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Fear of Crime among Women in the Old City Center of Istanbul

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Abstract

Istanbul, the biggest city of Turkey with a population of 17 million people, is a city where both the negative and positive effects of urban life standards are intensely experienced. Along with problems such as migration from rural areas to urban areas, rapid population growth, unemployment and squatting, crime rates have recently been observed to go higher (Yirmibesoğlu & Ergun, 2013). The old city center, Beyoglu was infamously known for its high crime rates and fear of crime, but today it seems that this image has changed and the fear of crime has decreased. Among the reasons for this decrease, we can mention the fact that Beyoglu has been through a gentrification process that some buildings have been restored, and that urban design implementations have been done in some streets. This study aimed to find out how fear of crime according to gender differed before and after the renovation process. With this aim in mind, field research and surveys were conducted in 2006 and 2010. The research problem, fear of crime and environmental safety in Beyoglu, was investigated based on certain variables such as the participants' gender, occupation, duration of residence in Istanbul, the place of residence, age group, place of birth, and educational level; the participants were also asked about the frequency of their visits to Beyoglu and the reasons why they go to Beyoglu. The results of the study revealed the differences in fear of crime between men and women. It was found that Beyoglu district became safer after the renovations; yet, the rate of fear of walking alone, and therefore the fear of crime, was found to be higher among women than among men.

Keywords

Crime, Women, Fear, City Center, Istanbul

1. Introduction

Istanbul has a segmented structure both in terms of its land use and the socio-economic levels of its residential

areas. Differences in physical structure, such as the division of the city by Bosphorus, multi-centered urban development, and scattered, unplanned housing areas (squatter areas) in the city are reflected in the distribution of crime rates.

Crime rates are higher in the districts that are older and closer to the center and lower in districts established as a result of migration from rural areas (Ergun & Yirmibesoglu, 2007).

The residential population in the center of Beyogluis low but daily population is very high, and this district has the highest functional load and also has different user quality, quantity, and diversity. It is observed that the social control mechanisms are at a lower level in these areas where the majority of land use is allocated to business (Yirmibesoglu & Ergun, 2013).

Wilson and Kelling (1982) focused on the phenomena of "broken windows". They arguethat residents will be less likely to get involved in situations in which help is needed if social and physical incivilities make residents fearful. If residents become less vigilant and less action-oriented, capacities for local social control will erode. As a result, the area will become "vulnerable to criminal invasion". Graphically, Wilson and Kelling (1982) propose the following casual sequence:

Disorder ⟶ Physical and Social Incivilities ⟶ Fear ⟶ Less Informal Social Control ⟶ More Crime ⟶ More Fear

The argument is that physical changes in environment such as increased dilapidation through cognitive effects on fear levels and behavioral effects on informal social control will lead to criminal invasion and higher crime levels. This suggests that, as a crime prevention strategy, major physical improvements such as renovating run-down housing, razing or restoring abandoned housing, cleaning up of playgrounds and public areas, and strict enforcement of housing codes will lower fear levels, thereby increasing levels of informal social control and decreasing the chance of invasion from outside offenders (Taylor & Gottfredson, 1987).

In the old city center Beyoglu, which has a high crime rate and which shares similarities with the city centers in research conducted by the most prominent theoreticians of crime (Shaw & McKay, 1942; Park & Burgess, 1924), the number of crimes and the fear of crime has recently been observed to decrease (Yirmibesoglu & Ergun, 2013, 2007). Among the reasons for this decrease are that the district has undergone a gentrification process, that some buildings have been restored, and that urban design implementations have been carried out in some streets (Ergun, 2004).

This study focused on how fear of crime according to gender differed before and after the renovation process and it examined whether or not there were differences between men and women in terms of their perceptions of safety of the district based on the participants' occupation, age, educational level, place of birth, duration of residence in Istanbul, and the current place of residence.

2. Fear of Crime and Gender

Reducing fear of crime, as well as preventing or reducing crime, is one of the most important steps to take in order to create healthy living environments since the problem is not all about crime itself, but also about fear of crime. Schweitzer et al. (1999) posits that crime in the United States cannot be eliminated although there has been a decrease in crime since 1994 and adds that crime is a fact of life and what affects people is fear of crime rather than actual crime.

Research has revealed that there is a difference between the actual amount of crime and the perceived amount of crime and that perception is always stronger than reality. Fear of crime keeps growing unless taken under control. The growth of fear of crime is triggered by environmental factors such as thrash, graffiti, noise, abandoned buildings, and damaged cars, antisocial behaviors such as gangs or being drunk and rowdy, distrust toward the police, bad reputation of urban areas due to crime, and the severity of criminal attacks in those areas (Taylor & Covington, 1993; McCrea et al., 2005).

Research has shown that fear of crime may change from country to country and according to the country's sociocultural and political-institutional structure (Hirtenlehner & Farrall, 2013), and that crime and fear of crime is correlated with individuals' education level, income level, race, age, duration of residence, sense of belonging to the place of residence, and most of all with their gender (Gray, Jackson, & Farrall, 2011). MacMillan et al. (2000), McCrea et al. (2005), and Pain (1997) found that women fear crime at higher levels than men. Similar

studies on this topic are explained below.

Gilchrist et al. (1998) conducted a study to determine the different rates of fear of crime among men and women. Professional empirically generated survey data about the fear of crime persistently indicate relatively small but statistically significant differences between fear rates expressed by men and women. Such differences are contrasted with objective crime victimization risk ratios; regularly magnified by amateur surveys; and have been ossified as stereotypes by the media. Subsequently, all women are believed to be fearful of crime, and all men fearless. The research reported herein encountered, paradoxically, fearful men and fearless women. A dissection of their qualitatively garnered feelings indicates, in a very provisional way, the general conditions under which crime-related fears are reduced and enhanced.

Chui et al.'s (2013) study investigated fear of crime in a group of students in Hong Kong; using a sample of 170 Hong Kong college students majoring in social work, the study aimed to investigate the effects of gender on fear of crime and their relationships to attitudes toward prisoners. In general, women reported a significantly greater fear of crime than men for all offenses except for being cheated. Fear of rape/sexual assault was found to be a significant predictor of fear of serious crimes for women but a less significant predictor of their fear of minor crimes. The shadow of the sexual assault hypothesis was supported in this study. Fear of crime had little impact on attitudes toward prisoners.

In their study on fear of crime in Stockholm, Smith and Torstensson (1997) state that "women and elderly are most fearful is a central paradox in the fear of crime literature". Four attempts to resolve the paradox are discussed: hidden victimization of women; greater tendencies of women to recall early life-course experiences, and to generalize fear from one context to another and from one type of victimization to another; vulnerability of women; and male discounting of fear. Empirical evidence from a Stockholm survey is used to argue that the hidden victimization stratagem does not seem likely to succeed in explaining fear levels. Tendencies for women to generalize differently from men across time, space or type of victimization experience are not found or weak. Results are consistent with the vulnerability hypothesis, specifically the greater "ecological vulnerability" of women (Sparks, 1982), but there is also evidence of male "discounting" of risk and fear. Further research is needed to assess the extent to which female vulnerability is more important than male discounting in accounting for risk perceptions and fear of crime.

In their study, conducted in the United Kingdom, Rengifo and Bolton (2012) examined individual-level associations between fear of crime and various environmental and cognitive assessments but have largely dismissed the relationship between various dimensions of fear and broad behavioral adaptations. Drawing on the risk interpretation model, we specify path models to assess the nature of relationships between perceptions of risk of crime and disorder and the patterning of voluntary and compulsory routine activities. They also explore whether these activities influence the relationship between disorder, risk and fear. Using data from the 2007 and 2008 British Crime Survey, they find support for the proposed distinction between types of routine activities. Although they also find that the various manifestations of fear exhibit different associations with these activities, their models offer marginal support for the proposed mediating role of behavioral policies.

Many studies on crime suggest that certain crimes, fear of crime and the feeling of distrust can be reduced through a better design of built-up environments and regular maintenance. This approach is known as crime prevention through environmental design in the United States, Canada, and Australia. In Europe, this concept is also known as "the reduction of crime and fear of crime by urban planning and building design".

The aim of the present study, similar to the studies conducted in other countries, is to explore to what extent gender is relevant in fear of crime. To that end, this study examines fear of crime among women in Beyoglu, the old city center of Istanbul, in 2006 and 2010 and investigates the changes in the levels of fear of crime after the renovation implementations in the area.

3. Fear of Crime among Women in Beyoglu

Beyoglu is one of the oldest settlements in Istanbul's European side in the Marmara Region, Turkey. The area of Beyoglu is 8.76 km^2, consisting of 45 quarters. According to 2012 address-based population registration system (TUIK, 2012), Beyogluhas a population of 246,152 and female population (120,169) is less than male population (Table 1, Map 1). Beyoglu is a distinctive settlement, especially considering the fact that its population reaches millions during the day and night (TUIK, 2012; Yirmibesoglu & Ergun, 2013).

According to data (IPD, 2008) obtained from the Istanbul Police Department, personal and property crime declined in Beyoglu district, especially in 2007 (Figure 1).

Table 1. The population of Beyoglu in 2012.

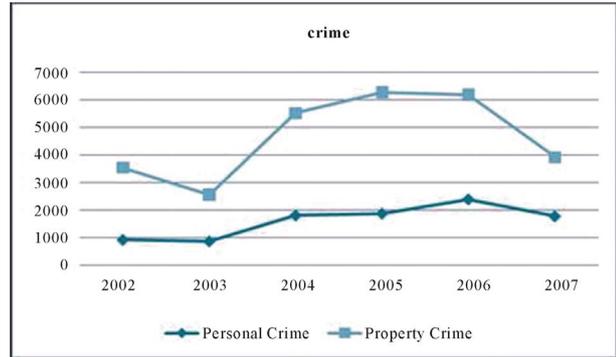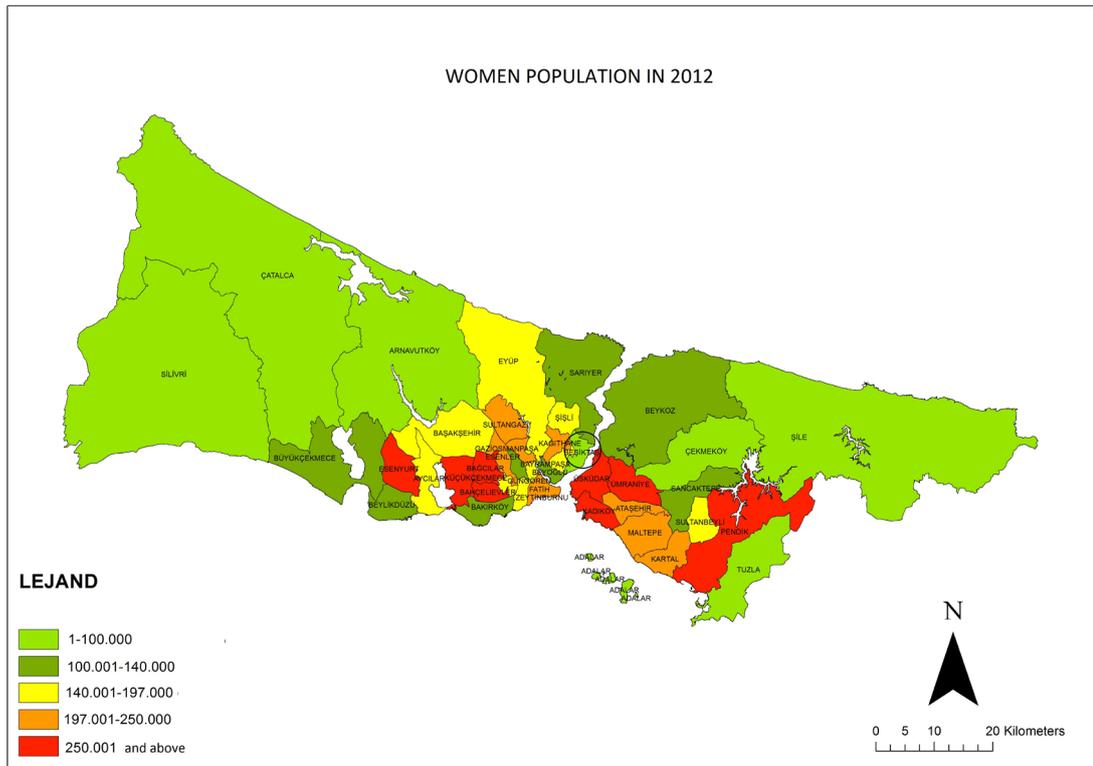| 2012 Population	City/Town Center
Female	120,169
Male	125,983
Total	246,152

Figure 1. Crime against property and person.

Map 1. The distribution of female population in Beyoglu district and İstanbul in 2012. Source: Berkoz et al., 2013.

As these changes were taking place, a sharp increase in property crime was observed because of the fact that wealthier people were entering the area in the 2000s. As from 2004, an analysis concerning crime in Beyoglu district was conducted, showing that during the first periods, burglaries and extortion occurred more frequently; crimes against the person transpired more in and around bars or similar venues, related to alcohol and drugs. If

the interventions made in this period are analyzed, it can be seen that; the street, square and historical building lighting process that started in 2004 and completed in 2006, a major campaign against drugs and thief gangs, have been implemented; surveillance cameras have been installed; moreover, restoration of old public buildings in the area have begun, together with construction of new buildings (Yirmibesoglu & Ergun, 2013).

The district became a residential area not only for Anatolian emigrants because of its central location and its being one of the oldest districts in Istanbul, but also for foreign immigrants from Africa and Central Asia. Thanks to a law that came into effect in 2004, renewals in historical locations have begun and the people who live here and who are seen as the major cause of crimes were removed and evicted.

In order to explore the fear of crime in the Beyoglu district, a total of 300 surveys (100 surveys per neighborhood) have been conducted on the users of the area in Cihangir, Asmali Mescit and Galata neighborhoods, all of which were recently renovated in 2006 (**Figure 2**). This survey was repeated in 2010 in order to present the change in fear of crime. The rates of females interviewed in 2006 and 2010 are close to each other (approximately 43% - 44%) (**Appendix 1**).

As far as educational backgrounds are concerned, persons who participated in the survey in 2006, have a high educational level (43% high school, 30.3% university). In 2010, these levels are found to be decreasing (29% university) and increasing (48% high school).

Regarding the age groups of the survey participants, the majority of the female users of Beyoglu fall into the 21 - 30 age group and the majority of male users into the 31 - 40 age group.

As for occupational groups, 2006 data shows us that the highest rate (29.3%) belongs to scientific and technical self-employed professionals. Commerce and sales professionals are second at 16.7%. Employees of the service sector turn out at 15.3% and non-agricultural employees at 11.7%. It is seen that the rate of students increased in 2010 (25.7%).

As for where the participants of the survey live in Istanbul, 2006 statistics show us that the rate of people living in city centers is considerably high at 46.7%. In 2010, this rate decreases to 18.3%. It is regarded that the rate of people who live in city centers or within 10 km of city centers is high (76.4% and 65.0% by order of survey years) (**Figure 3**).

According to the 2006 statistics, when the duration of residence in Istanbul is considered, the rate of new arrivals (0 - 5 years) turns out very low, 13.7%. In 2010 this rate increases to 21.3%. According to 2006 statistics, the rate of residence for 10 years or more is 73%, and approximately 63% in 2010 (**Appendix 2**).

The participants' weekly use of Beyoglu appears to be quite frequent. In 2006, maximum 46% visited Beyoglu daily. In 2010, this level is found to be decreasing to 26.3% (**Figure 4**).

Regarding the rate of women who use Beyoglu daily, in 2006 the rate is 17.7%, whereas it decreases to be 4.3% in 2010.

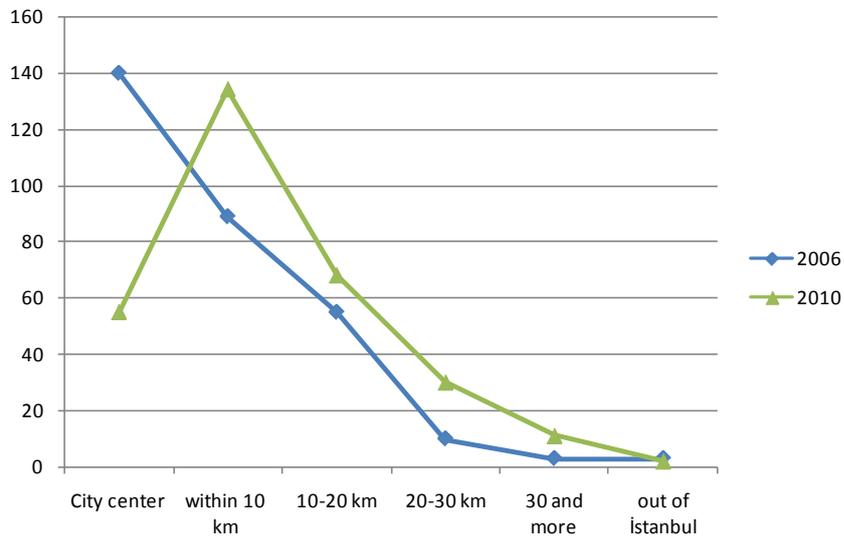**Figure 2.** Cihangir, Asmalı Mescit and Galata neighborhoods in Beyoglu.

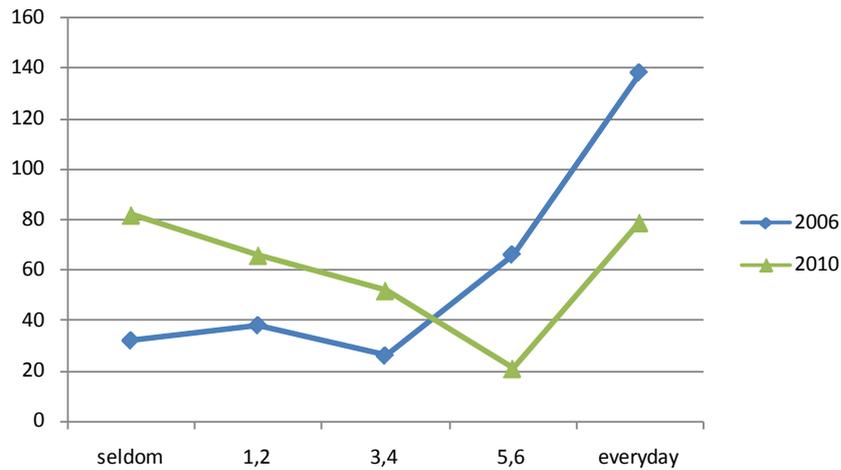**Figure 3.** Participants' place of residence.

Figure 4. Weekly use of Beyoglu.

Regarding the reasons why participants come to Beyoglu, it appears that a high rate of participants (37.3%) comes for residence in 2006.The rate of people who came to Beyoglu for entertainment and shopping purposes in 2010 is 63.0%. As can be seen in the table, in 2010 the reasons why women come to Beyoglu seem to be entertainment and shopping (37%), but the rate of women who come to Beyoglu for the same purposes in 2006 is 17%. It is observed that men come to Beyoglu mostly for business purposes (20% and 26%) (**Appendix 3**).

Concerning daytime safety in Beyoglu, most of the participants state that Beyoglu is safe during the day. It is observed to be 69.7% and 79.7% safe in the two surveys, respectively (**Table 2**). While the rate of women who state that the district is safe during daytime is 28% in 2006, it is 36% in 2010.

As far as nighttime safety in Beyoglu is concerned, a very large number of the participants state that Beyoglu is not safe at nights. Beyoglu is considered safe at a rate of 24.7% and 47.3% in the two surveys, respectively. While the rate of participants who report that Beyoglu is safe during nighttime was 7% in 2006, it increases to be 15.3% in 2010.

Considering if people are afraid of walking alone in Beyoglu, most of the participants state that they are not afraid of walking alone in Beyoglu (approximately 80% to 83%)). There seems to be a slight increase in the rate of women (30% to 31%) and men (49.7% to 51.3%) who do not fear walking alone and there also seems to be a slight increase in the rate of women who do fear walking alone in 2010 (**Figure 5**).

When we examine factors which caused insecurity in 2006, we see that participants has chosen other humans
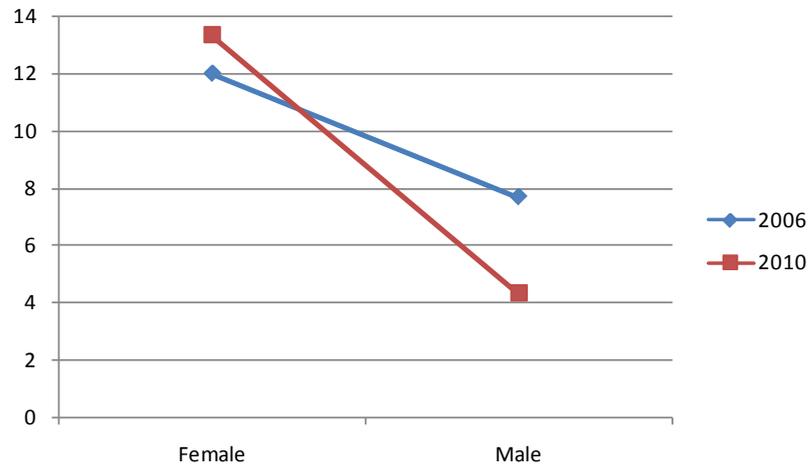
Figure 5. The rate of men and women who fear walking alone.

Table 2. Participants' opinions about environmental safety and fear of crime.

Safe during Daytime—2006	Female Frequency	% of Total	Male Frequency	% of Total
Safe	84	28.0	125	41.7
Not safe	44	14.7	47	15.7
Safe during Daytime—2010	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
Safe	108	36.0	131	43.7
Not safe	25	8.3	36	12.0
Safe during Nighttime—2006	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
Safe	21	7.0	53	17.7
Not safe	107	35.7	119	39.7
Safe during Nighttime—2010	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
Safe	46	15.3	96	32.0
Not safe	87	29.0	71	23.7
Safe after Renovations—2006	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
Safe	63	21.0	88	29.3
Not safe	65	21.7	84	28.0
Safe after Renovations—2010	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
Safe	44	14.7	96	32.0
Not safe	89	29.7	68	22.7
Fear of Walking Alone—2006	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
Yes	36	12.0	23	7.7
No	92	30.7	149	49.7
Fear of Walking Alone—2010	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
Yes	40	13.3	13	4.3
No	93	31.0	154	51.3

at only 8.3% in order of priority, which decreases to be 7.3% in 2010. On the other hand, as can be seen in the table below, whereas the most effective factors that cause insecurity are users, urban decay, and poor lighting in 2006, these rates decrease in 2010 after renovations and restoration which took place in the district (**Table 3**).

In terms of whether or not Beyoglu has become a safe place after the renovations, it is seen that the rate of participants with a negative view is high in 2006, whereas this rate is 44.3% in 2010, which is a clear decrease.

When we examine if Beyoglu is safe after the district was renovated, it is seen that 50.3% of the participants state that it is safe in 2006, but this rate decreases to 37.5% in 2010.

Regarding the reasons why Beyoglu is safe or not safe after the renovation of the district, negative views about the area is 48.7% in 2006, and 44.3% in 2010 (**Figure 6**).

Streets where women feel unsafe can be seen below:

The streets women feel unsafe in

- are especially preferred by low income class, and the national/international migrant population. Eg. Tarlabasi, etc.
- are dark and more desolate backstreets. Eg. Arslanyatagı, Sadri Alisik etc.
- are main streets and crowded streets Eg. Tarlabasi, Istiklal, etc.
- have steep slopes enabling the criminal to run away easily. Eg. Meclisi Mebusan

3.1. Correlation Analysis

The correlation analysis has shown that gender is (**Table 4**);

- negatively and significantly correlated with Fear of Walking Alone (2006 and 2010), frequency of use of Beyoglu (2010), Reason for visiting Beyoglu (2010), and negatively correlated with frequency of use of Beyoglu (2006),

Table 3. Factors that create insecurity according to priority.

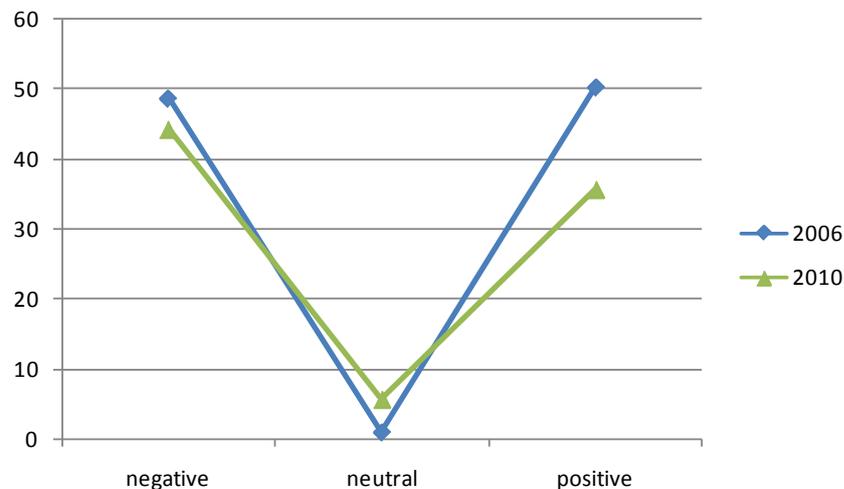| Survey Year	2006		2010	
	Number of People	%	Number of People	%
Humans	25	8.3	22	7.3
Users	134	44.7	7	2.3
Urban Decay	125	41.7	16	5.3
Poor Lighting	150	50.0	81	27.0
Unemployment	122	40.7	83	27.7

Figure 6. Safety after restoration.

Table 4. Correlation analysis according to gender.

Fear of Crime, Environmental Security, Reasons for Visiting Beyoglu, and Characteristics	Gender			
	2006			2010
	Pearson Correlation	Sig. (2-tailed)	Pearson Correlation	Sig. (2-tailed)
Fear of Walking Alone	−0.184**	0.001	−0.290**	0.000
Environmental Safety Daytime	0.076	0.190	−0.034	0.557
Environmental Safety Nighttime	0.165**	0.004	0.228**	0.000
Safe after Renovations	0.019	0.740	0.254**	0.000
Safety after renovations—Reason	0.052	0.372	0.159*	0.010
Reason for Visiting Beyoglu	−0.088	0.129	−0.329**	0.000
Frequency of use of Beyoglu	−0.117*	0.043	−0.365**	0.000

[**]Correlation is significant at the 0.01 level (2-tailed). [*]Correlation is significant at the 0.05 level (2-tailed).

- positively and significantly correlated with Nighttime Environmental Safety (2006 and 2010), and
- positively correlated with the district's becoming safe after renovations (2010).

3.2. Regression Analysis

Multiple linear regression analysis is a type of analysis that aims to estimate the dependent variable based on two or more independent variables that are related to dependent variables. Multiple regression analysis enables researchers to interpret the statistical significance of independent variables and the direction of the relationship between independent variables and the dependent variable.

According to the regression analysis, done based on 2010 data, the dependent variables were determined to be fear of walking alone in Beyoglu. The independent variables were determined to be educational level, occupation, the place of residence, the place of birth, gender, the duration of residence in Istanbul, and age groups. The analysis yielded the following findings (**Table 5**).

$$Y = a + b1 \times 1 + b2 \times 2 + b3 \times 3 + \cdots + bn \times n$$

Life Satisfaction = 2231 + 0.010 × place of residence + 0.067 × educational level − 0.267 × gender − 0.028 × duration of residence in Istanbul − 0.012 × age groups − 0.019 × place of birth.

There is a significant correlation between fear of walking alone in Beyoglu and gender, occupation, educational level, place of residence, place of birth, duration of residence in Istanbul, age groups ($R = 0.391$ $R^2 = 0.153$ $p = 0.000$).

As far as the dependent variable, fear of walking alone in Beyoglu, is concerned, it was found that;
- it is inversely and significantly correlated with gender variable and women fear walking alone more than men,
- it is directly proportional and significantly correlated with educational level variable; fear of walking alone increases as the level of education increases.

4. Results and Discussion

Improving the quality of life in big cities is one of the hottest issues of our day and high crime rates in urban areas are one of the things that impair the quality of life in big cities. In order to be able to create healthy living environments, reducing fear of crime is essential, as well as preventing and reducing crime itself. This study examined the old city center, Beyoglu, where crime rates were high and decreased after the renovation process.

As is suggested by Crowe (2000), "Good urban design and effective use of the built-up environment can help reducing fear and repeat of crime and improving environmental quality".

Table 5. Regression analysis of gender in 2010.

Regression Analysis	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Dependent Variable: Walking Alone in Beyoglu					
(Constant)	2.231	0.171		13.023	0.000
Gender	−0.267	0.046	−0.347	−5.846	0.000
Occupation	−0.011	0.007	−0.102	−1.587	0.114
Duration of Residence in Istanbul	−0.028	0.020	−0.103	−1.383	0.168
Place of Residence	0.010	0.020	0.027	0.494	0.622
Age Groups	−0.012	0.025	−0.036	−0.478	0.633
Place of Birth	−0.019	0.011	−0.111	−1.763	0.079
Educational Level	0.067	0.027	0.158	2.464	0.014

$R = 0.391$; $R2 = 0.153$; $F = 7.497$; $p = 0.000$.

Table 6. The changes in factors according to gender in Beyoglu between 2006 and 2010.

The Changes in Factors in Beyoglu between 2006 and 2010	Male	Female
Reason for Visiting Beyoglu	For Business Increased	For Entertainment or Shopping Increased
The Rate of Daily Visits to Beyoglu	Decreased	Decreased
The Rate of People Who Thinks Beyoglu Is Safe during Daytime	Increased	Increased
The Rate of People Who Thinks Beyoglu Is Safe during Nighttime	Increased	Increased
The rate of People Who Thinks the district Is Safe after Renovations	Increased	Decreased
The Rate of People Who Fear Walking Alone	Decreased	Increased

This study has found that fear of crime differs according to gender and similar to the findings of McMillan et al. (2000), McCrea et al. (2005), Chui et al. (2013), that women fear crime more than men. The fear still persists, although it slightly decreased after the renovations, which made the district safer.

The differences in fear of crime in Beyoglu between 2006 and 2010 according to gender; the changes in the rates of fear of crime in men and women according to various factors are given in the table (**Table 6**).

As can be seen in the table:

- Women come to Beyoglu for shopping and entertainment purposes and this rate increased in 2010,
- The rate of visiting Beyoglu for both men and women decreased in 2010,
- The rate of those who think Beyoglu is safe during daytime increased for both genders,
- The rate of those who think Beyoglu is safe during nighttime increased for both genders,
- The rate of women who thinks the district is safe after the renovations decreased, and
- The rate of women who fear walking alone increased.

As a result of the study, it was found that women, compared to men;

- still feel unsafe after the renovations in the district, and
- fear walking alone.

Prevention of crime and fear of crime is a comprehensive concept which involves law, order, social and educational policies, and built-up urban environment. Therefore, it is apparent that the issue should be handled through a holistic planning approach and through appropriate use of urban design resources.

It is suggested that, in decreasing crime rates and fear of crime, the characteristics of physical environment are more important than demographic characteristics. In her study, which collected survey data from pedestrians before and after street lighting, Painter (1996) suggests that street lighting decreases crime and fear of crime. Thomas (2000) points to the fact that it has a negative effect on fear of crime that employees and officials leave city centers after 17.00 and posits that creating city centers that do not sleep 24 hours would contribute positive-

ly to the prevention of fear of crime.

Similarly, this study found that in Beyoglu desolate and dark streets are the areas where crime occurs mostly, and therefore, where the rate of fear of crime is the highest (Yirmibesoglu & Ergun, 2013). Hence, as is stated by Crowe (2000), an appropriate urban design and effective use of built-up environment will decrease fear of crime and repeat of crime, and improve environmental quality.

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Appendix

Appendix 1. Socio-demographic characteristics of the persons.

Year	Number of questionnaire	%
2006	300	100
2010	300	100
Gender 2006	Frequency	%
Female	128	42.7
Male	172	57.3
Gender 2010	Frequency	%
Female	133	44.3
Male	167	55.7

Age of People 2006	Female Frequency	% of Total	Male Frequency	% of Total
20<	15	5.0	10	3.3
21 - 30	63	21.0	70	23.3
31 - 40	36	12.0	52	17.3
41 - 50	8	2.7	26	8.7
51 - 60	5	1.7	12	4.0
61+	1	0.3	2	0.7
Age of People 2010	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
20<	23	7.7	21	7.0
21 - 30	66	22.0	62	20.7
31 - 40	26	8.7	49	16.3
41 - 50	11	3.7	22	7.3
51 - 60	5	1.7	8	2.7
61+	2	0.7	5	1.7
Level of Education 2006	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
Primary school	2	0.7	19	6.3
Secondary school	17	5.7	42	14.0
High school	60	20.0	69	23.0
University	49	16.3	42	14.0
Level of Education 2010	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
Primary school	7	2.3	23	7.7
Secondary school	10	3.3	29	9.7
High school	64	21.3	80	26.7
University	52	17.3	35	11.7

Appendix 2. Participants' place and duration of residence in Istanbul.

The Duration of Residence in Istanbul 2006	Female Frequency	% of Total	Male Frequency	% of Total
0 - 5	17	5.7	24	8.0
5 - 10	15	5.0	12	4.0
10 - 20	25	8.3	31	10.3
20 - 30	43	14.3	56	18.7
30 - 40	24	8.0	33	11.0
40+	4	1.3	16	5.3
The Duration of Residence in Istanbul 2010	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
0 - 5	36	12.0	28	9.3
5 - 10	29	9.7	15	5.0
10 - 20	37	12.3	60	20.0
20 - 30	18	6.0	37	12.3
30 - 40	5	1.7	19	6.3
40+	8	2.7	8	2.7
Place of residence in İstanbul—2006	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
City Center	49	16.3	91	30.3
Within 10 km	49	16.3	40	13.3
10 - 20 km	25	8.3	30	10.0
20 - 30 km	4	1.3	6	2.0
30 and more	1	0.3	2	0.7
Out of Istanbul	0	0.0	3	1.0
Place of residence in İstanbul—2010	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
City Center	16	5.3	39	13.0
Within 10 km	73	24.3	61	20.3
10 - 20 km	27	9.0	41	13.7
20 - 30 km	13	4.3	17	5.7
30 and more	4	1.3	7	2.3
Out of Istanbul	0	0.0	1	0.3

Appendix 3. Participants' reasons for visiting Beyoglu and the frequency of visit.

Reasons for Visiting Beyoglu—2006	Female Frequency	% of Total	Male Frequency	% of Total
Entertainment. shopping	51	17.0	45	15.0
Business	30	10.0	62	20.7
Residence	47	15.7	65	21.7
Reasons for Visiting Beyoglu—2010	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
Entertainment. shopping	111	37.0	78	26.0
Business	17	5.7	80	26.7

Continued

Residence	5	1.7	9	3.0
Weekly Use of Beyoglu 2006	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
Seldom	15	5.0	17	5.7
1 - 2	23	7.7	15	5.0
3 - 4	12	4.0	14	4.7
5 - 6	25	8.3	41	13.7
Everyday	53	17.7	85	28.3
Weekly Use of Beyoglu 2010	**Female Frequency**	**% of Total**	**Male Frequency**	**% of Total**
Seldom	50	16.7	32	10.7
1 - 2	38	12.7	28	9.3
3 - 4	27	9.0	25	8.3
5 - 6	5	1.7	16	5.3
Everyday	13	4.3	66	22.0