Analysis of the Factors Affecting Women's Security in Urban Parks: Case Study of Shiraz Azadi Park

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Abstract

Women, as nearly half of the urban population, are particularly sensitive to security concerns in public spaces. Understanding their perceptions of crime in urban areas is essential for shaping safer environments. This study explores the characteristics of urban open spaces that either enhance security or create conditions that may foster crime, specifically from the perspective of women. Given their frequent presence in such spaces, parks hold particular significance in this regard. Shiraz Azadi Park was selected as a case study, with research conducted using both quantitative and qualitative methods. Data collection involved surveys, interviews, field observations, and mental mapping. The findings indicate that women's sense of security in urban parks is influenced by a combination of physical, functional, social, and perceptual-visual factors. The physical environment plays a crucial role, with elements such as green space density, the absence of secluded areas, clear territorial boundaries, and the presence of signage contributing to a sense of safety. Functionality is also key, with 24-hour accessibility, well-placed entrances and exits, and effective wayfinding enhancing security. Social dynamics, including artificial surveillance, the park's reputation, and the level of male dominance in the space, further shape women's perceptions of safety. Additionally, visual and perceptual aspects, such as clear sightlines, adequate nighttime lighting, simplicity in design, and overall physical security measures, play a significant role in fostering a sense of comfort and confidence in the space. By understanding these factors, urban planners and policymakers can work toward creating safer and more inclusive public spaces that better accommodate the needs and concerns of women.

Keywords: *Women's Safety, Urban Security, Public Spaces, Crime Perception, Urban Parks, Social Dynamics, Environmental Design, Wayfinding, Territorial Boundaries, Surveillance, Lighting, Spatial Planning, Inclusivity, Urban Planning, Space Characteristics, Azadi Park, Shiraz.*

Introduction

Women account for almost half of the urban population whose increasing presence in social activities significantly impacts on the physical construction of cities. Ensuring their security in society has always been one of the most significant challenges of architects and urban planners; this will guarantee the preservation of life, vitality, the prosperity of urban spaces, as well as the growth and development of society. Urban parks are among the places widely used by residents due to the modern apartment-living lifestyle in cities. People, especially women, use these places to spend their leisure time, enjoy nature, and do their physical exercises. However, the feeling of insecurity that sometimes arises in some parts of these spaces prevents them from attending and using such places; this issue will eventually lead to various psychological harms.

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This study assumes women to be able to identify crime-prone areas in urban parks as they are more sensitive compared to men in recognizing the potential for crime in a public space. The purpose of the study is to investigate the various factors affecting the feeling of fear and insecurity of women in urban parks. Therefore, women aged between 14 to 60 years were selected as the target community in Shiraz Azadi Park for the case study. Considering this explanation, the research questions are presented as follows:

- In an urban park, which spaces are less secure from a women`s perspective? Why?

- In an area, which factors have the most impact and the least impact on the crime rate?

- In urban parks, what effects do women's sociological characteristics have on their sense of security?

Literature Review

Crime

In general, crime means behaviors which oppose social order and expose the perpetrator to punishment or preventive action (education, care, and treatment) (Goldoozian, 1990: 143). According to sociologists, crime is a social phenomenon and arises from the social system, culture, and civilization of any society (Salehi, 2008: 46). Urban crimes are among various types of crime that occur in public places prone to be spread out to private areas as well (Ibid: 32). Theories related to urban crimes are generally tripartite: The first theory is the theory of vulnerability, first introduced by Skogan and Maxfield in 1981. This theory focuses on the relationship between citizens' social characteristics and the sense of fear in urban environments. Moreover, it attempts to show the relationship between residents` level of dynamism and social interactions on their fear in residential neighborhoods (Austin et al., 2002, 417-427). According to this theory, women and the elderly, typically more vulnerable to threats, feel more insecure compared to others. The second theory is social disorganization which, drawing on the mediating variable of social relations, demonstrates the relationship between the social structure (such as social and economic level) and the urban crime rate. The theory also claims that the degradation of socioeconomic status and family collapse lead to social disorganization and reduced social control w, which ultimately result in increased crimes, insecurity, and delinquency in urban areas (McCrea et al., 2005,7-27). The third category is the theory of social turmoil, seeking to prove the destructive effects of social anomalies on crime and feelings of insecurity (Shaw & McKay, 1942).

The theoretical background of urban criminology originates with the Chicago School of Sociology and the Early Studies of Urban Ecology. The school of urban ecology, with people like Park in its evolutionary process, studied social phenomena such as crime and mental illness in cities and managed to plot a map of them (Catton, 1999: 23). In 1961, Jane Jacobs explored the subject of the street bullying. She believed the insecurity problem in many parts of cities is not associated with criminal or deprived groups, but the urban areas are not physically capable of providing security and vitality (Jacobs, 1992: 35). By presenting a theory called "Eyes on the street", she considered street view (arrangement of buildings facing the street) as one of the most significant components of establishing security in urban spaces (Akbari & Pakbonyan, 2012: 55). Jacobs' efforts in the 1970s led to the formation and development of the crime prevention theory through environmental design (CPTED). This theory is a design methodology scheme that helps architects and urban planners to reduce the crime rate and improve the quality of life using appropriate and purposeful design methods of the environment (Atlas, 1999: 11). In 1970,

Oscar Newman developed Jacobs's ideas that emphasized active monitoring and definition of areas. Newman's book, entitled "Defensible Space People and Design in The Violent City", proposes the theory of defensible space and offers to change the structure of the urban environment in order to provide the security of society, not by the police, but by people in different urban areas (Newman, 1972: 37). Bill Hillier (2008) analyzed the physical characteristics of the environment using Space Syntax techniques and network statistical comparisons to examine crime-prone places. According to his findings, the qualified urban environments integrate with the city model and promote public security (Hillier et al., 2008).

Security

Security is defined as immunity from coercion, respect for rights, freedom and safety from the threat of death, disease, poverty, and unexpected events, and in general, the release of any factor that disturbs human peace (Jones, 1999: 102). Oxford Dictionary defines security as the state of feeling happy and safe from danger or worry. According to the Universal Declaration of Human Rights, security is regarded as social rights and freedom. This issue is among the essential and basic human needs in Maslow's hierarchy of needs (Eliaszade & Abtahian, 2010; Health Organization, 1998: 271).

Security consists of three integrated stages: individual, social, and national security (Sarokhani, Navidnia, 2006: 89). Security is also a concept that has both subjective and objective dimensions. Mentally, security means the feeling of fearlessness in an environment, and objectively, this concept is associated with safety against external dangers and attacks (Kargar, 2004: 36). Accordingly, security is directly related to the mentality and perception of the people. If the people of a society feel that security has been compromised, they may at first perceive it as merely a mental certainty; it will subconsciously manifest itself as an external reaction (Hosseini nesar, Ghasemi, 2012: 2). Therefore, what is referred to as security in this study is the mental concept of security presented in individual and social dimensions.

Extensive theoretical and practical research has been done on security and the factors affecting it. An overview is presented in the following table:

Parameters affecting the urban space security	Theoretical studies																
	Jacobs, (1992)	Beeler (2011)	Catton, William	CPTED(1971)	Newman (1972)	Hillier & Shu (2000)	McCrea et al (2005)	Lucas et al (2007)	Beeler(2011)	Lucas et al(2007)	Hashemi et al(2011)	Eliaszade & Abtahian,	Pourjafar et al (2008)	Daripour, Maleki	Izadi & Haghi (2015)	Bemanian et al, 2009)	Rafeian et al (2012)
Territory	●	●		●	●	●		●									
Considering corners and blind spot							●			●			●				
Safety (Physical Security)												●		●			●

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Environmental awareness								●									
Nightlife									●	●	●	●	●		●		
Accessibility		●	●	●				●	●			●					
Variety of Activity	●			●													
Diversity of Forms (Design)														●			●
Monitoring	●	●	●	●	●	●	●	●			●	●	●			●	
Space reputation												●		●		●	●
Visual communication			●				●	●								●	
Compatibility of activities									●	●		●	●				
Quality of lighting							●		●	●	●		●	●	●		●
Natural elements														●			●
Memorability														●		●	●
Variety of usage	●																
Design Simplicity									●			●					
Signs and symbols									●	●	●		●		●		
Repair and maintenance				●													
People participation									●	●	●		●			●	
Sense of belonging					●												
Eliminating the irritating factors			●														
Place sense and identity														●			●

Quality Of Furniture Arrangement							●	●	●		●		●		
Familiarity										●				●	
Variety of activities										●					

Table 1. Factors affecting security in urban spaces from the perspective of theorists and researchers

The table above contains a set of different factors affecting the sense of security in different environments. It presents the overlapping parts of theoretical and experimental research on the security of artificial environments, especially in urban public spaces, which were used to construct a researcher-made questionnaire.

Method

This study aims to analyze the factors affecting women's feelings of insecurity in a public urban space. Therefore, we try to identify safe and insecure places in urban areas and investigate the reasons for the formation of such spaces. In this regard, an urban park, used by the majority of society especially women, was selected as a public urban space for the case study whose details are subsequently introduced. The first step in the research process was to prove the park insecurity from the women's perspective. Hence, the effects of gender on the sense of security were examined for the park. To do so, a questionnaire consisting of 26 questions based on the five-point Likert scale was prepared. After evaluating the validity and reliability (Cronbach's alpha 81%) of the questionnaire, it was randomly distributed among 284 participants (males and females). Then, the data were fed into the SPSS software for analysis. The results presented in two descriptive and inferential steps. Moreover, the effect of women's age, marital status, and education on the sense of security or insecurity in the park was investigated.

After having statistically proven insecurity of the park from the perspective of women, a crime zoning map was extracted based on their viewpoints. This section intended to discover the crime-prone points and safe places in the park and the underlying reasons. The park maps were distributed among 84 female users of the park to distinguish different spaces of the park into five categories, indicated in five different colors, ranging from very high to very low in terms of security based on experience. Responders were also requested to explain why they consider a place safe rather than unsafe. The interviews were recorded, implemented, and coded with their prior consent; the efficient indicators of security in the park were extracted. The illustrated maps were then analyzed by Arc GIS software. The result was the extraction of a crime-prone zoning map. In the analysis section, the crime-prone zoning map confirmed the results of interviews collected from women in the community.

The last step was to prioritize the security indicators provided by women in the park to explain the practical strategies for improvement. Accordingly, the indicators, extracted as shown in Table 1, were compiled in a new questionnaire consisting of 16 questions and distributed among 186 women aged 18 to 50. After collecting the responses, the collected data were analyzed in the SPSS software using the Fredman test, and the desired indicators were prioritized. Finally, drawing on the results obtained, certain design solutions were proposed to eliminate crime-prone areas and, thus, increase the sense of public safety, especially for women in urban parks (Figure 1. Must be placed here).
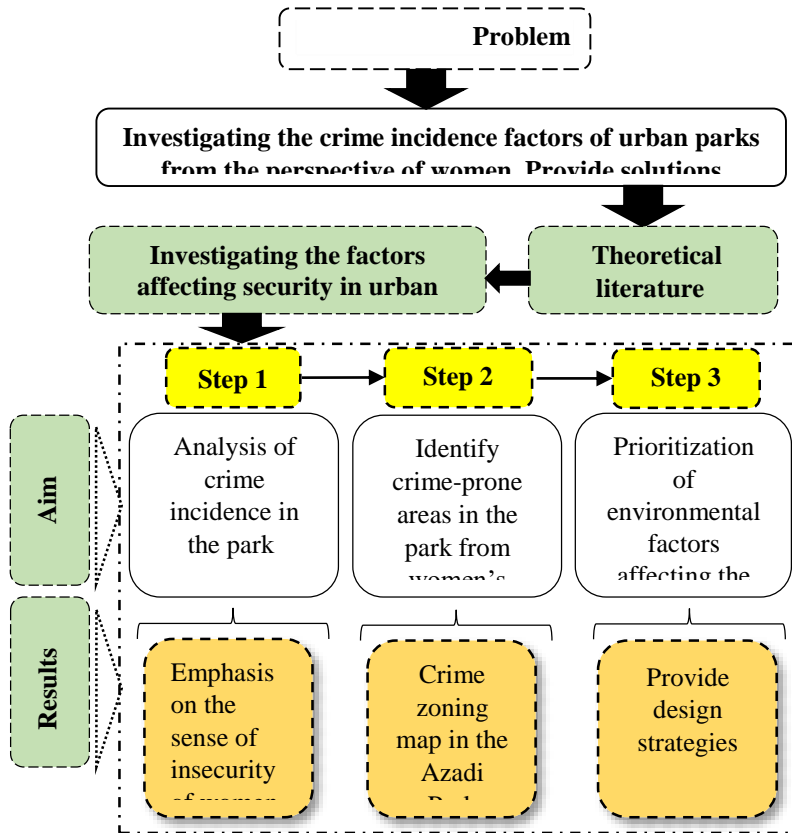
Figure 1. Research Process (Source: Authors)

Case Study

This study aims to investigate the feeling of security of women in an urban public space. Therefore, due to the daily and unlimited use of all members of the society, the park areas were selected as a case study among different public spaces. In 1966, Azadi Park was built on a 22-hectare plot of land in Shiraz. This park has a range of unique urban function including recreational, social, and educational activities. Azadi Park has an almost organic and coherent form that enhances its functional diversity and appeal. It is a multi-functional place suitable for residents as well as travelers having a religious-cultural complex, library, playgrounds, sports facilities, café, artificial lake, green spaces, birdhouses, various elements, a meeting hall, a theater, an amusement park, handicraft stalls, and a parking lot and more; it attracts people of all ages and genders. Figure 2 shows the location of the park in the urban space and different areas in it (Figure 2. Must be placed here).

Figure 2. Location of the park in the urban space and different spaces in it. (Source: Authors)

Results

The first step was to prove that the park is unsafe from the women's perspective. For this purpose, the questionnaire, explained before, was distributed among 284 people, and the collected data were analyzed with SPSS software. To investigate the sense of security in urban parks in terms of gender, a hypothesis was developed as follows:

Hypothesis: "the feeling of security in Shiraz Azadi Park differs among men and women."

To examine the hypothesis, Mann-Whitney test was used to determine whether the difference in the sense of security between men and women is significant or not. The results are presented in Table 2.

Sig	Z	Wilcoxon W	Mann-Whitney U	Differences in the sense of security in parks by gender
0/001	6/761	43992/00	16384/00	

Table 2. Mann-Whitney test, the difference in the feeling of security in Azadi Park by gender

According to the results and based on the Z value (6.761), at a significance level less than 0.05, it can be claimed that feeling of safety among men and women is different at a 95% confidence level. In order to measure the sense of security for men and women, the average rank of the sense of security by gender was used; the results are shown in Table 3.

Mean rank based on Likert scale	Sum of Rank	Mean Rank	N		Gender
5 of 3/02	47966/92	386/83	124	Male	**Amount**
5 of 2/21	43992/00	274/95	160	Female	**of**
-	-	-	284	Total	**security**

Table 3. Mean rank of feeling security by gender

According to the above table, the mean rank of men is higher than that of women. Therefore, it seems that women feel less secure than men in Azadi Park. On the other hand, the mean rank of descriptive data in the analysis of direct questions from women in the park shows that their sense of security with an average of 2.21 is lower than the average 2.5. In other words, women have responded "very low" and "low" to the related questions.

After proving the level of security for women in Azadi Park, the sense of security was observed based on age, marital status, and education. According to the three categories of age, education, and the two-by-two evaluation of the groups presented in the variables, the Tukey post hoc test was run to further analyze the samples; Moreover, according to the dual classification of marital status variables, Univariate T-test was used to examine the relationship in terms of the feeling of security. Accordingly, the results of the said tests are shown in Tables 4 and 5.

p-value	maximum	minimum	Std. deviation	Mean (security)	group	Independent Variable
0.0001	4	1	0.883	2.22	18-25	**Age**
	5	2	0.677	3.02	25-35	
	5	3	0.809	3.1	35-50	
0.794	5	1	0.9296	2.79	High school diploma	**Education**
	4	1	0.8697	2.61	Bachelor	
	4	1	0.7809	2.78	Master and upper	

Table 4. Tukey test: the effect of age and level of women's education on the sense of security in Shiraz Azadi Park

Sig	df	T	Std. Error Difference	Marital Status
./0001	88	-4/814	./835	**Single**
			./657	**Married**

Table 5. T-test, the effect of women's marital status on their sense of security in Shiraz Azadi Park

According to the significance level for the age and education variables in the Tukey test, it is observed that the amount is less than 0.05 in the age variable (0.0001) and more than 0.05 in the education variable (0.794). Therefore, women of different ages have different feelings about security in the park; however, their education level has no significant relationship to their sense

of security in the park. Moreover, the mean values for different age groups show that the younger the women, the more insecure they feel in the park, and the older they are, the more secure they feel. Furthermore, the results of the T-test indicate a significant relationship between the marital status of women and the sense of security in the park (Table 5). The main values show that married women feel more secure than single women in the park.

After conducting statistical analysis of the sense of security of women in the park and the study of demographic factors affecting this issue (second step), the crime-prone zones in the park were identified (the third step) based on women`s viewpoint and a crime zoning map was subsequently drawn.

To do so, maps of the park were distributed between 84 women in the form of a survey in order to specify the different spaces of the park on a 5-point Likert scale (Including very low security, low security, medium security, high security, and very high security) distinguished by different colors. People were selected randomly and the process continued until the responses became identical.

The prepared maps were fed into ArcGIS software, and the raster layers were analyzed and converted to the correct layers using the Raster Calculate command. Then, the discrete data converted into continuous data using the interpolation command which resulted in a crime zoning map (Figure 3. Must be placed here).
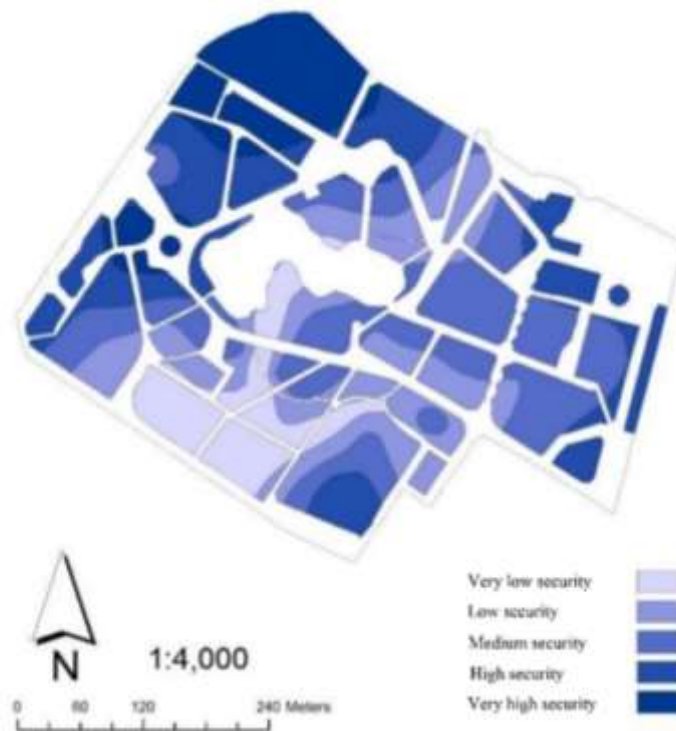
Figure 3- Crime zoning map in Shiraz Azadi Park based on women's opinion

Using a semi-structured interview technique, the factors causing the safety or insecurity of various spaces in the park from women's perspective were investigated. This step was

simultaneous with marking safe or insecure points on the map. Meanwhile identifying the spaces on the map, people provided the reasons behind their choices. After that, places were evaluated while recording the environmental characteristics affecting the safety or insecurity of the spaces; the items are also presented on the map as shown in Figure 4 (Figure 4. Must be placed here).

Figure 4. Reporting the factors affecting the safety or insecurity of different spaces of Shiraz Azadi Park

After the initial recording of the safety or insecurity factors, the interviews in the second step of the survey were reviewed, and the relevant indicators were obtained. To this end, the interviews were firstly transcribed, coded, and the key indicators were determined. Then, the indicators were classified based on environmental parameters. A report of this process is provided in the table below:

Indicator	Parameter	interviews
Functional	Proper location of entrances	"In my opinion, the children's playground is safer than all other parts of the park. This space is close to the park entrance, and there are women here who bring their children to the park to play. I feel comfortable; I am not worried about my safety and that of my child. There is a cozy atmosphere here for women and their children, which I think is due to the confinement of the surrounding space ..."
Social	Gender domination	
Perceptual-visual	Night lighting quality	"The space around the religious and cultural complex is the most secure space for women. I come to the library every day. The mosque and the library have made this part of the park a generally known place. A variety of space and furniture (tables and chairs) has created a suitable space for group activities and study. This area is suitable for group activities with classmates. We do not feel threatened even during the night because there is enough lighting at night, there is a lamp above each table."
Social	Reputation	
Physical	Proper arrangement of furniture	
Social	Control and monitoring	"I always choose the main entrance area of the park to visit my friends. I feel secure as there are a police station, a permanent book exhibition, and a bicycle station. It is always a crowded place. If we want to walk in the park, we walk to the religious-cultural complex because more people are there. Fitness equipment in the area is always used. Even at night, I see people using it because there is good lighting."
Social	Reputation	
Perceptual-visual	Night lighting quality	
Social	Control and monitoring	"The responsibility of caring for children has made security important to me. When I take the children to the park, we go to the entrance zone (Somayeh Street) because it is close to the parking lot, and the stalls selling snacks and handicrafts which make it always crowded. I feel more secure seeing more people."
Perceptual-visual	Visual communications	
Perceptual-visual	Design Simplicity	"I would like to go to the park lake area when I am at the park because it has a relaxing view. But, unfortunately, I feel much insecure there, and I never go there alone during the day or even with my friends at night. There are spaces around the lake with limited visibility. The difference in the height of the lake and other park areas, the shrubs and boxwoods, and even poor lighting at night make this space more preferable for criminals. I always feel afraid of crime and harassment and I am worried about being attacked by someone hiding behind the bushes or places I cannot see."
Physical	Dense green materials	
Perceptual-visual	Night lighting quality	
Social	Reputation	
Perceptual-visual	Visual communications	"The bike path, which has recently been added to the park, is one of the most unsafe parts of the park. There is

Physical	Dense green materials	nothing around it at all; there are only large, dense trees or steep grasslands. Additionally, it is by no means well-lit at night. This area of the park is very dark and secluded. Only a few people use this place during the day, let alone at night! While cycling I'm worried that someone may be hiding behind trees or down the hills ready to attack me, or in case something happens to me or someone bothers me, maybe no one will notice. For this reason, I prefer to ride on visible bike paths."
Social	Control and monitoring	
Physical	Proper safe sidewalks	
Physical	Dense green materials	"In some parts of the park, I feel scared and insecure. I prefer to leave the place sooner. Green spaces with dense and cluttered vegetation, inadequate and old lighting attract fewer people. In some areas, lampposts are taller than the trees and it gets dark under the trees at night making it prone to crime. I have personally seen many suspicious people in the areas. These places and parks are known for the presence of addicts and criminals."
Social	Reputation	
Perceptual-visual	Night lighting quality	
Physical	Variety of space	"The first time I came to this park, I went to spots that I thought they had been designed complicatedly. I got lost and couldn't find my friend at that moment, which made me feel frightened and confused. There was no sign to help me or to indicate my location in the park. That's why I got scared."
Perceptual-visual	Design Simplicity	
Perceptual-visual	Way finding	
Physical	Guides, elements and symbols	
Functional	Round-the-clock services	"One of the safest places in the park is the western part around the food stalls. They are open until the morning, especially in summer, so this area is always crowded and made me feel secure."
Functional	Territorial separation	"There is no specific territory in the park. When I go to the park with my friend, there is no private space for women. Even when I come with my family, there is no designated space other than a few stages among the green spaces, and such areas for this park are rare and inadequate."
Functional	Proper location of entrances	"I think the location of entrances to the park are perfectly chosen. The main entrance of the park is on Azadi boulevard (main street with heavy traffic). The second entrance is in front of Somayeh Street Shopping Center, and the third entrance is in front of Enghelab Bazaar. These entrances located in crowded areas and the presence of people creates a sense of security."
Perceptual-visual	wayfinding	"The park is vast, and the spaces in the middle of the park designed intricately that I sometimes feel confused and do not know where I am. Now imagine how scared and insecure the mother would be if her child got lost here."
Physical	Variety of space	

Physical	Physical security	"Feeling safe or insecure is not just about the fear of mugging or being attacked. There are some fountains in the park having no rails or protection. In some places, the flooring is broken. Some thorny shrubs are planted around some paths. These could create insecurity not only for children but also for the blind and disabled."

Table 6. Determining the indicators and parameters affecting sense of security in urban parks based on interviews with women

The table above is the excerpts of interviews conducted in the second part of the survey among women using Azadi Park in Shiraz. Due to the similarity of the contents, presenting all interviews here is beyond the scope of this paper. The most frequent factors stated by women concerning the sense of security or insecurity in various spaces of the park include the density of vegetation, the lighting at night, monitoring the spaces, crowdedness due to the different usages of the park, the reputation of the areas, and so forth. In order to evaluate the impact of each of the obtained indicators on the amount of security or insecurity women feel in urban parks, these factors are prioritized from the perspective of women. Therefore, a questionnaire containing 16 factors affecting women's sense of security in urban parks were designed and distributed among 186 people to determine the effectiveness of each of these indicators. After collecting the data, the Fredman test was run in SPSS software for analysis. The results are presented in Table 7.

Indicator	Rank	Mean Rank	Parameter
Social	1	12.76	**Control and monitoring**
Physical	2	12.17	**Dense green materials**
Perceptual-visual	3	10.84	**Visual communications**
Functional	4	10.80	**Round-the-clock services**
Perceptual-visual	5	10.31	**Design Simplicity**
Perceptual-visual	6	9.77	**Night lighting quality**
Social	7	9.17	**Good or bad reputation**
Social	8	9.06	**Gender domination**
Physical	9	8.60	**Variety of space**
Physical	10	8.35	**Proper safe sidewalks**
Perceptual-visual	11	7.59	**Physical security**
Functional	12	6.72	**Way finding**
Functional	13	5.72	**Proper location of entrances**
Physical	14	5.32	**Territorial separation**
Physical	15	5.17	**Guides, elements and symbols**
Physical	16	3.64	**Proper arrangement of furniture**

Table 7. Ranking of indicators affecting women's sense of security / insecurity in urban parks

Discussion
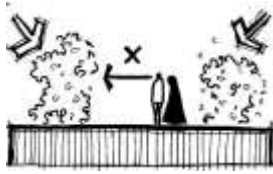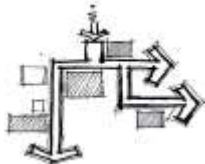
According to the findings of the present study, the most significant factors that can affect women`s feelings of insecurity in urban parks are as follows:
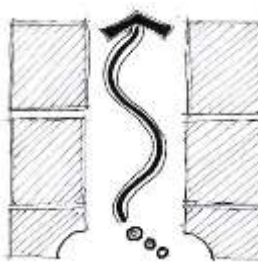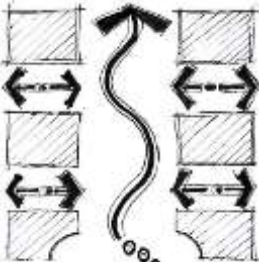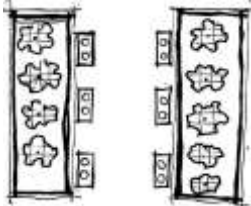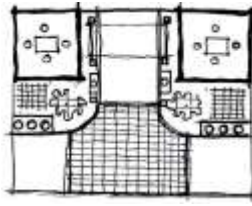
- Caring and monitoring: Women generally prefer to be in places where either people or the police or some other facilities are present. Accordingly, the proper distribution of various activities seems to prevent the concentration in one part of the park and increase the supervision by vendors and visitors.

- The green materials: in the interviews, the dense vegetation at the park has been criticized severely. Vegetation density prevents proper visibility in the park and also creates a space for criminals (drug users) as a hideout.

- Visual communication with different parts of the park: when women enter a public urban space such as a park, they prefer to be seen by others to feel safe. They also would rather have access to the crowded places around them to ask for help just in case.

- Round-the-clock services: numerous activities in different parts of the park lead to natural control and security. However, it must always be noted that the activities need to provide services round the clock, especially in the late hours of the night. This issue should also be considered in the cold seasons of the year when attending the parks is less frequent.

- Design simplicity: the geometric complexity confuses space and reduces the tendency of people to attend, especially women.

- The quality of night lighting: appropriate lighting creates a sense of security for women, especially at night. If the light sources are installed higher than the trees, the shadow of trees will create a dark and frightening environment and increase the possibility of crime in these spaces.

- The notoriety of space: this factor could reduce the tendency of people to spend time there. For example, areas known as a gathering place for certain groups of people (drug dealers), psychologically create a feeling of insecurity in mind.

- Gender dominance: women are more likely to be in areas of the park where other women are there; On the other hand, they refuse to enter places reserved for men, especially the younger ones.

- Spatial diversity: spaces that lack diversity do not foster the necessary motivation for the presence of different groups using the park which ultimately may lead to the excessive privacy of those spaces making them unsafe for women. Additionally, the passageways should be clear and guide users to main routes.

- Physical security: the prohibition of motor vehicles entering the park, the separation of bicycle and skating lanes from the sidewalks, creating shelter at different levels are among the factors that contribute to a safe park environment.

- Proper location of entries: interviews indicated that women are more likely to use the entrances adjacent to crowded urban thoroughfares or near lively areas.

- Territorial separation: in the formation of urban parks, separate areas should provide for various activities. Separating territories, using a variety of furniture suitable for individual and group activities, are also helpful and can prevent harassment.
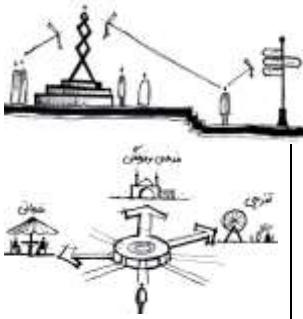
- Using signs and guides, proper navigation: people sometimes have difficulty in finding direction in many parks, especially those built on flat and vast areas. It is due to green materials and the geometric complexity of the paths. Getting lost is always accompanied by fear and insecurity, especially for women. Therefore, signs and symbols should be used to facilitate navigating in such parks.
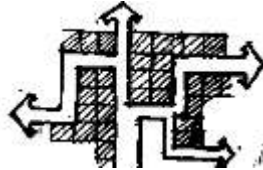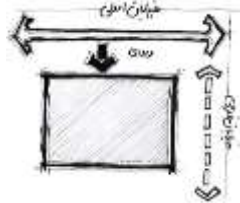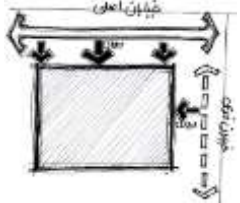
Finally, according to the interviews conducted, the study has provided criteria concerning each of the above factors. The criteria presented in the table below shows the appropriate and inappropriate patterns in the design.
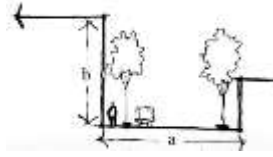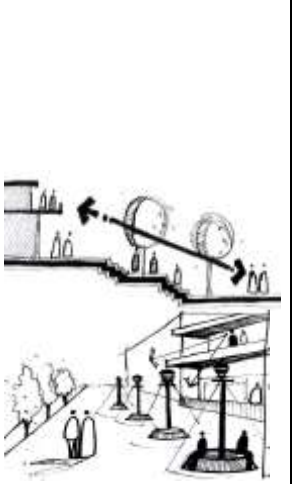
Indicators	Parameters	General criteria	Improper pattern	Proper pattern
physical	Dense green materials	- Reduce the use of vegetation along the sidewalks so that it is not possible to hide behind it; - Do not use dense vegetation in different parts of the park;		
	Variety of space	- Do not use complex geometries on a large scale; - Reduce the difference in height in the passages;		

	Proper safe sidewalks	- Increase accessibility by designing sidewalks in different parts of the park; - Minimize abandoned spaces with no designing in the park; - Do not design large grass surfaces that are difficult to access; - Do not design routes lacking connection with other routes;		
	Territorial separation	- Allocate special spaces to women in public parks; - Allocate special spaces for family use; - Define territories using gates, hedges, fences, etc.;		

	Guides, elements and symbols	- Use signs or guiding elements in different parts of the park; - Use elements that can be kept in people's minds as a sign; - Use legible signs and symbols in public spaces; - Place sufficient and appropriate marks at the entrances of the park; - Mark communication routes in public space;		
	Proper arrangement of furniture	- Properly place urban furniture in public spaces to increase visibility in space; - Use a variety of furniture for individual and group use;		

Functional	Round-the-clock services	- Use variety of activities; - Distribute activities in different parts of the park; Decentralize design - Provide round-the-clock services		
	Way finding	- Use legible and recognizable paths in the design; - Do not use fences around the park to facilitate people leaving the park when they feel threatened;		
	Proper location of entrances	- Locate the entrances of the park in the vicinity of busy areas		

Social	Reputation	-Prevent creating hangouts for groups (especially addicts) by allocating activities to spaces; - Prevent creating cozy and secluded corners without visibility;		
	Gender domination	- Design spaces suitable for use by different genders simultaneously; - Allocate spaces for women in the park;		
	Control and monitoring	- Set up police stations in parks; - Supervise and control the park by the guard; - Deploy activities in areas that are at a higher level; - Install CCTV cameras, especially in secluded areas of the park;		

Perceptual- visual	Visual communication	- Increase the visibility of the space; - Do not create cozy corners without visibility; - Reduce the use of artificial hills in flat spaces; - Avoid designing inappropriate horizontal surface differences in public spaces;		
	Design Simplicity	- Coordinate sort and color of materials in different parts of the park; - Use common forms in designing different parts of the park;		
	Night lighting security	- Use light towers to illuminate large areas of the park; - Use central lights, especially under tall trees;		

	Physical security	- Prevent the entry of motor vehicles such as motorcycles and cars into the park; - Put up fence around fountains and ponds and height differences;	

Table 8. Design Criteria Appropriate to the Indicators Affecting Women's Sense of Security/Insecurity in Urban Parks

Conclusion

Urban public spaces provide suitable spots for social interactions to meet social demands. Women, a half of the urban population, feel fear and insecurity in some urban public areas. Feeling insecurity prevents the tendency of society to attend urban public spaces. Urban parks are among spaces used to satisfy the leisure needs according to the lifestyle in urban communities. The feeling of fear and insecurity for women prevents them from attending such areas and ultimately has many emotional and psychological consequences.

This study was conducted in **Azadi Park**, the largest and most dynamic public park in the **Shiraz metropolis**, to examine the factors influencing women's sense of security in urban public spaces. The findings reveal that women's perception of safety is shaped by four key indicators: **physical, functional, social, and perceptual-visual** parameters. From a **physical perspective**, factors such as **reduced green material density, spatial diversity, well-maintained sidewalks, territorial separation, clear signage and symbols, and the strategic arrangement of park furniture** contribute significantly to enhancing women's sense of security.

In terms of **functional attributes**, elements like **round-the-clock services, well-positioned entrances, and diverse access routes** play a crucial role in fostering a secure environment. Regarding **social parameters**, **effective monitoring and control, the reputation of the space, and gender distribution across different areas of the park** are key determinants of perceived safety.

Lastly, **perceptual-visual factors** such as **visual connectivity, adequate nighttime lighting, spatial simplicity, and the presence of physical security measures** are essential in shaping women's sense of security or insecurity within the park. By addressing these critical indicators, urban planners and policymakers can create more inclusive and secure public spaces that promote social well-being and equitable access for all.

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