



Paper Type: Original Article

A Study on the Sense of Security in the Old and New Urban Fabric of Chelleh Khaneh Neighborhood, Rasht

Behzad Changizi^{1,*} 

¹ Department of Architecture, University of Guilan, Faculty of Architecture, Rasht, Iran; changizi@aihe.ac.ir.

Citation:

Received: 30 December 2024

Revised: 29 February 2025

Accepted: 01 April 2025

B., Changizi . (2025). A study on the sense of security in the old and new urban fabric of chelleh khaneh neighborhood, rasht. *Architectural dimensions and beyond*, 2(3), 230-241.


Abstract


Urban security is considered one of the key indicators of sustainable urban development, especially in neighborhoods with contrasting physical and social characteristics. This research aims to assess and compare the sense of security in the old and new urban fabric of Chelleh Khaneh Neighborhood in Rasht, based on the principles of Crime Prevention Through Environmental Design (CPTED). The objective of this study is to conduct a comparative analysis of the level of security within the physical environment of the Chelleh Khaneh neighborhood in Rasht. This applied research employs a mixed-methods approach (both quantitative and qualitative), including field observations and spatial analysis in both parts of the neighborhood. The comparative analysis uses CPTED indicators to evaluate the physical features that influence the sense of security. The research question is: How have the principles of CPTED manifested in the old and new fabric of Chelleh Khaneh, and how do these differences affect residents' perception of security? The findings show that, despite organic spatial patterns and limited natural surveillance, the old fabric has higher social cohesion and more informal surveillance. In contrast, the new fabric benefits from better physical design elements, such as lighting and access control, but the lack of a sense of belonging and social ties negatively impacts residents' security perceptions. Key CPTED indicators, such as natural surveillance and territorial reinforcement, have shown different performances in these two urban fabrics. The innovation of this study lies in the integrated evaluation of CPTED principles within two different morphological contexts in a single neighborhood, providing practical insights for urban designers and policymakers to enhance urban security in both traditional and modern urban fabrics.


Keywords: Comparative study, Security, Environmental factors, Chelleh Khaneh Neighborhood, Rasht.

1 | Introduction

Security has been one of humanity's most essential concerns since ancient times. With the emergence of collective human life, civilization, and social existence, the concept of security, particularly social security, became a significant and essential issue. One of the issues that has gained attention from urban planners and

 Corresponding Author: changizi@aihe.ac.ir

 <https://doi.org/10.48314/ad.b.v2i3.41>

 Licensee System Analytics. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0>).

city managers over recent years, due to various reasons such as population density and a decrease in face-to-face human interaction, is the security of citizens. The existence of security in urban environments is considered a fundamental requirement for the quality of life [1]. Since contemporary urban spaces are components for the occurrence of urban disorders and, consequently, insecurity, examining both qualitative and quantitative aspects of security in urban spaces is essential. The sense of security in urban spaces is one of the most critical indicators of space quality, and although this issue is a complex one with various social, economic, and cultural dimensions, the role and influence of environmental factors must not be overlooked in securing this need [2]. Urban spaces in large cities, while highly attractive and dazzling, are also filled with insecurity and fear. One of the main goals of urban management can be considered as improving the living and working conditions of residents in various social and economic groups, protecting citizens' rights, and encouraging sustainable economic and social development. Cities should be managed in a way that leaves no room for fear or feelings of insecurity among citizens [3].

Security is a psychological and social phenomenon. Undoubtedly, any disturbance in the feeling of security and the emergence of anxiety due to hazardous and worrisome situations in society increases the cost of social interactions and, on the other hand, disrupts social trust, leading to indifference and threatening social cohesion. Increasing security in cities, in addition to apparent benefits such as enhancing identity, vitality, efficiency, and aesthetic value, also ensures that people engage more effectively in a safe environment, boosting life, activity, investment, and business. Consequently, there will be more significant financial and economic growth. In contrast, insecure spaces repel people and investors [4].

The lack of security is increasingly recognized as one of the most fundamental social problems. Many policymakers and researchers in public services believe that the rise of insecurity and its destructive effects on social structures are among the major concerns of public policies. Insecurity disrupts the everyday vitality and health of life and imposes significant costs on society by creating obstacles to cultural growth and public participation. Creating safe communities enables the construction of secure and empowered neighborhoods for the welfare of their residents.

The physical environment of the city and neighborhood, as the main context for crime occurrence, can play a significant role in crime prevention. The theoretical approach of Crime Prevention Through Environmental Design (CPTED) aims to offer solutions for making the environment unsuitable for criminals. Increasing public surveillance, organizing public spaces, and managing defenseless areas are significant aspects of this approach. The main goal of this study is to compare the level of security in the physical environment of the Chelleh Khaneh neighborhood in Rasht [5].

In line with this research, the following questions are raised:

- Do the components of the new Chelleh Khaneh fabric increase its security compared to the old fabrics?
- Are the components of the new Chelleh Khaneh fabric influenced by or aligned with the old fabric?

2 | Literature Review

In old urban fabrics, physical and social structures have been shaped in such a way as to provide a sense of security for residents. However, over time, and with the development of cities, new urban fabrics may not possess this sense of security for various reasons. The Chelleh Khaneh neighborhood in Rasht, with both old and new fabrics side by side, provides an appropriate case for studying and comparing the sense of security in these two types of urban environments. In this section, we describe the essential factors that impact this research:

1.2 | Security

Security is a set of conditions that creates stability and peace of mind in a society, eliminating fear and anxiety among the public. The United Nations defines security as the absence of external threats, political or economic pressures, and the ability of countries to pursue their development freely. In Maslow's hierarchy of

needs, security is considered the second most important and fundamental need after basic physiological needs such as water and food [6].

Security, according to studies, can be analyzed at various levels, including public, social, functional, urban, spatial, and environmental security. Urban public spaces, as a physical manifestation of the public realm, are closely tied to security, as urban planning theories aim to balance social control and intimacy, security, and insecurity, the familiar and the unfamiliar, and similarities and differences. Therefore, cities are places of both fear and desire, threat and opportunity, which create both attraction and repulsion [7].

2.2| Security in Cities and Urban Spaces

The physical and social expansion of cities, coupled with their transformation into heterogeneous centers of population, social, and cultural diversity, has led to an increase in urban anomalies, especially in central areas, and exacerbated social and economic inequalities, which have created the conditions for urban decay and uncontrolled growth of urban problems [8]. This makes the role of security in urban life even more significant. Today, security is one of the leading indicators for measuring the quality of cities and urban spaces. Security and the sense of security are fundamental to citizens' satisfaction, well-being, and quality of life in the context of sustainable human development. An appropriate urban space should be able to ensure the security of various groups of users to a great extent. In fact, the success of an urban space today can be evaluated based on the number of men and women using the space and the diversity of people who interact with it, feeling secure and comfortable [9].

3| Previous Research

The growing presence of women in urban work and social activities necessitates attention to the location, design, and construction of urban spaces to accommodate the widespread presence of this group in public spaces. Research results show that surveillance, social, behavioral, physical, environmental, and accessibility indicators affect women's sense of security in the first district of Ahvaz. Among these, the surveillance indicator has the most significant impact on women's sense of security, followed by physical, social, accessibility, environmental, and behavioral indicators. The furniture indicator has the least impact.

Another study highlights that quality of life encompasses various criteria, one of the most important of which is the quality and physical security of the environment. Paying attention to these factors helps mitigate issues like the decline in vitality and liveliness and a lack of peace and comfort. Hence, addressing social, cultural, environmental, physical, and psychological indicators in both objective quantitative and subjective (qualitative) terms (*Table 1*) is crucial in urban planning to improve the quality of urban life. Results indicate that satisfaction with access to services positively and significantly affects the subjective quality of life, and increasing residents' satisfaction with the quality and security of the physical environment leads to a higher level of satisfaction with their overall quality of life.

Table 1. Objective and subjective variables of physical quality and security criteria [10].

Criterion	Subjective Variables	Objective Variables	Sources
Physical Quality and Security	- Access to facilities and aesthetic services	- Satisfaction with access to service facilities	Jacobs [11]
	- Access to housing facilities	- Satisfaction with access to housing	Rojas et al. [12]
	- Age of housing unit	amenities	Bratt [13]
	- Degree of wear and use of the building	- Sense of peace and stability in housing units	Royuela et al.
	- Quality of spaces	- Sense of peace due to the type of housing ownership	Peck [14]
	- Type of ownership	- Sense of insecurity due to physical insecurity in the area	Cozens and Love [15]
	- Size of housing unit		Das [16]
	- Compliance with building regulations		Diprose[17]
	- Compliance with urban planning laws		
	- Access to main urban roads		
	- Proximity to educational facilities		

Beyyan and [18] conducted a study on the factors influencing the sense of social security in cities. The results indicate that the social security status of citizens in Kerman city is in a favorable condition, with a significant relationship between the sense of social security in the city, watching television, listening to the radio, individuals' economic and social status, age, and gender.

Izadi emphasizes that urban design can enhance the sense of security in urban spaces, which in turn promotes the vitality and dynamism of the space. This can be observed through active public presence, fostering a culture of cooperation and interaction, reducing stress and anxiety, the presence of various age and gender groups, and the thriving of nightlife. The variables were categorized into seven factors explaining the sense of security, which include "Pedestrianization," "Aesthetics," "Social Interaction," "Direct Surveillance," "Environmental Comfort," and "Environmental Structure" [19].

The findings of an article titled "Study and Measurement of the Sense of Security in Different Urban Areas" showed that people generally agree on the selection of unsafe spaces throughout the city. The majority of people consider the lower-income neighborhoods, the outskirts of unfinished buildings, and dark, empty alleys as spaces with low security. This feeling of insecurity decreases in busy streets filled with crowds. People consider the effective presence of the police and law enforcement, cultural advancement, and the presence of well-designed spaces as the most critical factors in creating a sense of security.

Table 2. Security Feeling Indicators [20].

Component	Criterion	Features Examined
Qualitative	Spatial Form	Appearance and visual quality of the form (shape, color, order, and cleanliness that create a sense of security)
	Spatial Scale	Human-scale proportions; appropriate spatial-social density (not too high – not too low)
Performance	Sensory	Sensory comfort (no noise, pollution, unpleasant smells, etc.)
	Legibility	Clarity and legibility of space (transparency of private and public spaces, helping to identify ownership in the place)
	Surveillance and Control	Natural surveillance and presence of passive control systems (visual access to entrances and exits, commercial and service units, busy and open areas)
	Lighting	Lighting of public spaces, entrances, and walkways to provide appropriate visual visibility and legibility

Table 2. Continued.

Component	Criterion	Features Examined
Socio-Economic	Gender	Differences in perceived safety between men and women, behaviors, social attitudes, and gender-based lifestyles
	Household Size	Number of family members, number of children, and type of household relationships
Psychological	Income	Ability to purchase or rent housing
	Sense of Belonging	Interest and emotional attachment to the place and staying in it, increasing surveillance and control
	Experience	Mental interpretations based on experiences in the space (visual, auditory, spatial, physical)

The results showed that the sense of security among residents is at a moderate level, while their residential satisfaction is low. Furthermore, a significant positive relationship was found between the feeling of security and environmental factors (such as lighting, ventilation, and views) as well as between the sense of security and social factors related to residents' satisfaction in terms of neighborhood relationships. However, a negative and significant relationship was found in the case of management and maintenance. Overall, the results indicate a significant relationship between the sense of security and residential satisfaction in the residential complex.

In another study, "Evaluation of the Sense of Security of Citizens in New Cities," the results indicated a significant relationship between the sense of security and factors such as social capital, media performance, the role of law enforcement, and the social status of individuals. This article presents the sense of security from the perspectives of social, economic, value-based, political, national, and environmental security. It discusses its relationship with social capital, media performance, social and economic status, as well as physical and social characteristics [21].

In a paper titled "Study and Evaluation of the Sense of Social Security in the Jamaran and Fatemi Neighborhoods," the results indicated a higher level of security in the Jamaran neighborhood compared to the Fatemi neighborhood. The narrow, dark alleys, poorly planned spaces, and population density during the day were among the factors contributing to the lower security level in Fatemi. The findings showed that at night, when dark spaces are created, security is at its lowest, and residents feel more insecure in these areas, which was observed in both neighborhoods. Suggestions were made for increased security by law enforcement, the creation of appropriate infrastructure such as night lights, cooperation between neighborhood residents and relevant authorities to ensure security, and addressing the presence of addicts and beggars around parks and abandoned buildings [22].

4 | Research Methodology

1.4 | Crime Prevention Through Environmental Design (CPTED) Approach

Environmental criminology is the study of crime and criminality related to specific spatial locations and how behavior is influenced by location-based factors [23]. CPTED can be considered a targeted approach to efficiently and intelligently design environmental components using the built environment to reduce crimes. It effectively influences the enhancement of social capital, quality of life, citizen satisfaction, and ultimately, social welfare in communities. There is a consensus that the CPTED approach can be practical in two aspects: reducing actual crime in urban environments and increasing the sense of safety and spatial security within them.

Two Canadian researchers proposed the Safe Cities approach with an emphasis on crime management and prevention. This approach focuses on cooperation between governments and citizens, particularly marginalized and isolated groups, social prevention, and physical changes that impact urban security [24].

Other studies have shown that the physical environment is more important than the social environment in reducing crime opportunities because physical design elements can be modified through planning and design [25].

CPTED is defined as the proper design and effective use of the built environment, which can reduce fear, decrease crime, and improve the quality of life. The physical environment's form can prevent crime by blocking opportunities for crime and eliminating hidden spaces. In the CPTED approach, understanding the relationship between design and management in reducing crime and social misbehavior is of paramount importance [26].

Since the first generation of CPTED prioritizes natural methods, mechanical and organized methods such as security patrols, CCTV cameras, and advanced locks are not considered part of its principles. These methods fall under the situational crime prevention approach developed by Ronald Clarke [27].

Creating security using natural methods in the first generation of CPTED is based on four key principles.

Table 3. Criteria derived from the first-generation CPTED approach [15].

Approach	Period	Criteria
Zoning	Foundation (Early 1960s to Late 1980s)	First generation CPTED approach
Access control		
Environmental quality		
Natural surveillance		

The methodology of this research, in terms of its objective, is applied; from the perspective of approach and strategy, it is qualitative; and in terms of its nature, it is descriptive-analytical. The research process begins with data collection through documentary and field methods using observation tools and photography. For each of the indicators, 45 cases were randomly selected. Then, the information is organized, calculations are made, and analysis is performed, followed by conclusions. The studied indicators and the weighting method for each of them are provided in *Table 4*. According to a scale of 0 to 1, a value of 1 represents the ideal design in which the tendency to commit crimes is minimized. In other words, under these conditions, the physical environment of the living space is minimized to encourage criminal activity or, in other words, reaches zero.

Table 4. Weighting of indicators based on the 0-1 Scale.

Main Criteria	Sub-Criteria
Zoning	Weak = 0, Relative = 0.5, Suitable = 1
Access control	Weak = 0, Relative = 0.5, Suitable = 1
Environmental quality	Weak = 0, Relative = 0.5, Suitable = 1
Natural surveillance	Weak = 0, Relative = 0.5, Suitable = 1

2.4 | Study Area

The second district of the region consists of four neighborhoods: Chelleh Khaneh, Ziyabari, Park Shahr, and Pirsara.

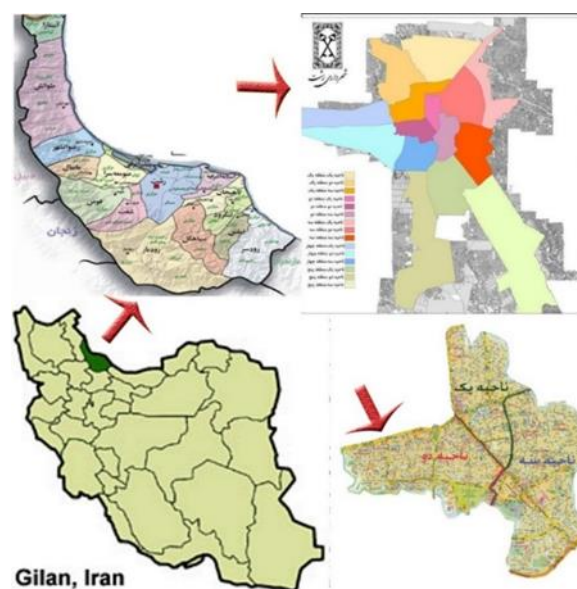


Fig. 1. Location of the Study Area.



Fig. 2. Area of Chelleh Khaneh Neighborhood, Rasht.

Boundaries of District 2, Area 2

- I. North: From Chamarsara Bridge to Shahid-e-Zahab Square.
- II. South: From Goharroud River, Tutunkaran Bridge to Razi Bridge.
- III. East: From Shahid-e-Zahab Square, Imam Khomeini Street, Hafez Boulevard to Parastar Square.
- IV. West: From Goharroud River, from Razi Bridge to Chamarsara Bridge.

The Chelleh Khaneh Neighborhood is one of the old neighborhoods of Rasht, with a history of about 100 years. The local dialect spoken by the people is predominantly Gilaki. The reason for naming this neighborhood is that, in ancient times, a group of dervishes used to stay in this area, spending forty days and nights praying and worshipping. They would light candles and make wishes, and this place became known as Chelleh Khaneh, or the house for performing "Cheleh," a term for a period of spiritual retreat.

The population density of this neighborhood is 33.167%. The historical values formed in this area date back to the Safavid, Pahlavi, and Qajar periods. Analyzing the urban development trends during these periods shows that the old, historical fabric is located in the central part of the city. The high density of historically valuable properties in the central area and the city's expansion during different historical periods have led to the creation of a special historical zone in the region, which follows specific construction regulations.

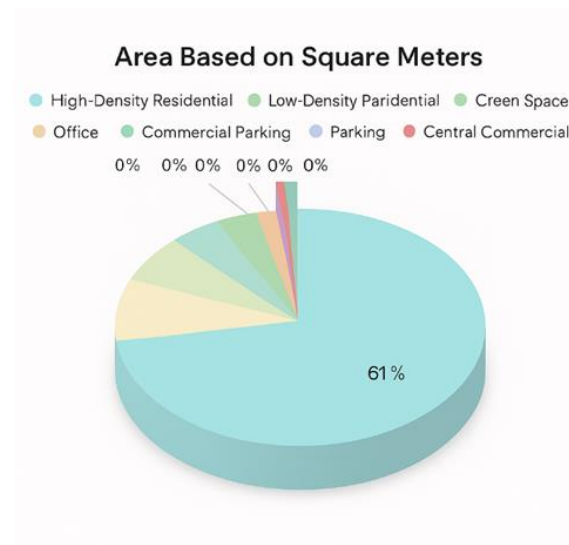


Fig. 3. Land use status of chelleh khaneh neighborhood based on the detailed plan.

5 | Research Findings

Table 5. Evaluation of the territory definition criterion.

Standard Deviation	Average	Weak = 0		Moderate = 0.5		Good = 1		Neighborhood	Neighborhood
		%	Count	%	Count	%	Count		Cheleh Khaneh, Rasht
1.03	0.33	46.66	21	40	18	13.33	6	Old Fabric	
2.37	0.77	0	0	46.66	21	53.33	24	New Fabric	

Table 6. Evaluation of access control criterion.

Standard Deviation	Average	Weak = 0		Moderate = 0.5		Good = 1		Neighborhood	Neighborhood
		%	Count	%	Count	%	Count		Cheleh Khaneh, Rasht
0.82	0.27	46.66	21	53.33	24	0	0	Old fabric	
2.58	0.83	0	0	33.33	15	66.66	30	New fabric	

Table 7. Environmental quality criteria assessment.

Standard Deviation	Average	Weak = 0		Moderate = 0.5		Good = 1		Neighborhood	Neighborhood
		%	Count	%	Count	%	Count		Cheleh Khaneh, Rasht
1.03	0.33	40	18	53.33	24	6.66	3	Old fabric	
2.58	0.83	0	0	33.33	15	66.66	30	New fabric	

Table 8. Evaluation of the natural surveillance criterion.

Standard Deviation	Average	Weak = 0		Moderate = 0.5		Good = 1		Neighborhood	Neighborhood
		%	Count	%	Count	%	Count		Cheleh Khaneh, Rasht
0.92	0.3	46.66	21	46.66	21	6.66	3	Old fabric	
2.27	0.73	0	0	53.33	24	46.66	21	New fabric	

Table 9. Differences and similarities between new and old fabric.

Main Criteria	Old Texture	New Texture
Zoning		
		
		
Access control		
		
		
Environmental quality		
		

1.5 | Territoriality

Humans attribute significance to space, form, and function through sociocultural relations and spatial organization, which in turn reshape these relationships. Therefore, the construction and design of urban spaces influence the process of social life and must be both physically and psychologically functional for citizens. Factors such as architectural harmony, legibility, boundary definition, and clarity in land-use differentiation are effective in achieving this goal. In both the old and new fabrics of the Chelleh Khaneh neighborhood, architectural harmony and clear land-use separation are evident and aligned with one another.

2.5 | Access Control

The quality and coverage of streets are among the key factors in enhancing spatial security. Pedestrian paths not only serve a connective and access role but also provide a safe and comfortable space for social interactions, observation, and more. Proper integration of pedestrian and vehicular movement, traffic calming, and clearly defined entrances (including shared entrances) all contribute to the quality of pathways and accessibility. In the old fabric of Chelleh Khaneh, pedestrian-vehicle integration and traffic calming are weakly implemented, whereas in the new fabric, there is relative improvement in street quality and access.

3.5 | Environmental Quality

One of the most critical indicators of behavioral pollution and crime-prone conditions is poor lighting. In the old fabric of Chelleh Khaneh, insufficient lighting is noticeable, while the new fabric shows relative improvement. The quality of buildings and the types of materials used are also influential factors in environmental quality; these are low in the old fabric and significantly improved in the new fabric.

4.5 | Natural Surveillance

Environmental oversight and creating a sense of place are essential for comfort and security. The presence of blind spots blocked windows, and solid walls without openings are all factors that reduce natural surveillance. In the old fabric, blind spots and obstructed openings are visible, while the new fabric is better organized with more environmental visibility. However, visual access to secluded spaces such as parking areas remains limited in both fabrics.

6 | Conclusion

Observations and statistical findings illustrate the security perception status of the Chelleh Khaneh neighborhood. To achieve the desired condition, the studied indicators are categorized on a three-level scale from 0 to 1:

- I. Level 1 represents a suitable condition.
- II. Level 0.5 represents a relative condition.
- III. Level 0 indicates a weak condition.

On average, in terms of the mentioned indicators, the percentage distribution in the old and new fabrics is as follows: (The continuation would list the comparison, which appears to be missing from your input.).

Table 10. Evaluation of chelleh khaneh neighborhood (Rasht) by indicator type.

Natural Surveillance	Environmental Quality	Access Control	Territoriality	Neighborhood	Neighborhood Chelleh Khaneh, Rasht
0.3	0.33	0.27	0.33	Old fabric	
0.73	0.83	0.83	0.77	New fabric	

Table 11. Standard deviation of chelleh khaneh neighborhood (Rasht) by indicator type.

Neighborhood	Natural Surveillance	Environmental Quality	Access Control	Territoriality	Neighborhood Cheleh
0.92	1.03	0.82	1.03	Old fabric	Khaneh, Rasht
2.27	2.58	2.58	2.37	New fabric	

According to the analysis of field studies, the newly developed area—which was designed to improve and is influenced by the old urban fabric—demonstrates a higher level of desirability and greater security. Under such conditions, the tendency to commit crimes in the new development is lower.

Funding

This research was conducted without any external financial support from public, private, or non-profit funding agencies.

Data Availability

All data generated or analyzed during this study are included in the published article. Further details can be provided by the corresponding author upon reasonable request.

Conflicts of Interest

The author declares no conflict of interest related to the content or publication of this article.

References

- [1] Takano, T., Morita, H., Nakamura, S., Togawa, T., Kachi, N., Kato, H., & Hayashi, Y. (2023). Evaluating the quality of life for sustainable urban development. *Cities*, 142, 104561. <https://doi.org/10.1016/j.cities.2023.104561>
- [2] Salehi, E. (2012). The impacts of environmental factors in crime occurrence and safety of Tehran's citizens. *Crime, law and social change*, 58(4), 457–467. <https://doi.org/10.1007/s10611-012-9392-z>
- [3] Shach-Pinsly, D. (2019). Measuring security in the built environment: Evaluating urban vulnerability in a human-scale urban form. *Landscape and urban planning*, 191, 103412. <https://doi.org/10.1016/j.landurbplan.2018.08.022>
- [4] Wang, J., Long, R., Chen, H., & Li, Q. (2019). Measuring the psychological security of urban residents: Construction and validation of a new scale. *Frontiers in psychology*, 10, 2423. <https://doi.org/10.3389/fpsyg.2019.02423>
- [5] Marzbali, M. H., Abdullah, A., Abd Razak, N., & Tilaki, M. J. M. (2011). A review of the effectiveness of crime prevention by design approaches towards sustainable development. *Journal of sustainable development*, 4(1), 160. <https://doi.org/10.5539/jsd.v4n1p160>
- [6] Sejodi, M., Hataminejad, H., & Ghorbani, R. (2021). A Survey on the Environmental Security with Emphasis on CPTED Approach (Case Study: The Farhang Neighborhood of Rasht). *Geographical studies of coastal areas journal*, 2(2), 31–60. **(In Persian)**. <https://doi.org/10.22124/gscj.2021.19653.1080>
- [7] Istrate, A. L., Mitchell, A., Russell, P., & Murphy, S. (2024). Comparative analyses of publicness in urban squares within a diversifying metropolis. *Urban design international*, 1–19. <https://doi.org/10.1057/s41289-024-00256-1>
- [8] Chen, Y., Ge, Y., Yang, G., Wu, Z., Du, Y., Mao, F., ... others. (2022). Inequalities of urban green space area and ecosystem services along urban center-edge gradients. *Landscape and urban planning*, 217, 104266. <https://doi.org/10.1016/j.landurbplan.2021.104266>
- [9] Yu, D., Fang, C., Xue, D., & Yin, J. (2014). Assessing urban public safety via indicator-based evaluating method: A systemic view of Shanghai. *Social indicators research*, 117(1), 89–104. <https://doi.org/10.1007/s11205-013-0366-z>

- [10] HasaniPour, H., Kazemi, A., & Saghafi Asl, A. (2024). Environmental quality indicators of urban open spaces in bagherabad neighborhood of Rasht, Iran. *Geographical research*, 39(4), 419–431. **(In Persian)**.
https://georesearch.ir/browse.php?a_id=1666&sid=1&slc_lang=en&html=1
- [11] Jacob, J. (1961). The death and life of great American. *Cities. new york: vintage books*.
<https://www.bol.com/nl/nl/f/the-death-and-life-of-great-american-cities/30162225/>
- [12] Rojas, E. (2015, March). Housing policies, quality of housing and urban development lessons from the Latin American experience 1960–2010. In *World bank conference on land and poverty, washington, DC* (pp. 23-27).
https://www.academia.edu/download/37741433/Rojas_Submision_737.pdf
- [13] Bratt, R. G. (2002). Housing and family well-being. *Housing studies*, 17(1), 13–26.
<https://doi.org/10.1080/02673030120105857>
- [14] Peck, C., & Kay Stewart, K. (1985). Satisfaction with housing and quality of life. *Home economics research journal*, 13(4), 363–372. <https://doi.org/10.1177/1077727X8501300403>
- [15] Cozens, P., & Love, T. (2015). A review and current status of crime prevention through environmental design (CPTED). *Journal of planning literature*, 30(4), 393–412. <https://doi.org/10.1177/0885412215595440>
- [16] Das, D. (2008). Urban quality of life: A case study of Guwahati. *Social indicators research*, 88(2), 297–310.
<https://doi.org/10.1007/s11205-007-9191-6>
- [17] Diprose, R. (2007). Physical safety and security: A proposal for internationally comparable indicators of violence. *Oxford development studies*, 35(4), 431–458. <https://doi.org/10.1080/13600810701701913>
- [18] Shapour, B., Ameneh, F., & others. (2013). Examining the factors affecting the sense of social security in cities (Case study: Kerman city). *Urban Sociological Studies (Urban Studies)*, 3(6), 103-122. **(In Persian)**.
<https://www.sid.ir/paper/210331/fa>
- [19] Izadi, M. S, & Haqi, M. R. (2015). Improving the feeling of security in public spaces by using urban design. *Case study: imam square in hamadan*, 2(2), 5-12. **(In Persian)**.
https://www.sid.ir/fa/VEWSSID/J_pdf/38513940201.pdf
- [20] Nazmfar, H., Alavi, S., & Eshghi, A. (2018). Spatial analysis of security in parks of Tehran. *Geographical urban planning research (gupr)*, 6(3), 491–510. <https://doi.org/10.22059/jurbangeo.2018.246430.822>
- [21] Ehsani Fard, A. A., Shoaee, H., & Maleki Shoja, K. (2013). Evaluating the level of citizens' sense of security in new cities, case study: the new city of Eshtehard. *Urban and rural management*, 11(31), 317-334. **(In Persian)**. <https://www.sid.ir/paper/92085/fa>
- [22] Rezavian M. T., & Aghaei, P. (2014). Investigating and evaluating the feeling of social security in a case study neighborhood: (Comparative study of Jamaran and Fatemi neighborhoods). *Zagros landscape geographic quarterly*, 6(20), 43-57. **(In Persian)**.
https://www.sid.ir/paper/175696/fa?utm_source=chatgpt.com
- [23] Cozens, P. M. (2011). Urban planning and environmental criminology: Towards a new perspective for safer cities. *Planning practice and research*, 26(4), 481–508. <https://doi.org/10.1080/02697459.2011.582357>
- [24] Thompson, S. K., & Gartner, R. (2007). Effective crime prevention in Toronto, Canada. *Enhancing urban safety and security: global report on human settlements 2007*.
<http://staging.unhabitat.org/downloads/docs/GRHS.2007.CaseStudy.Crime.Toronto.pdf>
- [25] Abdullah, A., Abd Razak, N., Salleh, M. N. M., & Sakip, S. R. M. (2012). Validating crime prevention through environmental design using structural equation model. *Procedia-social and behavioral sciences*, 36, 591–601. <https://doi.org/10.1016/j.sbspro.2012.03.065>
- [26] Crowe, T. D. (2000). Crime prevention through environmental design. *National crime prevention institute*.
https://popcenter.asu.edu/sites/default/files/Responses/closing_streets/PDFs/Crowe_Zahm_1994.pdf
- [27] Saville, G., & Mihinjac, M. (2022). Third-generation CPTED—Integrating crime prevention and neighbourhood liveability. In *Urban crime prevention: multi-disciplinary approaches* (pp. 27–54). Springer.
https://doi.org/10.1007/978-3-031-15108-8_2