# CRIME PREVENTION IN RESIDENTIAL SETTLEMENTS OR NEW SUSTAINABLE COMMUNITIES-CITIES

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#### ABSTRACT

Sustainable communities need to be implemented economically, socially and environmentally to respect the needs of future settlement patterns. They are also defined as well-designed places where people feel safe, where crime or feelings of insecurity does not undermine quality of life. Safety and security are essential for creating successful sustainable communities and settlement patterns as these places are not only well-designed environments to live in, but also places where freedom from crime and fear of crime, improve the quality of life. In other words, sustainable communities embody the principles of sustainable development, such as; meeting the needs of existing and future generations as well as integrating the social, economic and environmental components of their community. In that case, planning and design of the built environment has a great effect on safety of public spaces and perceived safety of their users. Now there is also a change and shift of zoning paradigms for cities and residential settlement patterns from socially and economically heterogeneous at least interactive open districts and metropolitan bound city blocks, to closed system of more homogeneous societies under different names of gated community residences, and or satellite towns/cities.

Although sustainable communities improve people's quality of life by providing safe and healthy environment to live and work in, it also encourages 'a sense of place' with well-designed and well-used public spaces. Unfortunately, too little attention has been paid by planners and designers to crime issues so far in Turkey. To fill this vital gap, a survey has been conducted to analyze how safety issues are important for the

community members and what can be done to improve safety issues in new urban settlements to create sustainable cities and communities. In this particular study, the results of the questionnaire are discussed and recommendations have been made for creating safer and sustainable new settlements and communities for existing and future generations.

Key words: sustainable cities, design, perceived safety, fear of crime, quality of life.

## Introduction

Fear as an instinctive feature of human beings stand next to the very basic instinct for survival. Remaining evidences show that the first tools 'designed' by early humans were almost all related to issues regarding survival; food, water, shelter, hunting, and security in different contexts. Earliest security tools seem to have evolved against nature and climate where the necessity for security against its own kind is relatively a quite late issue. Designing to secure itself from its own kind seems to have emerged mostly in settled societies and by agriculture. Though fear is a very instinctive and natural feature of human beings, crime is a social issue emerged quite late in the course of time. Mythologies, sagas, holy scriptures, and history are full of different types of crime from brother to brother, son to father, mother to son, one group to another for countless reasons, where the common denominator is they are all evil acts of humans against humans. These acts later turned out to be considered as violation of religious regulations (which are called sins) and/or violation of laws (which are called crimes). Historical, archaeological and even linguistic evidences show that there is an interrelation between acts of crime and settlements and modes of production. Anthropologists discover that remaining primitive societies in Amazon, Africa, or in the oceans do not seem to have developed such violent acts aiming its own kind within these so called tribal societies. What we know of crime today seem to have developed mostly by prosperity, wealth and settled ways of life in parallel with the laws of these social structures. In ancient hunter-gatherer societies and even in remaining tribal societies there seems to have developed no security items that we see in settled societies. Fictional like 'Dr Jeckyll and Mr Hyde', actual like 'Jack the Ripper' are the figures of XIX Century, when settlements and mobility of societies transformed into industrial modes of life in latter decades. Industrial and even postindustrial modern settlements in that sense while creating a spatial closeness provided with the most technological gadgets, tools and services to reduce crime and fear of crime, they do not seem to create the security which socially or ethnically bound familiar societies have developed without all those advanced design tools and services.

## Perceiving Fear of Crime in Urban Areas

Crime and fear of crime are getting one of the most serious problems of cities and also very critical issues in urban crime prevention. Particularly, perceptions of crime do not necessarily reflect its realities. In urban environments people experience fear of crime in different and varied formats and every person who lives in cities is potential victims for any crime incidents. Today, fear of crime and feelings of insecurity constitutes as much a problem as crime itself. The fear of crime and feelings of insecurity keeps people off the public places and also limits people's behaviour to access to opportunities and facilities in their public environment. In other words, it creates a barrier to participation in the public life, changes the forms of residential settlements and public spaces, thus, it reduces the liveability and sustainability of the city. In this context, the crucial question is how can we deal with the problem of perceptions and realities of crime? Studies have shown that crime and anti-social behaviour are more likely to occur if design of the built environment is unsuccessful and feelings of insecurity can be reduced by a better design and maintenance of the built environment as well as public and personal safety tools. It is obvious that, level of the fear of crime is unequally distributed considering the varied user profiles and places of cities. Considering the previous studies, a variety of environmental and social features have been correlated with fear of crime. Characteristics that contribute to fear of crime do not always match those that contribute to crime. Areas that are feared are not always areas of high crime [1] and people often have an exaggerated perception of the level of crime in specific areas [2].

Fear of crime is influenced by a variety of factors including the actual crime rate, the demographic and psychological profile of the individual, and the physical and social characteristics of the environment. Many studies suggest that fear of crime is not necessarily related to actual victimization, and crime affects more than its direct victims. Studies also find that women and the elderly are more fearful [3, 4, 5]. As a specific group, the elderly also have a greater fear of crime, although they have the lower rate of victimization. Perceptions of safety and vulnerability to crime also differ significantly between men and women [6, 7, 8, 9]. Considering women's reactions to crime [10] has explained that most female respondents felt themselves to be weaker than the average person of their gender. Women usually more fearful in public spaces and they often limit their activities in order to protect themselves from any types of crime or fear of crime [11]. Besides, some statistics report that women have lower victimization rates for many types of crimes, yet women report a higher level of fear of crime. Women are more likely to use avoidance tactics such as restricting their nigh-time activities. In other words, women are more vulnerable to crime than men, although their likelihood of victimization is considerably less than men [12]. Thus, women's greater fear limits their use and enjoyment of the public environment.

On the other hand, lower-income groups tend to experience higher levels of fear than upper-income groups. While many members of these groups may actually experience

higher levels of victimization because they either tend to live in higher crime areas or more often targeted by hate-crimes, some more fearful groups do not experience higher victimization rates [13]. Similarly, fear of crime may be affected by many factors including changes brought about by experiences. [14] has examined that characteristics of the built environment contribute to fear of crime in public areas and these features can be both physical and social. Physical features of public spaces including maintenance, potential hiding places for potential offenders or criminals, poor lighting, isolation, vegetation, potential escape routes, etc. have a great impact on increased fear of crime and feelings of insecurity [15]. Crime prevention through design concept includes many aspects that are closely related to each other and also offers a new way of thinking about crime, design and crime prevention through design [16]. Many crime-based researches suggest that fear of crime often affects people more than the actual risk to their safety. It is obvious that, perceptions of crime and safety influence how people choose to interact with spaces, places and other people. When people perceive that an environment is unsafe their behaviour may change in a way that reflects these perceptions. For instance, they might use the environment at specific times of the day/night, not using the environment at all. Importantly, such modifications in behaviour occur even when perceived fears are not supported by actual crime statistics.

In order to improve perceived safety in urban areas, there is an urgent need to integrate this concept into the planning and design processes, successfully. Crime prevention studies must be based on analysis of the national, political and legal conditions of each country, as well as the local situation of each particular area. Therefore, there must be additional results and recommendations while considering the unique nature of each communities, as well as public areas. There is no doubt that fear of crime is a crucial factor for sustaining public spaces as well as cities. Because, it creates a barrier to participation in the public life and it also reduces the liveability of the city. Consequently, it is crucial to analyse the reasons of fear of crime and feelings of insecurity for creating more sustainable design solutions for cities.

## Case Study: Comparisons of Residential Settlements from Closed to Open

Fear of crime and perceived safety in urban areas has been recognised for many years. In this particular study, three zones including different characteristics and income groups as well as design features had been selected and observed through the study. There are many reasons that have an impact on feelings of insecurity and one of the aims of this study is to find out how the residential settlements have been affected by safety and security issues. In that case, a questionnaire had been made for the users of these specific residential zones. 90 respondents were asked detailed questions about their settlements (why do they choose to live there, how safe do they feel in their neighbourhood and which factors affect their feelings of insecurity, etc.) and the results were analysed by using the SPSS software. In that case, three zones which

include varied characteristics and income groups had been selected and observed through the study. Through the questionnaire and observation process, these areas also analysed by considering their design characteristics and the impacts on fear of crime.

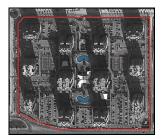
### Zone 1: Closed Residential Settlement

The first settlement zone of the study is fully surrounded by the physical barriers and walls, thus it is completely being separated from the outside. One of the main characteristics of this particular zone is the residents of this area almost have the same economic and social levels.

Considering the physical built environment and design features of the Zone 1, it is clear that the residents of this closed settlement are not welcome for people who do not live in this particular area. In other words, they strictly separate their neighbourhood from the outside in order to protect themselves from any kinds of crime or anti-social behaviour. The safety precautions of the Zone 1 include walls, CCTV camera systems, security at the gate, etc. In this case, the main argument is that 'Are these precautions increase the perceived safety, or vice versa?'







**Figure 1 :** Satellite View of Zone 1 -2 and 3.









Figure 2: Security Precautions of Zone 1.

### Zone 2: Semi-Closed Residential Settlement

The second settlement zone of the study is partially surrounded by the physical barriers and walls, thus it is not completely being separated from the outside. Although, the residents of this area almost have the similar economic and social levels, they are not fully protected and separated from their outer environment as in Zone 1. This particular settlement also aimed to be surrounded by security precautions

at the beginning of design and application process. However, because of the environmental regulations, they are forced to ruin their physical barrier partially, from one direction (as seen above marked with red arrows) by the governmental authority that makes this zone semi-closed residential settlement. According to the majority of the residents, this situation improved their feelings of insecurity.

## Zone 3: Open Residential Settlement

Zone 3 is fully open residential settlement that has an easy access from the outside without having any security precautions or physical barriers in and around it. This particular area also includes varied economic and social levels of residents, unlike from Zone 1 and Zone 2.

Through the study, the questionnaire had been responded by the 90 residents (30 for each zone) in order to find out how perceived safety varies according to gender and varied economic, social, as well as environmental features. The SPSS software has been used and frequency analyses were made for analysing the results of the fear of crime survey.





Figure 3: Public Access Points of Zone 2 and General View from Zone 3.

**Table 1:** Cross correlation for Gender and Survey Questions.

	Q1					Q2					Q3					Q4					Q	5		G	16		Q7				
Gender	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5 1	2	3	4	5	1	2	3	4	5 1	2	3	4 5	1	2	3	4 5
Male	15,9	50	25	9,1	0	9,1	27,3	18,2	20,5	25	27,3	61,4	11,4	0	9,1	54,5	22,7	13,6	0	47,7	25	27,3	0	0 45,5	43,2	11,4	0 0	40,9	40,9	18,2	0 0
Female	32,6	52,2	10,9	4,3	0	26,1	30,4	10,9	19,6	13	47,8	47,8	4,3	0	47,8	45,7	6,5	0	0	54,3	21,7	23,9	0	0 52,2	37	10,9	0 0	52,2	30,4	17,4	0 0

At the beginning of the survey, respondents were asked whether they are agree or not that 'Crime is an inevitable feature of everyday life'. Considering the percentages of the survey results (Table 1), majority of the both male and female respondents were agreed with this idea. They also mostly believe that fear of crime and feelings of insecurity keep them away from public spaces and thus, affect their quality of life.

**Table 2:** Cross correlation for Zones and Survey Ouestions.

	Q1					Q2						Q3				Q4					Q5					Q	6		Q7			
Zone	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5 1	2	3	4	5	1	2	3	4	5	1	2	3	4 5	1	2	3	4 5
Closed	23,3	63,3	13,3	0	0	0	0	6,7	40	53,3	23,3	66,7	10	0	26,7	50	13,3	10	0	13,3	40	46,7	0	0 6	60	33,3	6,7	0 0	50	43,3	6,7	0 0
Semi-closed	30	46,7	16,7	6,7	0	20	36,7	26,7	13,3	3,3	46,7	40	13,3	0	33,3	46,7	16,7	3,3	0	56,7	26,7	16,7	0	0 3	3,3	56,7	10	0 0	46,7	43,3	10	0 0
Open	20	43,3	23,3	13,3	0	33,3	50	10	6,7	0	43,3	56,7	0	0	26,7	53,3	13,3	6,7	0	83,3	3,3	13,3	0	0 5	3,3	30	16,7	0 0	43,3	20	36,7	0 0

Considering the results of the survey, it is possible to say that, the respondents who prefer living in the closed residential settlement have mostly believe that crime is a daily occurrence of life and they also have higher level of fear than the others. They also add that, the main reason for them to choose this kind of closed area for living is to protect themselves from possible crime events and anti-social behaviours. Therefore, as seen in the survey results, they feel safe in their neighbourhood (Zone 1) because they are surrounded by security precautions, as well as physical barriers. They explain that, living with neighbours who have similar economic and social level with them and surrounding themselves by creating an environmental barrier make them feel safer. However, they also admit that they sometimes feel so much isolated from public dynamics, which is a disadvantage for them. Unlike the residents who live in a closed residential settlement in Zone 1, majority of the people who live in an open access residential settlement in Zone 3 believe that having close relationships with their neighbours and the idea of 'see and be seen' is more important than the physical barriers and security precautions for creating safer and sustainable urban spaces.

## Conclusion

The dynamics of cities-as well as the residential settlements- have many changes depending on time and other factors including social, economic and environmental features. Today, people are becoming more fearful particularly in public areas where crime and anti-social behaviours are likely to occur. Fear of crime is influenced by a variety of factors including the actual crime rate, demographic and psychological profile of the individual, physical and social characteristics of the environment, etc. It is obvious that, perceptions of crime and safety influence how people choose to interact with the city, places and other people. In this case, there is an argument that is it the best way 'living in the isolated life style and settlements' for protecting themselves from crime and fear of crime and creating safer and sustainable cities!? Security guards, fences, walls, inside outside locks, sensors, cameras, barriers, monitors... Or usually just 2 keys one for the apartment door and one for the main door... or yet even none (if you're living in a settlement where there are groups depending on strong social bounds of ethnicity or familiarity which were not the included in this study). All of these design tools of different scales from urban to industrial products seem to have been developed not only to reduce crime, but also to reduce fear of crime. Though there seems to be major differences in terms of tools and services to secure settlements in our study, the fear of crime seems to affect the residents of different types of settlements, whether people are living in either open (Zone 3) or closed (Zone 1) residential sites. The amount and distribution of wealth and prosperity is an important factor shaping the design features of settlements in terms of security. Quantity and quality of design tools and services increase with the wealth and prosperity, a significant design feature of medieval times when prosperous cities surrounded themselves with walls and barriers to secure and protect their

wealth. Though decreasing the fear of crime to an extent these residential closed settlements create other types of social alienations increasing polarities in cities socially and geographically. While public open settlements are urban areas where interactions among citizens create a kind of social familiarity which is an important factor to decrease fear of crime, closed residences are settlements where less social interaction and familiarity end up with increased tools and services of design to reduce fear of crime.

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