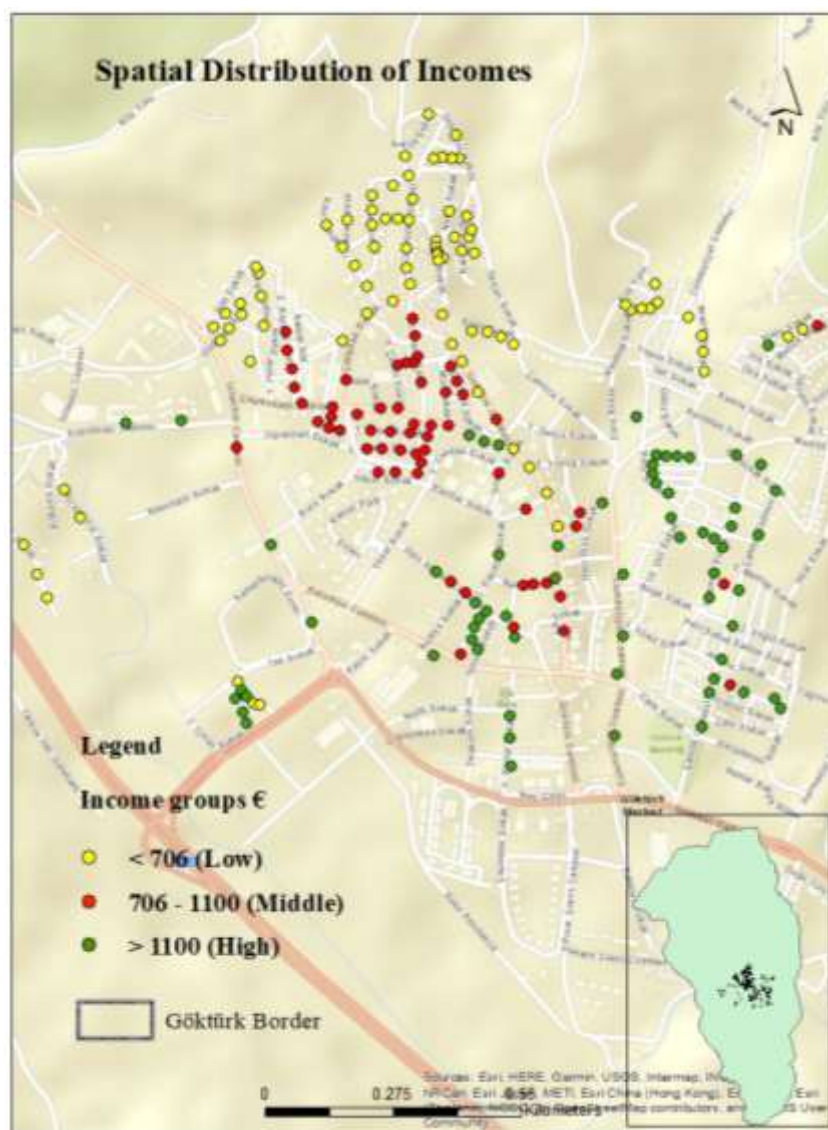

Figure 8: Distribution of Households income
Source: Authors

According to Figure 8, middle and upper income class households are located in the centre, some parts of the west and eastern part of the neighbourhood. In the

central and northwestern part, the income groups are mixed and heterogeneous. However, given the congestion of households with a high income level, it is higher than the low income level. Therefore, it can be concluded that these low-income households are at risk of being integrated into renovations or under construction projects, or at risk of being excluded, because the presence of high-income house-holds increases the land and rent values in the neighbourhood. So the presence of low-income households in these areas is gradually diminishing. Concerning house-hold ownership, 69.0% of households own their property where most of the nuclear and non-nuclear families including 30.5% of households also live on rent.

Households in this area have experienced mobility from 1 to 8 times since the year 2000, of which 24.5% have moved between 2 and 3 times, whereas 10.1% of people have moved houses between 3-4 times (Tab. 3). Just 2.9 % were more mobile in the last 19 years while 26.4% never have moved houses since the 2000 (Fig. 9).

Figure 9: Distribution of mobility since 2000
Source: Authors

Figure 9 indicates that most of the households living high-income group areas and newly constructed apartments areas have come to the neighbourhood recently, whereas residents of squatter settlements and some of the central area either have no relocation experience or their mobility restricted to the neighbourhood border. Residents of these areas have either not moved or relocated once or twice, and also in the northern part of the centre, households move more than twice that reflects the dynamics of residential mobility in the central area.

The previous households' residents show that 38.2 % of them just had mobility within Göktürk, while 44.9% immigrated to this neighbourhood from other districts and regions (Tab. 3). Based on interviews most of the households moved house regarding their job necessities (Fig.10).

Figure 10: Distribution of households' previous location
Source: Authors

As can be inferred from the data, 30% of people have been living in their current houses less than 5 years while 41% are living between 5 to 15 years. The other

29% of households have been living in the same houses for more than 15 years (Tab. 3). Generally, the mean number of years spent living in this area is 12.6 year, which is shown in Figure 11.
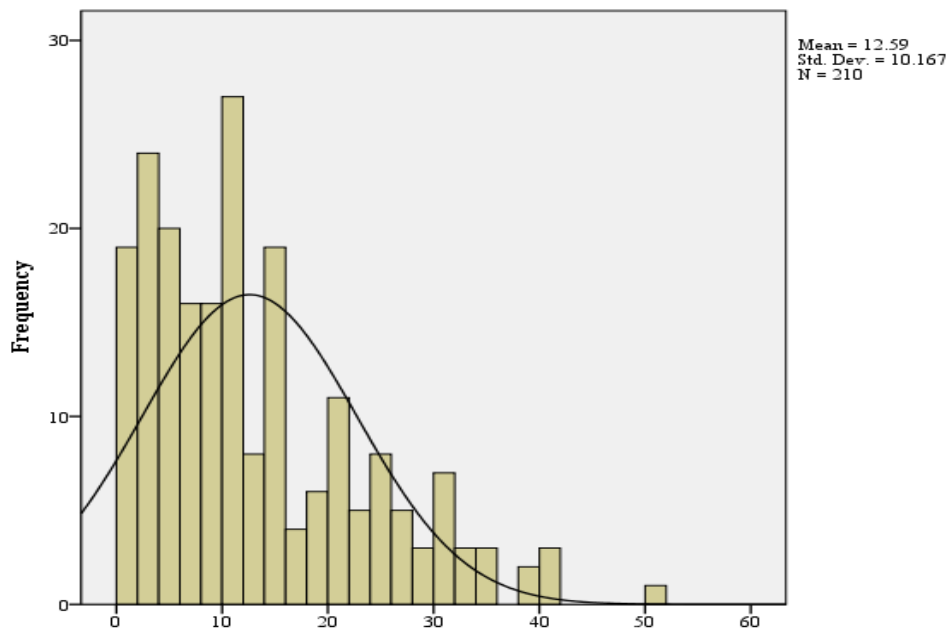
Figure 11: Histogram of living years
Source: Authors

It should be noticed that 75.2% of the current inhabitants are from Istanbul who originated from other neighbourhoods or areas of Istanbul. Around 14.8% of families moved out of Istanbul to the area, indicating that the social context of this area is homogeneous. The distribution of households which have attachment feelings to the neighbourhood shows that most of the residents in informal settlements and some parts of the central areas are much attached to the neighbourhood where they are located on the old core of the neighbourhood.

Table 3. Socio-economic features of Göktürk

	Variable	Percent
Households income (monthly) Euro	<393	2.4
	393-550	15.9
	551-710	13.0
	711-860	22.3
	861-1020	7.3
	1021-1177	5.6
	>1177	33.5
Mobility since 2000	No move	26.4
	1	44.2
	2	16.3
	3	8.2
	4	1.9
	5	0.5
	6	1.9
	8	0.5
Households previous location	Same neighbourhood	38.2
	Another neighbourhood	6.6
	Anther district	30.6
	Another region	14.3
	Never move	10.3
Living years	<6	30.0
	6-10	28.2
	11-15	12.8
	16-20	9.5
	21-30	13.8
	>30	5.7

Source: Authors

Observations on income and housing ownership indicate that the majority of the low-income group are homeowners, while the high-income group has a significant share of rent, ownership and joint ownership with family. In addition, the middle class group are often homeowners and tenants and have only a small share of households living in nuclear families.

3.4. Satisfaction level of neighbourhood and residence

Compared to the income group's satisfaction with the quality of their neighbourhood, most households are satisfied with the quality of neighbourhood while a significant number of high-income households are dissatisfied with the environmental quality of neighbourhood (Tab. 4).

Table 4. Socio-economic features of Göktürk

Household groups	Satisfaction from neighbourhood		Satisfaction from residence	
	Mean	Std. dev.	Mean	Std. dev.
High income	4.44	.799	3.857	1.0755
Middle income	4.12	.718	3.707	.8788
Low income	4.07	.908	3.836	.8769

Source: Authors

By comparing household income and household satisfaction from their current housing, most income groups are satisfied from their housing, whereas some middle- and upper-class households are dissatisfied with their housing. It must be noticed that low-income households continue to admit that they are satisfied with their homes, despite the fact that they are living in informal settlement, indicating that they do not want to lose their houses even with the least level of quality.

Households in the informal settlement and neighboring districts are not very satisfied with their housing size, this point indicates that the household dimension is not commensurate with their space of housing. Since the area is surrounded by forest and park, unsurprisingly people are satisfied with the quietude throughout the area. Availability of different modes of transportation result in satisfaction from accessibility to workplaces and other urban public service centres. This level of satisfaction refers to the fact that most of the household's workplaces are not far from their houses. In addition to the presence of forests, quality of parks and green spaces within the neighbourhood are also essential. However, most of the residents are dissatisfied with the number and quality of existing green space and besides the cleanliness of streets and pedestrian walkways, the existence of stray dogs and worn down streets that need to be repaired are other causes of residents' dissatisfaction (Tab. 5).

Table 5. Overall view of households' satisfaction with neighbourhood

Satisfactory assessment	Mean	Std. deviation
Satisfaction from size of house (n:210)	3.85	1.015
Satisfaction from attributes of current house	3.80	1.025
Satisfaction from security of neighbourhood	4.06	.886
Satisfaction from quietude of neighbourhood	4.25	.839
Satisfaction from neighbourhood destination accessability (n: 208)	3.61	1.203
Satisfaction from accessibility to work place (n: 151)	4.01	.973
Satisfaction from accessibility to park and green spaces	3.90	1.026
Satisfaction from neighbourhood quality attributes (sanitation and cleaning) (n:209)	3.50	1.114
Neighbourhood attachement level (n:208)	4.09	1.157

Source: Authors

By examining the cross-tabs between the two variables, it can be seen that the percentage of neighbourhood security is not related to the households' decision to stay or relocate (tab. 6). In every satisfaction range from very dissatisfied to dissatisfied, there is a large percentage of people who do not want to move out of the neighbourhood. Examination of the satisfaction from quietness and households' mobility, reveals that satisfaction rate placed on the average level. Besides this, the desire to move on the basis of current housing includes over 83.3% of all satisfaction ranges. According to the chi-square test there is no significant relation between mobility and satisfaction from the quietude of the neighbourhood regarding the validity of this confrontation and comparison (Tab. 7).

Table 6. Mobility vs satisfaction from security of neighbourhood

Test	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	36.507	28	.130
Likelihood ratio	34.038	28	.200
Test		Value	Approx. Sig.
Nominal	Phi	.419	.130
by nominal	Cramer's V	.209	.130
N of Valid Cases			208

Source: Authors

Table 7. Mobility vs satisfaction from quietude of neighbourhood

Test	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	23.305	21	.328
Likelihood ratio	26.434	21	.190
Test		Value	Approx. Sig.
Nominal	Phi	.335	.328
by nominal	Cramer's V	.103	.328
N of Valid Cases			208

Source: Authors

Most of the households which are satisfied from accessibility to public urban services do not intend to move. Table 8 confirms the accuracy of this analysis for educational centres using the chi-squared test. For other urban public facilities the p value of chi square test is not significant. The same comes true for access to the workplace. Often those who do not wish to change their homes are satisfied and very satisfied from their workplace. Obviously, these people often live in the workplace close to their home (Tab. 9).

Table 8. Satisfaction from urban public centres (educational) and mobility

Test	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	14.596	7	.042
Likelihood ratio	15.759	7	.027
Test		Value	Approx. Sig.
Nominal	Phi	.274	.042
by nominal	Cramer's V	.274	.042
N of Valid Cases			194

Source: Authors

Table 9. Mobility vs satisfaction from accessibility to work place

Test	Value	Df	Asymp. Sig. (2-sided)
Pearson chi-square	16.891	8	.031
Likelihood ratio	11.608	8	.170
Test		Value	Approx. Sig.
Nominal	Phi	.334	.031
by nominal	Cramer's V	.236	.031
N of Valid Cases			151

Source: Authors

Most residents who are relatively satisfied with access to green spaces and parks are not reluctant to move to another housing unit as they express but since the chi-square value confirms there is no meaningful relation between these two variables (tab. 10). There is a weak and inverse relationship between housing ownership and satisfaction from housing size ($R2$= .023, B= -0.025, P= .000) – (Tab. 11). Around 89.5% of people do not consider their houses in need of renovation and households

are not in a state of disrepair. This can be deduced from the average year of residence (age of building) that no residential building is more than 20 years old. The majority of households are from Istanbul and since 2000, the number of households relocating has been often low, as 70% of households either not moved or only once.

Table 10. Mobility and satisfaction from accessibility to park and green spaces

Test	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	25.214	28	.616
Likelihood ratio	18.393	28	.916
Test		Value	Approx. Sig.
Nominal	Phi	.348	.616
by nominal	Cramer's V	.174	.616
N of Valid Cases			208

Source: Authors

Table 11. Housing tenure and satisfaction from housing size

Test	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	21.226	12	.048
Likelihood ratio	16.073	12	.188
Test		Value	Approx. Sig.
Nominal	Phi	.318	.047
by nominal	Cramer's V	.184	.047
N of Valid Cases			210

Source: Authors

This is also documented by statistics, as far as households are concerned about the social relationship with the rest of the households, it can be seen that 52.9% an-

swered positively to their relatively social attachment in Göktürk. The results have been obtained regarding the responsiveness of the urban environment to the daily needs of households show that the adequacy and accessibility to retail stores, households are satisfied from urban public services by 81.1% positive answer. More than half of the population expressed satisfaction from the adequacy of local business centres to their needs. Concerning recreational centres and parks, 59.5% of residents expressed satisfaction with the adequacy of these areas in terms of service provision. However, in relation to establishments and cultural centres less than half have expressed satisfaction from being responsive to the current population of the area, indicating that the number of centres is not sufficient for the families. Besides this, 68.1% of households also acknowledge the adequacy of these health centres. Referring to sports facilities, given that less than half of the population are satisfied with their adequacy, indicate that as population grows then the area needs to increase in health service centres to meet household's needs. Most income groups are not very reluctant to change their housing unit, whereas the high percentage of households that tend to move are middle-class households. According to the data of this study, there is a weak and inverse relationship between the desire for reconstruction and the times of mobility over the past 20 years (R2= .023, B= -4.976, P= .000) – (Tab. 12). Besides, there is a positive and significant relationship with satisfaction from housing and the desire for reconstruction (R2= .056, B= .792, P= .001) – (Tab. 13). The average year of residence of the households in the study area is approximately 13 years, which indicates that there is not a long history of living in this area. In general, most households with low, moderate and high income are generally satisfied from their housing space, which indicates that the average household size of 3.67 is proportional to the average 136.2 m².

Table 12. Mobility and satisfaction from accessibility to park and green spaces

Test	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	25.214	28	.616
Likelihood ratio	18.393	28	.916
Test		Value	Approx. Sig.
Nominal	Phi	.348	.616
by nominal	Cramer's V	.174	.616
N of Valid Cases			208

Source: Authors

Table 13. Satisfaction from housing and housing reconstruction

Test	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	13.688	4	.008
Likelihood ratio	11.267	4	.024
Test		Value	Approx. Sig.
Nominal	Phi	255	.088
by nominal	Cramer's V	.255	.008
N of Valid Cases			210

Source: Authors

Regarding household's satisfaction from proximity to the central workplace, the residents of all three income groups are satisfied with the proximity to their workplace, indicating that their workplaces are in the same neighbourhood. Finally, the weak relationship is considered between residential ownership and the times of household's mobility over the past 20 years (R^2= .022, B= .031, P= .032) – (Tab. 14).

Table 14. Mobility and tenure

Test	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	65.806	21	.000
Likelihood ratio	66.103	21	.000

Test		Value	Approx. Sig.
Nominal by nominal	Phi	.562	.000
	Cramer's V	.325	.000
N of Valid Cases			208

Source: Authors

4.   Discussion and conclusion

To urban planners, property developers and policy makers, residential satisfaction is a significant indicator that contributes to defining the level of contentment which households obtain. In context of residential satisfaction, an extensive range of pull and push variables influence residential mobility intention of households within neighbourhoods. According to the discussion in this study, satisfaction is a perception of the environment comparing to the expectations of inhabitants from environmental quality. Satisfaction of households from their residential environment is significantly associated with the level of their income groups. Majority of households from a high-income group, tend to have more opportunities and willingness to change both the quality and location of their living environment, than the lower income group.. In this case, the tendency to move to another residence due to the environmental quality decreases within high-income group.

On the other hand, housing to low-income households is more likely defined as shelter since their expectations of the residential environment are related to how they can meet this initial need. Therefore, their expression of satisfaction from the quality of the residential environment and assessment of its standards can be less reliable. The solid reason is that they do not have other opportunities to move so they claim to be satisfied from the current environmental conditions.

It must be noticed that, over the past decade, large areas of Istanbul have been renovated as a result of urban transformation projects regarding renewal policy on worn-out areas (Kuyucu, Ünsal, 2010; Kuyucu 2017). And Göktürk is not in exception in this rule due to its slums. So, while the physical characteristics of the residential neighbourhood of the households are going through a transformation period, the inhabitants living in informal settlements are not socially and economically capable of coping with the improvement of their residential environment.

Regarding the case study, the development of Göktürk neighbourhood from rural to urban area for high-income households has led to ongoing renovation of low-income residential areas and informal settlements. Results put forward the significance of a transformation process with possible evictions in these neighbourhoods, which can be gradually dominated by high-income groups.

The presence of exceptional environmental attractions, including the peacefulness of being enclosed in the forest, has made this environment a particular region for luxury housing projects. Another significant attraction of Göktürk is being surrounded by the challenging large-scale urban projects such as Marmara motorway, New Airport of Istanbul and Canal Istanbul, which is an artificial waterway project that will connect the Black Sea and the Marmara Sea, approximately 25 km away from the natural waterway, Bosporus. The presence of these projects and their further development have definitely influenced both the development of Göktürk neighbourhood and on the residential mobility of inhabitants in moving or staying in the neighbourhood that can be discussed in another research.

Besides, land prices and rents do not match the financial levels of lower income group living in the centre and informal settlements, which is one of the effects of an influx of higher income families. Households regarding their social status, income group, land price, and availability of housing supplies compete for their most desired available options to accommodate in residential neighbourhoods. That is how in the case study, the absence of favourable socio-economic conditions for families living in the low-quality dwellings, on the one hand, and dissatisfaction of households living in new luxury residential projects from nearby informal settlements may lead to another experience of eviction in Istanbul in the name of gentrification and new development. Due to the fact that this area is isolated and the closest

residential neighbourhood to it has similar conditions (gated-communities), so their mobility for this group of families is a critical issue that needs to be addressed. Since, there are significant numbers of these families who are more prone to be evicted, a preventive approach for planning must be defined to be put on the agenda of urban planners. Planners in such circumstances should consider the economic status and minimum living standards of this vulnerable group (who tend to relocate) in order to avoid the challenge of displacements by adopting appropriate policies to improve the quality of their housing and residential environment to where they belong. In summary, the proximity of two different income groups' inhabitants together, one of which is growing faster (due to environmental attractions and benefits as a result of large-scale projects), has gradually provided the conditions for the displacement of low-income, so-called vulnerable, households. For the further studies, dimensions and scales of these evictions and the prediction of possible moves would be examined in the form of detailed spatial analyses.

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