

## **Evaluation of factors affecting promoted sense of security in residential environments (Case Study: West Tehranpars, Iran)**

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**Abstract:** Security is one of the important indexes for life quality, considered by designers and urban planners because of consisting calmness and comfort of citizens in urban environments. Hence, urban planners insist on developmental necessity that encompasses all life aspects of citizens; they consider such development as a suitable development for humandignity. One of the aspects of this sustainable development is a desirable residential environment that provides people with security. Promotion of sense of security among people contributes to improve circumstances and reduce abnormalities. For this purpose, this research endeavors to examine factors affecting on increasing the sense of security in Tehranpars in Region 4 of Tehran, Iran that considering insecurity of residential environments in this region in order to present effective factors and suitable solutions to improve security in this area. This is a descriptive-analytical study that has employed library method to present research literature, background and model. 380 questionnaires were designed in accordance with sample size. Data analysis was conducted using SPSS method and CSM index. Results obtained from study indicated that security in

studied area would be promoted through some actions including application of proper lightening, promotion of urban environments, increasing quality of spaces, and organizing indefensible spaces.

**Keywords:** sense of security, residential environment, West Tehranpars neighborhood, Tehran City.

## Introduction

Over recent years, residential environments, in particular, in urban areas have been increasingly considered, as the major habitats for residents and importance of urban environment issues have not been bold as are today (Rafeeian & Asgarizadeh, 2009). Hence, study about dwelling not only covers physical aspects but also consists of structural, functional and identical aspects of residential environments (Mohit, 2010). On the other hand, world population is considerably urbanized in accordance with transformation of rural life style to urban life over the recent decades (Kasili et al. 2014; Patel & Procclle, 2012). It has been estimated that there are over 1 million people living in overpopulated urban areas, in which violence and diseases occurs (Patel & Procclle, 2012; World Bank, 2011; Croog et al. 2002). Therefore, increasing urbanization process is treated as a “modernism crisis” due to crime commitment and security expansion (Patel & Procclle, 2012). Fast growth of cities and their physical development has contributed to various crises in urban life such as educational, moral, and behavioral fields problems, mental health issues, environmental problems and reduced quality of living place; hence, the concern about quality of life is characterization of contemporary society that might be caused by quality of urban environment (Pacione,2003) so that it is important to study a residential environment due to its effectiveness in important planning indices such as quality of life (Brower, 2003). Therefore, security index in urban environments is one of fundamental necessities to achieve promoted quality of citizens’ life (Salehi, 2004). Also, it can be stated that crime and sense of insecurity in dwelling environments is one of the main concerns of citizens in today cities. Therefore, the concept of security in city and neighborhoods has a significant status as the focusing element of economic, political, and social activities of citizens (Alizadeh,2007) so that there would be numerous negative implications if this concept is ignored (Pettit, 2004) so that reduced quality of residential environment and satisfaction level of people can be named as one of the most important implication. General studies in field of understanding quality of life, neighboring satisfaction and social capital indicate the fact that insecurity is considered as a concern for majority of people. Therefore, sense of security and comfort of citizens in residential, work, entertainment environments is one of factors affecting their quality of life. According to the mentioned subjects in Tehran Megacity, statistics indicate a significant relationship between different regions and nature or repetition of crimes; therefore, these regions can be classified based of the quality of urban security (Ahmadi, 2006). Unfortunately, there are some fields for occurrence or intensification of insecurity in some of Tehran regions due to various social, economic, or activity reasons so that social life of people is problematic in these areas and it seems that serious actions are required to identify and solve problems in different scientific scopes. Hence, it would be important to try to meet fundamental needs of people in accordance with increasing development and expansion of cities as well as increased population

density level in these areas. Wets Tehranpars neighborhood, located in Region 4 o Tehran City, is one of relative old neighborhoods that it is possible to study factors affecting security in residential environments in this area considering the history of the area and its residents.

According to the mentioned points above,theresearch figures on Confirming or rejecting the following hypotheses: it seems thatsense of security of inhabitants in Tehranpars residential areas is in high level, and shows that different components affecton forming of the sense of security of inhabitants.

The main objective of this study is to evaluate level of sense of security among residents living in considered area and secondary objectives include scrutiny of factors affecting assessment of sense of security, evaluation of the relation between residential displacement of household and sense of security, and presenting some solutions to improve and promote security level of studied area.

### **Theoretical Discussions**

Security, literally, means being immune, being safe and having peace of mind (Moeen, 1996). According to Oxford Dictionary security means, “being free from danger or threat, preventive proceedings to ensure security of a country, person, or value issues” and safety means, “being safe, situation free from danger, and ability to protect health” (Oxford, 1998-1999). Holy Quran also has introduced security as one of goals of the God governance and Righteous succession (Surah Noor, The Light). Also in another verse, the secure city is introduced as a utopia (Surah Al-Nahl). Security is also identified as one of objectives of Jihad (Surah Al-Baqara). Despite referring to preventive proceedings to ensure safety in meaning of Security, there is not a significant difference between these two Latin words. From perspective of John E. Moores, security means relative freedom from harming threats (Buzan, 1999). These threats can be both objective values such as human life and subjective values such as identity. Therefore, “security encompasses two objective and subjective aspects; in objective aspect, security means lack of threat for obtained values and it means lack of fear of harmed values in subjective aspect. These two aspects include two main elements including “threat” and “opportunity” and security is subjected to relative freedom from threats and benefiting from opportunities (Abbasi Varki, 2008). According to Buzan, if confrontation facilities are more than threatening facilities, security will be obtained, but if density and intensity of threat is more that confrontation facilities, that threat would lead to insecurity. From the viewpoint of Copenhagen School Scholars, absolute security is not imaginable and presence of a percentage of insecurity and crisis is the factor of development and dynamism of human life (Cecep, 2002).

Patrick Morganexpresses about this matter, “security is a condition as health or dignity that is not simply defined or analyzed” (Morgan, 2006). If we keep values alive in a society not to allow them being forget, we will achieve security. Therefore, the most important principle in this field is that citizens and authorities should be believed in general values such as rights of others, justice, freedom, compromise, and other human virtues (Mahmoodinajad, 2010).Mondel defines security as “comfort, lack of fear, free of any kind of factor threatening human peace of mind, either natural or unnatural”. Giddens defines social security as actions done to protect life of society members and then protect their lifestyle (Giddens, 2004).From the perspective of Human Rights, security is peace of mind so that people can live without any problem in a society

(Brzezinski, 1990). Parsons introduces 4 basic dimensions for security including life security, financial security, intellectual security, and collective security (Chalabi, 1996). Giddens considers social life of person as a specific pattern in which, inter-human relationship forms and this pattern of social life would result in Strucration problem that is examined in society and this contributes to life continuity and ensuring existential security. Accordingly, Giddens defines existential security (sense of security) as the time when the person knows how to continue his/her life without any problem; in this regard, a mental mode occurs that is sense of security (Stones, 2000). Security is a subjective and relative concept that emerges and continues in a society based on various principles. Traditional attitudes toward security have considered application of military and threat-oriented forces; whereas, in todays, critical and comprehensive security studies, social groups not only might be threatened by military tools but also might be harmed by environmental and economic factors so that these factors might threaten political unity of a country (Hart, 2010). According to the presented definitions, security is now considered as one of the most important human need in cities and human communities from the viewpoint of thinkers and scholars. There have been various theories in field of security; according to the theory of human need, sense of security is obtained if the fundamental needs of human are met; otherwise, human faces insecurity (Eeseman & Kattle, 1990). This theory defines security as a certain circumstances with continuous life considering required political, economic, social and mental ecologic conditions of people and identical groups (Karimi, 2006).

The most famous theorist of in this field is Sites that defines fundamental needs of human as the needs for reaction, security, recognition, motivation, rationality, and control (Sites, 1973). He believes that if objective incidents or theoretical transformations contribute to lack of desirable reaction of human, his identity is not recognized, and his incentives are not flourished, the concept of his life will be changes, his behavior and rational decision-making will be limited, the control of people on their behavior management will be disturbed and all of these factors finally lead to some threats against security of human society (Karimi, 2006).

One of theories in field of security is Maslow's hierarchy needs theory. Maslow classifies human needs to 5 categories including physiological needs, safety needs, belongingness and love needs, esteem and self-fulfillment needs. In Maslow's needs hierarchy, need for safety and security is at second level that consists some options including security, stability, attachment, support, fear, concern, need for organization, discipline and rule, having a powerful supporter and so on (Maslow, 1993).

Talcott Parsons, one of famous sociologists, has analyzed security through a sociological approach. He selected Hobbesian issue about security as the theorizing base of his sociology, but in fact, the basic issue of analytical action theory of Parsons is the social order problem (Chalabi, 1996) that conveys the security concept. Parsons has classified society to sub-systems that each of them has a specific function and their capabilities in implementation of functions contribute to society survival and in contrary, if functions are weak, coherence, unity, and social security is collapsed and deterioration danger threats such society (Navidnia, 2006).

Alfred Eisenstadt considers social coherence and trust as the most important social order issue; it means that social order stability is not possible without coherence and trust. Hence, trust is an important element in process of feeling physiological and mental calmness as well as social security (Giddens, 2004).

Security has extensive dimensions at micro and macro scales so urban and residential environment security are scopes of this concept. Urban security means comfort, calmness and safety in city that forms one of new approaches in urbanization called “safe city”. Also, security in urban environments is considered as a kind of inner comfort and calmness that are components of quality of life. Quality of human life is the base of urban scape within sustainable urban development so that the life of citizens is full of social welfare and sustainability of urban environment is not harmed. Strength point of this theory is the relation between development components through a logical and rational process leading to survival of development (Cozen,2005).

Fast population transformation and expansion of cities’ population up to 70% of world population besides environmental transformations, economic, social forces, and globalization have changed present century to the first urban century. Although modern life and increasing urbanization have provided some advantages including access to social advance, educational, cultural, and health facilities and services for residents, they have changed cities to places full of new challenges. Changes in modern lifestyle and tensions caused by it such as mental and psychological pressures, anxiety, stress, traffic, air pollution, etc. have affected majority of people living in cities from the half of 20<sup>th</sup> century. In this regard, abnormal behaviors, urban crimes and violence have been one of major social harms and challenges for cities and megacities management all around the world. Various studies in environmental psychology, urbanization, sociology, and urban geography scopes emphasize on the mutual effect of human and environment on each other(Park,2015)It means that as much as human can change life environment, environmental factors also can effect on thoughts, feelings, and behaviors of people. Therefore, the main based of urban design and planning of residential environment is paying attention to increasing quality of residential environments. Contrary to quality and environment concepts, complexity of housing issue and diverse aspects of it prevent from having a unique definition for it. The concept of housing not only physical location but also the encompasses the whole of residential environment that consists of all necessary facilities and services for well-being of family, employment, education, and health programs; therefore, definition and concept of housing is not just confined to a dwelling unit but also encompasses the whole of residential environment (Amani, 2004). In this regard, living means having sense of belonging to a specific place, which might be a green farm or a gray street, also means occupying a house in which, the heart is flourishing and brain is thinking (Schultz, 2002). In present century,one of features of favorable urban residential environments is that security of residents is provided and social harms are reduced. Quality of residential environment is a concept full of mental value. This value is equal to total evaluations of constructive features and components of environment because of value of residential environment and total subjective value of urban residential environment and applies a few numbers of potential functions. Different people do different activities so that the environment has various functions for various people and creates various meanings (Mistress, 2014). The effect of urban spaces and environments can be seen in emergence of human virtues that might change to abnormal social behaviors due to incorrect planning (Kheybari, 2015).Fykr considers any type of abnormality in urban space as a reason for insecurity mentioning high number of young population in megacities as a danger for sustainable urban security. In his opinion, major issues of megacities are increasing immigration from villages to cities, from small cities to megacities, marginalization and poor urban population that might lead to security unsustainability (Fykr, 1971). Cities with decoration of neighborhoods and benefitting from position and location indeed <http://jrdsjournal.wixsite.com/humanities-cultural>

indicate economic, social, political, and geographical transformations of themselves so that urban spaces are different with each other and these differences are emerged due to complementary or monopoly locating and social composition of population (Kargar & Gharagozloo, 2012). In fact, persons choose those environments for life that are able to provide them with comfort and meet their expectations; otherwise, residential dissatisfaction of people leads to displacement and moving to favorable environment. Security importance in residential environment is so considerable that Julius believes that crime rate in residential region and security level has a high effect on priority to select residential environment (Oktay&Orcunoglu,2007).

Hence, satisfaction with house has relative certain social and physical aspect. In relation with physical aspects, space of dwelling unit, number of rooms, area of house, per capita open space, internal and external appearance, and facilities can be mentioned and in relation with social aspects, some indexes including person per room, person per dwelling unit, household per dwelling unit, etc. can be named (Poor Ahmad, 2012). Rifwater assumes that poor and low-income households are always concern about crime and aggression against their privacy of residential unit and security of residential unit is one of optimal housing standards for them (Armitage & Monchuk, 2010). Hence, factors affecting promotion of sense of security in residential environments o people should be noted as an important issue. Therefore, factors in following table are mentioned as effective indexes in residential environments.

**Table 2. Role of urban spaces in prevention from crime commitment and creation of security (Hataminejad et al. with some corrections by Authors)**

Effective Factors		Explanation
physical	suitable design	To design a residential environment with the aim at creating a defensible space, spatial classification as general and semi-general, private, and semi-private spaces would help to recognize people who are allowed to live in such spaces. Also, it is possible to create defensible space using physical elements, and diverse architectural designs such as site designing, neighboring units and their locations, paths, windows, stairs, doors, elevators, etc. (Cooper, 1986)
	removal of vulnerable spaces	Removal of abandoned and unused public buildings and also destruction of unusable spaces in residential environments are some of important actions in this field, because crime might be committed in such spaces that are suitable for gathering of addicts, homeless people and offenders (Schneider,2007)
sense of belonging		Paying attention to having a perfect mental image of spatial phenomenon is considered as its logical understanding that its continuity would lead to sense of identity and this sense leads to sense of me and us in environment, sense of security, peace of mind, self-confidence, adoptability and adjustment with space (Zad Rafee, 2005). Therefore, strengthening sense of belonging of citizens toward public urban spaces would make

		these citizens to consider this space belonged to them and using it without any fear, anxiety or shame.
management and maintenance	continuous monitoring and consideration of space	Increasing quality of supplies and public spaces by urban management in residential environments besides investment attractions are effective factors in promoting security level in residential environments.
	optimal locating of usages	Suitable furniture and urban facilities as well as locating of usages that leads to accumulation of population can promote security level in residential environment to reduce crime commitment, because population is a factor that requires reducing urban insecurity.
supervision	systematic combination of applications	In general, coordination between applications and presence of night applications in residential contexts lead to increase in sense of security among residents. Researches have indicated that neighborhoods with a coherent coordination between their contexts and night applications have higher security.
	supervising over spaces	One of principles to promote sense of security in residential environments and neighborhoods is placing doors and windows with street view, because this design would enable users to monitor public spaces so that insecurity would be reduced. If the criminal person knows that crime might be seen even if it is not potentially like that, possibility of crime commitment might be reduced because of the transmission process from thought to action (Ismaelzadeh, 2008).
	optimal lightening	Suitable lightening in city and its spaces not only leads to better view but also contributes to creation of a clear subjective image of city in night. Suitable lightening can be a factor strengthening identity of a place and promoting its specific character so that attraction and calmness of city and its spaces can be increased and presence of citizens will be strengthened. In this regard, efficiency of the city will be increase in day and night and permanent presence of citizens in space will lead to economic development and security in space.
access	walking frame	ease of access in which, all people are able to use city, dynamism of these paths to increase population attractions, and prevention from empty path are some of effective proceedings in residential environment; in this case, combination of different movement types such as walking, car riding, and bicycle riding would increase security level and quality of movement frames.
	entry/exit	Design of blind and short alley, application of standard doors and windows and suitable design to facilitate supervision of residents on entry and exit of house are appropriate solutions that lead to reduced crime commitment through narrowing entry path of buildings. Researches have indicated that regions with limited entries and access paths would experience more

		crimes (Ghoorchi, 2002). Moreover, buildings with easy access such as houses locating in crossroads might be more theft compared to buildings in blind alleys.
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## Research Background

First theories in field of urban crimes and security in urban environments was associated with studied of Chicago urban sociology school that have studied different areas of city in accordance with economic, social, and physical features. They believed that study of the behavior of urban residents in frame of urban environment is possible. In their opinion, social, economic and physical specifications can effect on crime commitment in a region. Stark, one of researchers of Chicago School in 1925, introduced five aspects of urban structure that are predictor factors of crime commitment in neighborhoods; these aspects consists of density, poverty, mixed use, continuous displacement, destruction and collapse of buildings (Ahmad Abadi et al. 2007). Several years later, in 1981, Maslow defined security as one of necessary and fundamental needs for human excellence in his needs hierarch theory. He states that this need is necessary for life like physiological needs of human and promotion of this factor would directly effect on health and well-being of human and society (Maslow, 1996). It can be stated that some authors like Jacobs (1961), Jeffery (1971), and Newman (1973) in 1960s and 1970s paid more attention to security in urban environments (Zabihi et al. 2013). Jain Jacobs was the first person who mentioned the relation between human interactions, urban design and prevention from crime. Jacobs considered the interaction between physical space and social processes that create environment within urban security emphasizing on active space as a factor to create a secure and safe environment (Elyaszade Moghadam & Zabetian, 2010). He introduced movement creation, active applications of street and stress activities, and natural cares of these activities as effective factors in constructing a good urban space. His fundamental idea was that an urban space is safe if it has suitable population coverage with many observer eyes in its space (Jacobs,1961). When Jacobs saw security in busy public spaces, Oscar Newman take a step ahead, reasoning that private spaces are safer. Newman assumed that a smaller private space would encourage residents to expand their control on space so that crime will be reduced. He conducted a study in New York found that crime rate in high-rise apartments has a higher growth than low-rise residential projects. He concluded that this issue was due to lack of control or personal responsibility for a space occupied large number of people. Newman and Jacobs believed that success of a defendable space is related to monitoring and supervision imposing by spatial specifications. Also, studies of Jeffery, creator of "Crime Prevention through Environmental Design" (CPTED) approach, believes in effects of some factors such as design, psychology and biology in insecurity breakout. He assumes that both environmental effects on human behavior and genetic field of crime commitment should be considered to prevent from crimes (Jeffery, 1971). According to definition by National Crime Institute of America, crime prevention through environmental design is suitable use and design of constructed environment that might lead to reduced fear from crime and improved quality of life (Iranmanesh, 2005). Wekerle and Whitzman presented secure cities approach in 1995 emphasizing on crime prevention and management in neighborhood. The expressed awareness of environment, others' supervision and contribution to increase safety and security in neighborhood emphasizing on integration of these factors to increase safety and security (Wekerle & Whitzman, 1995). In other studies conducted in field of security, Greenberg et al. indicated that affection attachment, as the basic element of



social correlation, is considered as the main factor for regional control, because sense of belonging to community would make people feel that are controlled by community and society thinks of them (Greenberg, 1982). There have been many studies conducted in field of the effect of security on residential satisfaction that position of crime indexes, poverty, social disorders and their effects on neighborhood satisfaction can be named as one of these studies (Ahlbrandt, 1984; Marans & Rodgers, 1975). Results obtained from study conducted by Baba and Austin (1989) showed that improved environmental specifications and better situation of neighboring residents would lead to increase in satisfaction of residents and this leads to increased security in neighborhoods (Baba&Austin, 1989). James et al. (2009) stated that crime rate in region not only can effect on access to dwelling services and quality and residential environment specifications but also can effect on residents' satisfaction with residential environment (James et al. ,2009). It has been also proved that perception of neighborhood and community plays a vital role in formation of actual residential and household specifications including perception of crime, social order and social relations that can effect on perception of people from residential satisfaction (Hipp, 2010; Lauren M. Ross, 2012). Results obtained from researches conducted in Weniping indicated that unfavorable social-economic level of residence is a powerful factor caused more crimes in neighboring unit (Wisener and et al., 2004). Bill Hiller team has recently introduced aggregation of streets and their layers as the key factor in creation of a safe urban environment using Spatial Syntax Software. In viewpoint of this team, the urban environments are those that are integrated with urban pattern and public security (Boyle et al., 2004).

### Studied Area

Municipality of present area of Wets Tehranpars was called Tehranpars before divisions in 2008. This region (West Tehranpars) is now limited to Vafadar Highway from north, to Resalat Highway from south, to Kazem-Shahed (Parvin) Blvd. from easts and to Ordibehesht Street-Delavarán Blvd-Shahid Bagheri Highway from west (Detailed Design of Region, 2009). West Tehranpars region is located in Municipality District 5 of Region 4 in Tehran neighboring to Majid Abad and Ghanat Kosar from north, to Municipality District 8 of Tehran from north, to East Tehranpars from east and to Oghaf, Elm and Sannat, and Narmak neighborhoods from west. Tehranpars neighborhood has four squares. Urban structure of this area is based on modern urbanism, similar to Narmak. The main owner of Tehranpars was a Zoroastrian person called Arbab Hormoz and now Zoroastrians are living in this area, in particular in Second Square. Fire Temple of Zoroastrians is located in Jashnvareh Street. One of important characterizations of Tehranpars is naming of allies in this neighborhood that is based on even numbers through eastern-western method continuing from Tehranpars Three-way to Fourth Square (Tehran 100, 2008). Both eastern and western Tehranpars neighborhoods have engineering and urbanism principles. 4 main squares in Tehranpars neighborhood is located in Wets Tehranpars. Assessment of current position of the area based on SWOT technic indicates that conditions and specifications are as follows:

Quantity	Basic indexes	
103911	Population	205

8473	employed
31310	household number
3.31	household size
2953	number of dwelling units
149	Average density of residential buildings
160	average area of residential units
1.2	household density per dwelling unit
297	Gross population density
35826	employed people
185	average area of units
3.7	ratio of resident to employees



Figure 1. Map and table of general information of Region (reference: Report of Detailed Design of Region 4, 2006)

Table 4. Evaluation of Studied Area using SWOT technic

Strength	Weakness	Opportunity	Threat
Presence of designed appropriate interior traffic network in area Long history of residence in the area Familiar of residents with each other	Allocation of about 50 percent of the lands to housing (two times more than the city average) Shortage of some local services in the area Darkness of some passages due to lack of attention to Lighting Tendency to displacement among residents Lack of cultural and recreational per capita in area	Surrounding by arterial passageways Proper division of paths in neighborhood Quick access to the urban and suburban bus terminal Access to the subway station Presence of extra-regional applications	Fragmentation and dissociation of tissue by the highway Increased social anomalies in the region because of sub-dividing high population density and residential use in area

Research Methodology

The main objective of this study is to evaluate factors affecting increased sense of security in residential environments in West Tehranpars Neighborhood in Tehran, Iran. Descriptive methodology was employed to review research background and references, to define concepts, and to determine theoretical bases. To collect data library and field studied were applied. Also, evaluation of security level was done using indirect method. This method is implemented through classification of security indexes to two levels in residential environments of studied area (Table 3). At first level, 5 factors including physical, sense of belonging, management and maintenance, supervision, and accessibility were considered and at second level, each of these indexes were divided into some sub-criteria.

Present research is a survey study and a quantitative research that datas have been gathered using the questionnaire. The population under study is included residents of Western Tehranpars and the sample size is estimated with a population of approximately 103900 people. Sampling is accidental, and to measure the qualitative variables, Likert Scale; to analyze the findings, Chi-square and Gammastatistical tests are used.

Statistical population of study consisted on residents living in West Tehranpars Neighborhood and sample size was estimated about 103900 members. Sampling method was random and LIKERT Scale was employed to measure qualitative variables. To analyze findings, Chi-square and Gama statistical tests were applied. Since there were numerous households living at studied area and difficult process of survey, Cochran formula was used to determine sample size and statistical sample size obtained to 380 members. Direct method of questionnaire was used to quantify these indexes. Questionnaires were divided into two parts including personal and economic questions in first part and second part consisted of questions related to mentioned factors.

In association with the reliability of the measurement tool, comments of social sciences are considered and validities of questionnaires are obtained through Cronbach's alpha test respectively residential environment 82% and factors affecting the increase in the sense of security 80%. To analyze the data also two types of statistical analysis, descriptive and inferential statistics has been used and the results of the sample has been studied using Pearson correlation test.

$$n = \frac{NT^2 S^2}{d^2(N-1) + T^2 S^2} \quad n = \frac{103900(2/58)^2 \cdot (1/85)^2}{(0/05)^2(29437) + (2/58)^2 \cdot (1/85)^2} = 38$$

## Research Findings

According to the goal of this study, analysis process was evaluated using questionnaire and collected data analysis through SPSS software based on some statistical methods such as mean, factor analysis and regression. To obtain a perfect result within assessment of sense of security in West Tehranpars Neighborhood at region 4 of Tehran, the following methodology was implemented. At this step and after distribution of 380 questionnaires at studied area, data were inserted into SPSS Software and analyses were done.

According to the second hypothesis that shows different components effective on forming the residents' sense of security, it can be stated that management and maintenance component with average of 2.86 has the highest level of impressment on area security, yet observation index with minimum average about 2.35 has the lowest level of effectiveness. In association with the other components, physical components, due to existence of subcriteria like perfect lighting spaces and existence of abandoned fields, each with 3.3, and suitable mixing applications with 2.1, have the highest and lowest scores in area security.

It can be stated about the factors affecting security in residential environments that the management and maintenance factor with mean of 2.86 has the highest effectiveness in security of the area and supervision factor with minimum mean of 2.35 has the lowest effectiveness. In terms of other factors, physical factor consists of sub-criteria including suitable lightening of spaces and abandoned lands with 3.3 mean and suitable mix of application with 2.1 mean has the highest and lowest rank in security of area, respectively.

**Table 4. Mean of effective factors in security of Tehranpars Neighborhood**

First level	Second level	Mean	Standard deviation
Physical 2.42	un-necessary and hidden spaces (non-defendable)	2.6	2.45
	presence of hidden corners	2.2	2.33
	context compactness	2.3	3.12
	abandoned and dilapidated lands in neighborhood	3.3	2.35
Sense of belonging 2.5	willingness to live in neighborhood	2.5	3.15
Supervision 2.35	suitable supervision over spaces	3.2	2.34
	Appropriate lightening of spaces	3.3	2.37
	suitable mix of applications	2.1	2.65
	presence of night usages	2.4	2.89
	presence of doors toward street	2.75	3.53
Access 2.78	ease of access and displacement for persons	3.1	2.21
	combination of various paths	2.3	2.16
	blind and short alleys	2.51	3.89
	standard doors and windows	3.11	3.91

	dynamism and liveliness of walking routes	2.9	2.58
Management and maintenance 2.86	ability of spaces to attract population	2.9	2.89
	optimal locating of usages	3.2	2.55
	continuous supervision over spaces	2.8	2.75
	investment incentives in area	3.1	3.53
	Proper placement of urban furniture and general equipment	2.5	2.74
	design of potential centers for associations	2.7	3

Customer Satisfaction Measurement (CSM) Index was employed to measure level of satisfaction with residential environments. To calculate this index, the following equation was applied to obtain satisfaction level of residents with security in each of variables (Jeanne, 2003):

$$CSM: \frac{\sum_{i=1}^n \alpha_i \cdot \beta_i}{\sum_{i=1}^n \alpha_i \cdot (\max \beta_i)} * 100$$

Where, CSM indicates satisfaction percent of residents with security status in Tehranpars considering existing factors in theoretical bases. Obviously, the index of 100 indicates perfect satisfaction and if the index is lower than 100, this indicates wider gap between expectations and created satisfaction (Shaterian et al. 2011).

According to the first hypothesis, that has mentioned the high sense of security of inhabitants of residential areas in Tehranpars, in surveys done separately has been indicated the satisfaction of the safety of residents according to the mentioned components including physical and structural (51.1 percent), sense of belonging (49/4 percent), monitoring (57/2 percent), access (65/9 percent), management and maintenance (41/1 percent), that according to Table 5, conforms low levels of resident satisfaction in housing sector and high levels of satisfaction in field of transportation and access. Due to the assessment of satisfaction of residents from security of studied area in the second phase of the study, the impact of satisfaction or dissatisfaction of security has been studied, in total including the 47/06 indicates the point that residents are not satisfied with the security of their residential area.

According to assessment of satisfaction level of residents with security in neighborhoods and mentioned factors, the obtained results are as follows: physical factors (51.1%), sense of belonging (49.4%), supervision (57.2%), access (65.9%), management and maintenance (41.1%). According to table 5, low satisfaction of residents in dwelling part and high satisfaction in scope of transportation and accessibility are accepted. According to evaluation of residents' satisfaction with security of studied area at second step of research, effect of satisfaction or dissatisfaction of security is studied herein.

**Table 5. Expectation level and function of satisfaction with security in different parts (%)**

description	satisfaction level		
	function	expectation	function difference
physical	51.1	100	48.9
sense of belonging	49.4	100	50.6
supervision	57.2	100	42.8
access	65.9	100	34.1
management and maintenance	41.1	100	58.9
Overall	-	-	47.06

### Conclusion and Recommendation

The issue of urban security is an issue considered by experts in scopes of urban sciences, politicians, and managers, but there is not a clear definition of it. According to various definitions related to security, urban security is definable through its antonyms and threats so that this concept encompasses an extensive range related to city. In this research, urban security was examined in terms of threats caused by crime prevention. Since urban security has been less considered from urban planning perspective while it has a prominent position in urban planning as one of issue related to city, it is possible to control some urban threats in majority of cases using an accurate planning and suitable policies in scope of urban land usage.

The research is done to evaluate insecurity residential areas of the neighborhood with the aim of studying effective components on increasing the sense of security within Tehranpars district in Region 4 Tehran that at first 5 criteria and 21 sub-criteria were identified in this study as the most important factors affecting increased security of West Tehranpars and then these criteria were processed using Statistical methods and swot table. The results were related to suitable lightening of spaces and proper design of buildings. Since lightening situation of the studied area is somewhat inappropriate in some parts of area.

This confirms the theory of Jason who believes that the first ideas are crime prevention and care of people, and take under consideration and observation. This feature will be done to increase the visibility and control of assets and buildings. In this environmental design of fighting against crime in such supervision, residents monitor the public and semi-public spaces where they live normally and accidentally and they identify strangers in place. Paying attention to lighting and ambient lighting is also desirable policies in this way.

On the other hand, presence of non-defendable spaces full of crime in some parts of the area might affect the security concept. To promote urban security in this research, it is necessary to use public participation potential and increase sense of identity and belonging among residents in neighborhood, because areas with high sense of belonging among their residents have low crime rate.

This confirms the theory of Petersen who believes that providing facilities to create some social activities in city regions is suitable to increase the human oversight on areas, in addition to employment and welfare facilities. Many urban crimes are taking place in areas that public oversight is low and man has no physical presence. In this way, to be accomplished a kind of empowerment in social activities is the goal, In fact in city areas and special areas that rise in crime is very likely, to increase social activities and attendance is mentioned.

Also, the third priority in this regard is promotion of urban spaces in order to increase quality of public services that leads to increase in residents' involvement and security in accordance with conducted researches in this field. The other solutions include removal of non-defendable spaces, changing usage of some distributive and empty spaces such as abandoned lands, and organizing spaces under bridges and changing them to green spaces and recreational centers. According to Newman theory (Newman, 1996), vulnerable or non-defendable spaces are highly threatening urban spaces. The following measurements can be conducted in studied area in order to employ mentioned priorities and increase security.

- A) Recommendations that can positively effect on promotion of urban security thorough approval and implementation of rules and regulations:
- Secure activities around insecure places
  - Combination and establishment of long-term usages around usages with limited activities through day and night
  - Removal of usages with trans-regional functions maladaptive with residential environment through rules and regulations
  - Regional parking
  - Widening routes and local accesses
  - Establishment of usages with day and night function in street
  - Decreasing hidden and dark corners in street thorough constant supervising over constructions and physical changes over the time
  - Prevention from monopoly spaces with specific groups
  - Changing insecure usages besides residential environments
- B) Recommendations that can be implemented by citizens through incentive policies to promote urban security:
- Expansion of usages to meet daily needs of residents
  - Making incentive policies to form mixed usages
  - Encouraging residents to create blind alleys
  - Encouraging residents to provide optimal lightening in streets at nights
  - Increasing usability of parks and green spaces increasing formal and informal supervision
  - Establishing and forming dwelling units in some parts of street at high floors of commercial units
  - Expansion of required field for presence of residents in outer space of house at neighborhood to reduce attractiveness for nonresidents
- C) Recommendations that can be conducted by institutions and organizations responsible for urban management:
- It is recommended to:

- Create public and cultural spaces for social interactions of residents in neighborhood
- Create places for leisure time of young people
- Build sports spaces in neighborhood
- Create different usages for streets at day and night
- Create centers for constant monitoring over streets
- Prove required contexts for simultaneous use of social groups of space
- Determine the border of space with signs and symbols
- Embed warning boards and signs in public spaces for illegal users
- Select suitable vegetation coverage for green spaces in neighborhood and parks
- To increase required facilities for constant presence and activity of children, women, and elderlies
- It is recommended to provide:
  - Proper lightening in intersections, streets, sidewalks, squares and parks
  - Appropriate dispersion of clear and active places in street
  - Appropriate separation of private and public scenes
  - Removal of blind and empty places in parks and other spaces

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