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Investigating the Role of Environmental Comfort on Citizens' Behavior in an Urban Street: A Case Study of Khosravi Street, Mashhad

Farnoosh Vazin[1]

1. Department of Urban Planning, Faculty of Architecture and Urban Planning, Mashhad Branch, Islamic Azad University, Mashhad, Iran

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ABSTRACT

Environmental comfort is one of the qualities of urban spaces that its existence enhances the efficiency and level of satisfaction of citizens and users of a space. This satisfaction and interaction in the urban space causes individual and collective behaviors of citizens and encourages them to relate with the urban space and social relations. Therefore, in this regard, the present study aimed to investigate the role of environmental comfort on the behavior of citizens in Khosravi Street (between Khosravi intersection and Dialmeh intersection) using a quantitative analysis method by a questionnaire (138 people), and for this purpose, the validation of the research was assessed using Cronbach's alpha tests and the relationship between index and research criteria was analyzed using the confirmatory factor analysis test; the criteria were ranked using the Friedman test and the significance of the research sub-criteria was assessed using the conceptual modeling. The result of the research indicates that by giving importance to the height changes in the index buildings in the first place and giving importance to the opening in the direction of temperature changes and finally paying attention to the stoic forms and defining the spatial territory and paying attention to the soft spaces in the direction of environmental comfort, it becomes possible to reach to the physical dimension, and by a variety of colors and forms in urban furniture and creating attractive buildings to the perceptual and visual dimensions, and finally by drawing activities to the outside space and applying lighting and 24-hour applications to the safety, as well as improving the functional and activity dimensions of the environmental comfort in Khosravi Street in order to change the environmental behaviors of citizens

***Keywords**: Environmental Comfort, Citizens' Behavior, Citizens' Satisfaction, Khosravi Street*

1. INTRODUCTION

Today, urban public spaces are a basic necessity in urban development programs, which indicates the importance of these spaces in strengthening the socio-cultural aspect of the city. It must be acknowledged that the appearance of the city, which is one of the general problems of contemporary cities, has upset the balance of the bilateral relationship between man and urban space.

Modern urban life is a producer of mental illnesses caused by mental and environmental pollution. On the other hand, the lack of giving importance to the necessary qualities of an urban space has led to a decline in the level of presence, activity and, consequently, the behavior of citizens. Behaviors in public spaces, including passages, are very much related to the environmental comfort of citizens in that space.

*Corresponding author:
farvazin@gmail.com

Therefore, it is expected that in the appearance of urban streets as the most popular public areas, the dimensions of environmental comfort will be considered in order to promote and improve citizenship behaviors and activities. Table 1 represented a brief background of researchers and topics in the field of environmental comfort and urban behavior.

Table 1. Literature Review

Theorist	Year	Type of the work	Title of the work	Type / nature / purpose	Data collection method
Seyed Bagher Hosseini, Razieh Rezazadeh	2009	Paper	Environmental sustainability (environmental comfort) in open urban spaces	Quantitative and qualitative / descriptive-analytical / applied	Library studies and questionnaires
Rahmatolah Monshizadeh & Aghil Ojagh	2012	Paper	Thermal comfort and the effect of building height on the microclimate of urban spaces	Quantitative and qualitative / descriptive-analytical / applied	Cognitive maps and documentary studies and questionnaires
Hyungsuk Choo	2009	Paper	The influence of the resident's identification with a tourist	Quantitative and qualitative / descriptive-analytical / applied	Cognitive maps and documentary studies
Robert D. Brown	2010	Book	Design with Microclimate	Qualitative / descriptive / applied	Library and documentary studies
Jennifer K. Vanos	2014	Paper	Children's health and vulnerability in outdoor microclimates: A comprehensive review	Quantitative and qualitative / descriptive-analytical / applied	Questionnaire and documentary studies
Marjolein Pijpers & Van Esch	2015	Book	Designing the urban Microclimate	Qualitative / descriptive / applied	Library and documentary studies

2. Literature Review

2. 1 The importance of the Street as a Behavioral Territory in the Occurrence of Various Activities

Behavioral territory is a small social unit that is obtained from the sustainable integration of an activity and a place in such a way that in a regular process, it can fulfill the necessary functions of that behavioral environment. Barker believes that a behavioral territory is a fixed set of activities and places in which a repetitive activity or a fixed pattern of behavior occurs and has a specific design of the environment, and establishes a proper relationship between repetitive activity and the environment in a period done at a certain time. Therefore, the streets will create a mental perspective in people due to their objective perspective, how they relate to each other, the clarity and legibility of their appearance, and the equipment and graphic signs in them. According to Jan Gehl, people's activities and behaviors in public spaces can be classified into three groups, each of which requires different characteristics in the physical environment; essential, selective and social activities and behaviors. In general, activities include three different levels: The first category includes essential activities and behaviors that are more or less mandatory and occur under any circumstances, and their occurrence has the least impact on the environment. Activities such as going to school or work, shopping and other public and everyday activities place into this category. The second category of activities that are carried out in urban spaces are selective activities that take place only when there is a desire to do them and the time and place also provide a favorable environment. Activities such as walking, sitting and relaxing in attractive places place into this category. The third category is social activities, which include a wide range of interpersonal

relationships, depending on the characteristics of the urban space. The special conditions are the spaces for standing, sitting, eating, playing, etc., which affect these activities. When the environment or the street is of low quality, only the necessary activities are performed; however, in high-quality environments or streets, not only the necessary activities are performed, but also the tendency to spend more time for these activities increases due to better conditions [1].

2.2 Behavior and Types of Behavior in the Street

Now, after understanding the importance of the quality of a street as a behavioral territory in this research, it is necessary to describe the behavior and its types in a space. There are different types of human behavior according to different credentials, some of which we will mention in this section: Responsive behavior (reflective), active behavior (active) and hidden behavior [2]. Behavior has the following characteristics:

Visibility of behavior: Each behavior is manifested in a specific way through which it becomes visible. In fact, behavior is the objective manifestation of activities and what is visible. Behavioral variability: Behaviors can be transformed very quickly and easily and without definite boundaries, and this is more noticeable in the case of behaviors related to an activity. Transition through the human psychological space: The human psychological space has different layers such as knowledge, experience, norm, value, etc., and any work that accepts the environment passes through these layers. Activity also has a universal nature that is transformed to behavior through the psychological space [3].

Behavior is classified into two groups, individual and group behaviors, in terms of appearing individually, sometimes referred to as personal habits, or appearing as a collective norm. Individual Behavior: A set of beliefs, opinions, attitudes, actions, movements, and responses that each person gives to internal and external situations and stimuli according to specific mental and environmental conditions. Group Behavior: Behavior is a common way of acting and living. In psychology, behavior is defined as an individual's reaction (whether in normal life or in specific social situations). Collective behavior is the unstructured, spontaneous, emotional, and unpredictable patterns of behavior of people who follow collective behavior, reacting to a particular stimulus that may be another person or a particular event [4].

2.3 Individual Behavior and Spatial Behavior

Individual behaviors include those behaviors that are performed alone. The important thing about these behaviors is that them are done individually, which may occur in private or in public spaces. In other words, individual behavior can even be done in public. Spatial behaviors include behaviors that occur in a place and are influenced by the environment. In fact, in the study of spatial behaviors, not only the behavior between humans, and the behavior between humans and the environment, but also the interactions between humans and the environment are considered. How we use the physical environment around us in establishing social relationships in the field of studying human social behavior in relation to the physical environment is examined [3].

2.4 Social and Non-spatial Behavior

Social behavior is the behavior that requires communication between two or more people, i.e., it can be done with at least two people, such as talking, group games, etc. These types of behaviors are not only done with the activity of several people, but also in which people are influenced by each other. Non-spatial behaviors are those behaviors that occur in communication between humans and are examined regardless of spatial dimension and surrounding conditions [5]. Figure 1 shows the types of behavior.

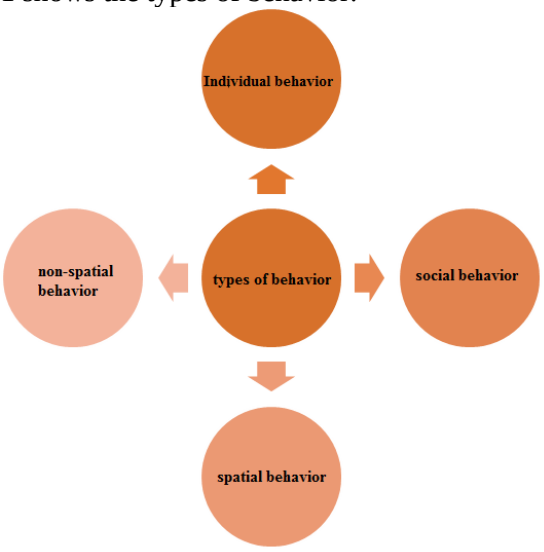

Figure 1. Types of Street Behavior

2.5 Influence of Behavioral Patterns on the Environmental Comfort

Bentley also believes that the difference in behavioral patterns of human is largely attributed to the impact of climate conditions .The feeling of comfort in the human environment is undoubtedly effective on the quality of their behavior and activities; therefore, paying attention to the logic of comfort in designing different urban spaces has a great impact on the health of their body and soul. The highest degree of flexibility of the interior spaces of the building is provided when it is possible to naturally adjust its environmental conditions in terms of ventilation and light. On the other hand, the range of activities and the range of its flexibility in an outdoor place depends to some extent on its micro-climatic conditions, especially the position of sunlight and wind speed [6]. Robert Brown also believes that humans tend to spend their time outside the home, walking, interacting with nature, chatting with friends, visiting shops, sitting with a cappuccino in an open cafe. Green space architects and urban designers are trying to design places that encourage such activities, places where people can go and love and spend their time . At the same time, designers often focus on issues such as physical activity, functionality, and combinations. All of these are certainly important, but these plans are doomed to failure without proper connection to the hidden dimension and the main ideal in the vision. Humans do not use that space as long as they do not have thermal and environmental comfort. It should also be noted that very few people pay attention to the importance of the effect of design on the sun, wind, humidity and temperature of a space [7].

2.6 Environmental Comfort and Its Importance in Urban Spaces

Environmental comfort is one of the most important and basic components of man-made environments, because "for living, the city is a big house, and just as a house must have the qualities and benefits to make living desirable and comfortable, the city must also have qualities and features to provide comfort, convenience and security." Also, the city, like home, should have a warm, intimate and pleasant environment in order to provide the possibility of a desirable life. Urban design determines the quality of urban life that is related to physical and climatic environments. Also, environmental comfort is the feeling of satisfaction and comfort resulting from the coordination of physiological, psychological and physical aspects of human beings and their environment, which includes a wide range of conditions of thermal, acoustic, visual, olfactory and air quality to beauty [8]. Each of these environmental factors affect the senses through variables such as cold, heat, sound and light, and it is the response to environmental stimuli that determines the amount of comfort on a case-by-case and general basis. In fact, environmental conditions determine the initial value of comfort indicators. Findings of environmental comfort studies show that although the factors affecting comfort do not have the same weight, but most of them emphasize the importance of thermal conditions as the most influential issue on space satisfaction and the most important criterion of general comfort [9] and have assumed the calculation of thermal comfort to precede audio and visual comfort, to the extent that in some studies [8], outdoor comfort means thermal comfort.

2.7 The Effect of Environmental Comfort on the Occurrence of Citizenship Behaviours

Comfort, application and meaning (cognition and perception) are the three perspectives of people whose environmental relationship is presented here as behavior. Based on the need for recreation and leisure, people are often directly exposed to different climates to see the outer urban space. The micro-climate that people experience in the streets and squares is affected more or less by the local climate. Special weather conditions may cause other effects and emotions. For example, strong winds in a square space may increase feelings of homesickness or other social feelings such as homelessness. The range of climate change may vary during sunny and windy days. But during stagnant and gray days when temperatures are moderate, conditions are relatively less important. The interesting thing is that the memory of the place that we often fairly experience is not the average of the climate. In fact, urban spaces become climatic spaces in the mind. Places evoke certain states and that microclimates may be an important generator in this process [10].

Therefore, the issue of environmental satisfaction and evaluation is considered from both human and environmental aspects. Satisfaction is measured based on the evaluation of specific physical

indicators such as temperature, vision, noise, location of the room in the building, etc. Therefore, having environmental comfort and paying attention to it can be effective on the level of satisfaction and presence in space, and also behaviors are largely affected by the environmental comfort in urban spaces and follow it. The mental model of the relationship between man and the environment shows that there is a bilateral relationship between the characteristics of the urban environment on the one hand and the human perception, cognition, evaluation and behavior on the other hand [1].

2.8 The Importance of Urban Street Landscape on Environmental Comfort and Citizenship Behaviour

Therefore, it must be acknowledged that due to the reduction of the efficiency of spaces by the qualities of urban spaces, including environmental comfort and lack of attention to them, collective and individual behaviors and the range of activities and interactions are diminished and the appearance of an urban space that could have caused attractiveness and presence and invitation to various behaviors is leaving its place. Therefore, the study of urban landscape design in a way that promotes environmental comfort and this environmental comfort promotes citizenship behaviors and social activities, is considered vital. Finding environmental comfort measures that affect the behavior of citizens can also help solve this problem and eliminate it. According to all the mentioned principles, Table 2 is a summary of measurable criteria and sub-criteria and landscape features of urban streets, which is based on the importance of the role of environmental comfort in the behavior of citizens. This table is taken from extensive studies of texts, books and articles on the subject of research, which is a basic framework for analyzing the subject of research in Khosravi Street (case study).

Table 2. Measurable Criteria and Sub-criteria Based on the Importance of the Role of Environmental Comfort in the Behavior of Citizens

Criteria	Sub-criteria	Indicators to reach the sub-criterion
Improving the physical dimension of the landscape by relying on the role of environmental comfort in people's behavior	Pay attention to the shape of the bodies	-Creating canopies of at least 2 to 5 meters on the street wall - Roofing parts of the sidewalk for environmental comfort all year round -Creating closed and enclosed space openings in the main row for temperature changes throughout the year - Using porch-like forms to inject a sense of space - Creating spatial contrast in the order axis -Relating the applications on both sides of the axis and enhancing visibility silhouettes - Variety of colors in the body, especially in the first floors
	Pay attention to the street floor	- Separation of pedestrian and passenger spaces to inject security -Proper flooring - Using soft spaces to enhance environmental comfort and create new behavior -Creating level differences to reinforce individual behaviors
	Pay attention to the signs	- Placing symbolic elements in areas of concentration and activity centers along the axis -Changing in the height of index parts and buildings along the axis -Placing the key elements in the backward and forward of the building
Improving the perceptual and visual dimension of the landscape by relying on the role of environmental comfort in people's behavior	Pay attention to beauty	- Creating attractive buildings in row -Use of color and form variety in urban furniture
	Emphasis on diversity	- Variety of urban furniture and spatial arrangement
	Increase the sensory richness of the street	- Using fountains in rows and backwards -Harmony of the street with the style and historical form of the past -Coordination of bodies in accordance with Islamic culture

Criteria	Sub-criteria	Indicators to reach the sub-criterion
Improving the functional and activity dimension of the landscape by relying on the role of environmental comfort in people's behavior	Presence and spatial efficiency	-Creating essential activities, selective activities and social activities - Dragging activities from inside of the land use to the outside space
	Emphasis on security	- Creating safety for people in the space by lighting and other services - Creating 24-hour land uses
	Emphasis on leisure and comfort	- Creating openings equipped with furniture and green elements in order to stimulate behaviors based on environmental comfort

3. Introducing a Case Sample

According to the above explanations, it should be acknowledged that neighborhoods and streets in the city of Mashhad are the main structure and identity of the city; the distance of the urban landscape of the passages and neighborhoods from the scope of environmental peace and comfort has gradually caused their inefficiency and degradation of their identity. This goes so far that citizens do not have the desire to attend and use the spaces, do not express their collective and individual behaviors and ultimately do not show interactions. In this regard, it seems that Khosravi Street in Mashhad in particular has undergone many changes, to the extent that it has gradually become a street like other streets in the city. This street is located in Samen area (13th district of Mashhad municipality). The existence of the historical and tourism pillars of this row, which has an identity, has doubled its values. Pilgrims, passers-by, travelers and visitors need to attend and travel as different user groups due to the commercial role of this axis. However, the lack of attention to the qualities leading to environmental comfort in this axis has caused the degradation of the urban landscape and, consequently, the reduction of the level of use of regular spaces during different seasons and conditions. Therefore, the main issue of the present study is to analyze the affecting factors of environmental comfort on the behavior of citizens to improve the urban landscape on this street. Figure 2 shows the location of Khosravi Street (between Khosravi and Dialmeh intersections) in the city and region.

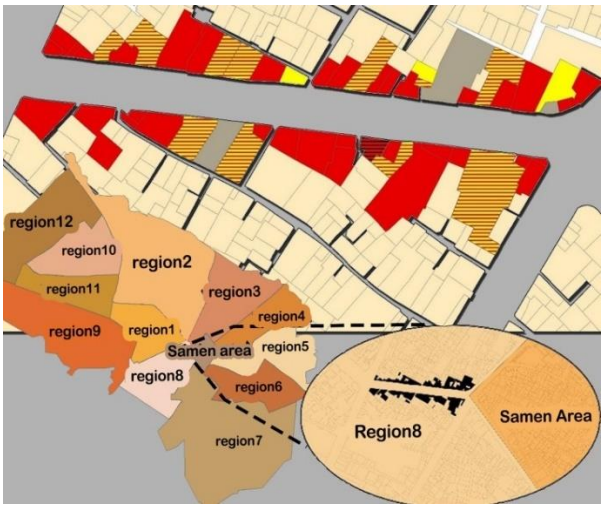

Figure 2. Location of the Study Area

4. Case Sample Analysis

Using the Kolmogorov-Smirnov test, the normality of the research variables is investigated; in this regard, the likelihood ratio method in structural equations is used.

In this study, the significance level of the test in all variables is higher than 0.05, and the claim of normality of the research variables has been accepted. Checking the reliability of the questionnaire or reliability is one of the technical features of the measurement tool. This concept deals with the extent to which measuring instruments produce the same results under the same conditions. The reliability coefficient range is from zero to one. The more this coefficient tends to go to one, the more the questionnaire is reliable. In this study Cronbach's alpha method was used to determine the reliability of the test. This method is used to calculate the internal consistency of a measuring instrument that measures various properties. If the alpha value is more than 0.7, it indicates good reliability, and if it is between 0.5 and 0.7, it indicates moderate reliability. In the present study, Cronbach's alpha is greater than 0.7 and the reliability of the questionnaire can be confirmed. The results of this reliability are presented in Table 3.

Table 3. Questionnaire Reliability Results

Criteria and sub-criteria of research	Number of questions	Cronbach's alpha
Improving the physical dimension of the landscape by relying on the role of environmental comfort in people's behavior	10	0.942
Paying attention to the shape of the bodies	5	0.891
Paying attention to the street floor	3	0.853
Paying attention to the signs	2	0.738
Improving the perceptual and visual dimension of the landscape by relying on the role of environmental comfort in people's behavior	6	0.859
Paying attention to beauty	2	0.982
Emphasis on diversity	1	---
Increasing the sensory richness of the street	3	0.724
Improving the functional and activity dimension of the landscape by relying on the role of environmental comfort in people's behavior	5	0.773
Presence and spatial efficiency	2	0.749
Emphasis on security	2	0.853
Emphasis on leisure and comfort	1	---
The whole questionnaire	21	0.963

In order to understand the relationships between landscape criteria and sub-criteria based on the role of environmental comfort in people's behavior, the confirmatory factor analysis test based on the structural equation model has been used with LISREL software. As shown in Table 3, all criteria and sub-criteria of the study were evaluated for 138 citizens of Khosravi Street. Figures 3 and 4 show the values of t-statistic and factor loads. Where: x1: Improving the physical dimension of the landscape by relying on the role of environmental comfort in people's behavior, x2: Improving the perceptual and visual dimension of the landscape by relying on the role of environmental comfort in people's behavior, x3: Improving the functional and activity dimension of the landscape by relying on the role environmental comfort in people's behavior.

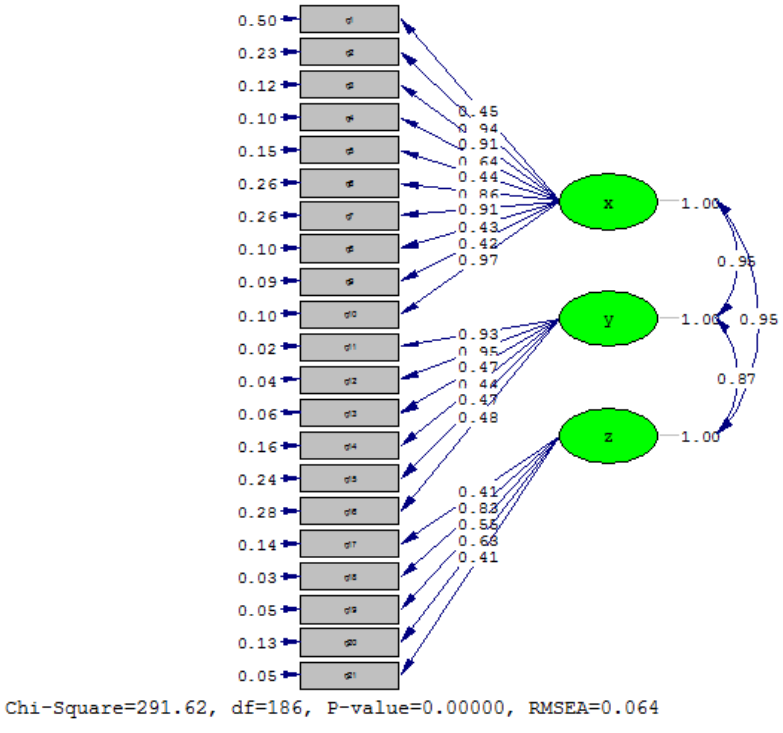

Figure 3. Diagram of Model Factor Coefficients

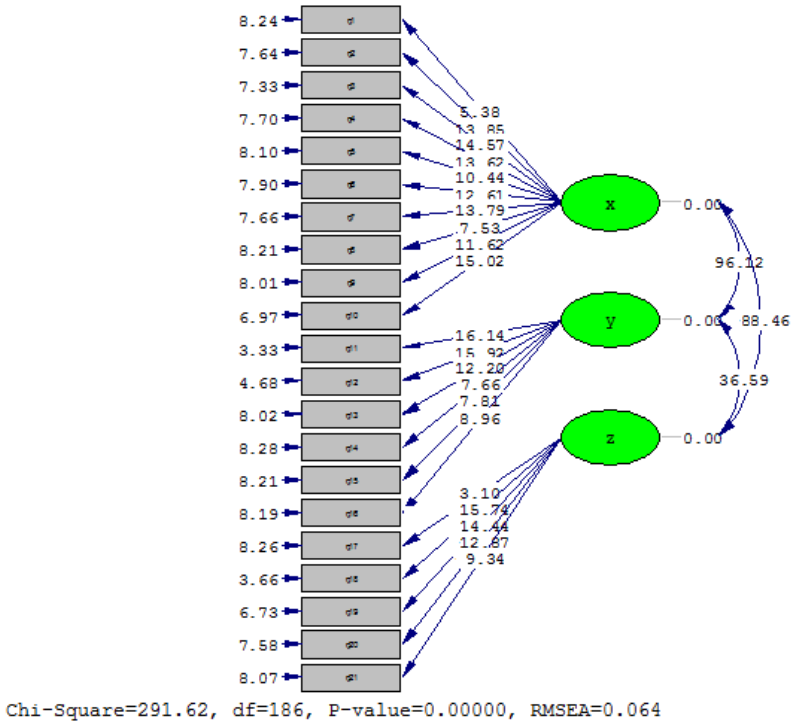

Figure 4. Diagram of Model T-statistic Values

According to Table 4, the results show that the improvement of the physical dimension by relying on the importance of environmental comfort on the behavior of people on Khosravi Street, focuses on the importance of height changes in index buildings in the first place and the importance of openness to temperature changes and finally attention to the stoic forms and the definition of the spatial territory and the importance of the soft spaces in the direction of environmental comfort. Therefore, by creating and defining these factors, it is possible to achieve environmental comfort through the physical dimension of the landscape and consequently the citizenship behavior derived from it. Also, in order to improve the perceptual and visual dimension of the landscape, relying on the role of environmental comfort in people's behavior, it is possible to achieve a large extent to this improvement by giving importance to color and form diversity in urban furniture and creating attractive buildings and finally, by dragging the activities to the outside space and applying lighting and 24-hour applications, it is possible to reach security and promote the functional and activity dimension of the landscape by relying on the role of environmental comfort in people's behavior.

Table 4. Results of Confirmatory Factor Analysis of Variables

Questions	Criteria	Sub-criteria	Indicators	Factor loading	T-statistic
1	Improving the physical dimension of the landscape by relying on the role of environmental comfort in people's behavior	Pay attention to the shape of the bodies	The importance of the roof along the path in the direction of environmental comfort	0.45	5.38
2			Paying attention to openness in the face of temperature changes	0.94	13.85
3			Interest in stoic forms and definition of spatial territory	0.91	14.57
4			Paying attention to contrast and communication in the route and land uses	0.64	13.62
5			Importance of color variation in the first floor's wall	0.44	10.44

Questions	Criteria	Sub-criteria	Indicators	Factor loading	T-statistic
6		Pay attention to the street floor	The importance of proper flooring	0.86	12.61
7			Paying attention to the norm of spaces in the direction of environmental comfort	0.91	13.79
8			Paying attention to level differences in the occurrence of individual behaviors	0.43	7.53
9		Pay attention to the signs	Paying attention to sign elements in activity centers	0.42	11.62
10			The importance of height changes in index buildings	0.97	15.02
11	Improving the perceptual and visual dimension of the landscape by relying on the role of environmental comfort in people's behavior	Pay attention to beauty	The importance of attractive buildings	0.93	16.14
12			The importance of color and form diversity in urban furniture	0.95	15.92
13		Emphasis on diversity	The importance of urban furniture diversity	0.47	12.20
14		Increase the sensory richness of the street	The importance of using a fountain in backwards	0.44	7.66
15			Paying attention to the harmony of the street with the historical style and form	0.47	7.81
16			The importance of coordinating bodies with Islamic architecture	0.48	8.96
17	Improving the functional and activity dimension of the landscape by relying on the role of environmental comfort in people's behavior	Presence and spatial efficiency	Attention to the occurrence of individual, social and selective activities	0.41	3.10
18			The importance of dragging the activities to the outdoors	0.83	15.74
19		Emphasis on security	Paying attention to security as an effective element on comfort	0.55	14.44
20			The importance of lighting and 24-hour land uses in creating security	0.63	12.87
21		Emphasis on leisure and comfort	The importance of equipped green openings in order to stimulate behaviors based on environmental comfort	0.41	9.34

The Friedman test is used to prioritize and rank physical, perceptual, visual, functional and activity criteria. Table 5 also shows the average rank of each of the studied dimensions, and the criterion with the highest average is prior and ranked first. According to Table 5, to achieve the goal of research in Khosravi Street, the considered criteria should be applied in the center of the street in the order of the presented priorities. The agenda for each criterion is presented in Table 2. Based on Table 5 and Figure 5, it can be acknowledged that the criterion for improving the functional and activity dimension of the landscape by relying on the role of environmental comfort in the behavior of people has an average rank of 2.97 and is the first priority, the criteria for improving the perceptual and visual landscape by relying on the role of environmental comfort in the behavior of people has an average rank of 1.54 and is the second priority and the criterion for improving the physical dimension of the landscape by relying on the role of environmental comfort in the behavior of people has an average rank of 1.49 and is the last priority.

Table 5. Ranking and Prioritization of Criteria Based on the Average Rank

Criteria	Average rank	priority
Improving the physical dimension of the landscape by relying on the role of environmental comfort in people's behavior	1.49	3
Improving the perceptual and visual dimension of the landscape by relying on the role of environmental comfort in people's behavior	1.54	2
Improving the functional and activity dimension of the landscape by relying on the role of environmental comfort in people's behavior	2.97	1

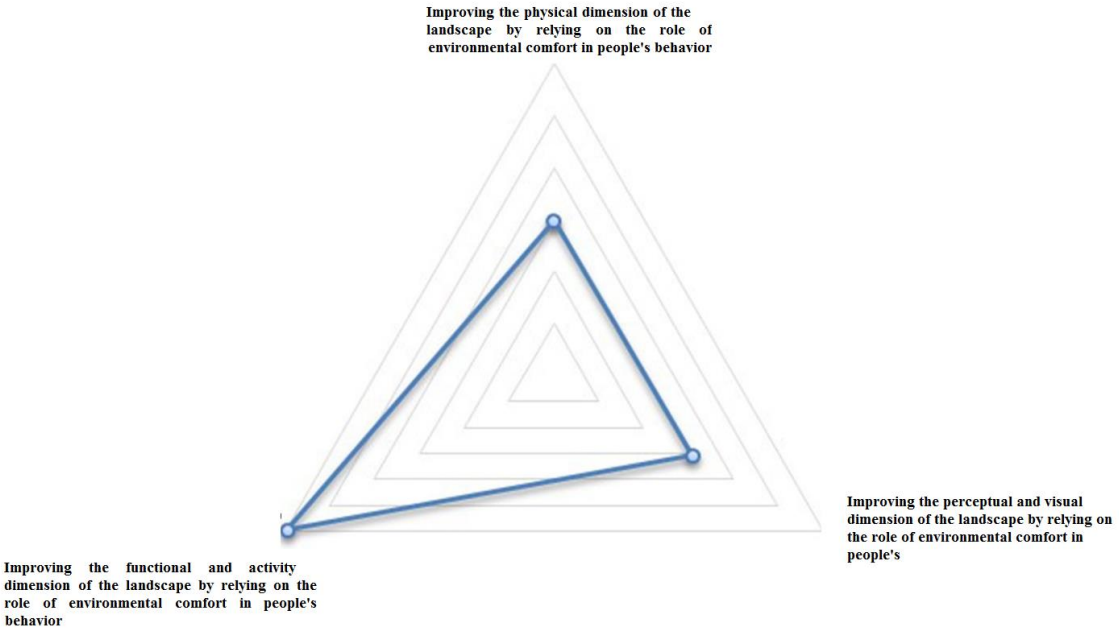

Figure 5. Ranking and Prioritization of Criteria

Table 6 shows the average rank of each of the sub-criteria, and the sub-criterion that has the highest average rank is the first priority. According to Table 6 and Figure 6, the criterion of emphasis on leisure and comfort with an average rank of 8.99 has the first priority and the sub-criterion of attention to the street floor with an average rank of 1.51 has the last priority.

Table 6. Ranking and Prioritization of Sub-criteria Based on Average Ranking

Sub-criteria	Average ranking	Priority
Pay attention to the shape of the bodies	6.28	3
Pay attention to the street floor	1.51	9
Pay attention to the signs	4.43	6
Pay attention to beauty	2.72	8
Emphasis on diversity	2.84	7
Increase the sensory richness of the street	5.67	4
Presence and spatial efficiency	7.97	2
Emphasis on security	4.58	5
Emphasis on leisure and comfort	7.99	1

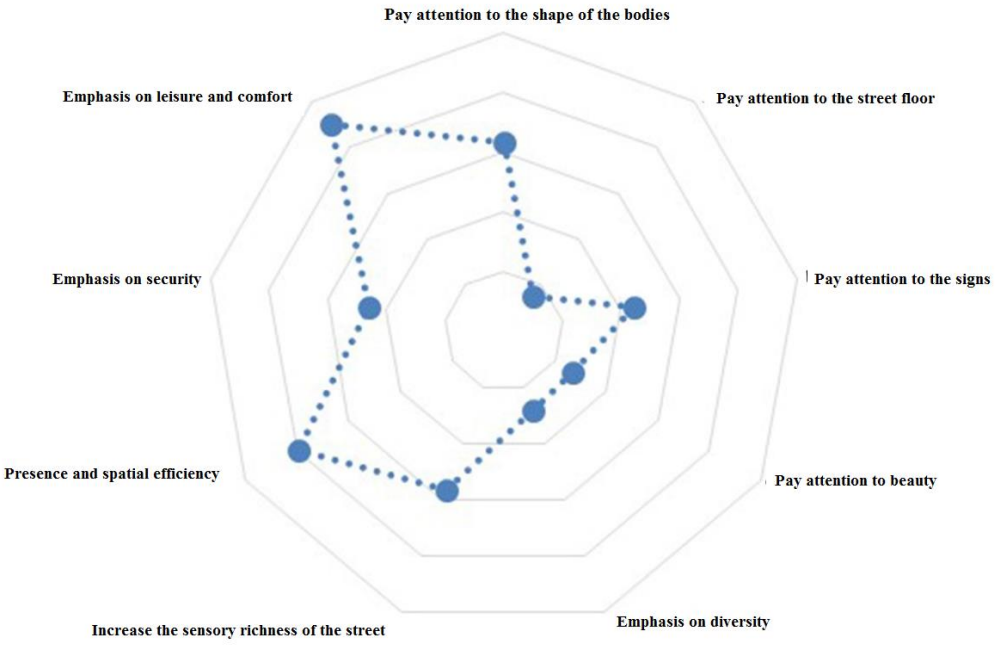

Figure 6. Ranking and Prioritization of Sub-criteria

Finally, in this section, using structural equations, the hypothesis of which independent variables have an impact on which dependent variables is examined. So, by using the structural equation model, it is possible to simultaneously evaluate the quality of measuring variables and the acceptability of direct and indirect effects, as well as the defined interactions between variables. In the present study, a second-order factor model has been designed to investigate this hypothesis. Second-order factor models are factor models in which latent factors, measured using observed variables, are themselves affected by a more underlying variable and the hidden variable. In this section, structural equation modeling will be used to analyze and estimate the research parameters and the hypothesis will be tested. In the following, the models related to the research hypothesis test are examined. Figures 7 and 8 are the diagrams of path coefficients and t-statistic values for the research model, respectively.

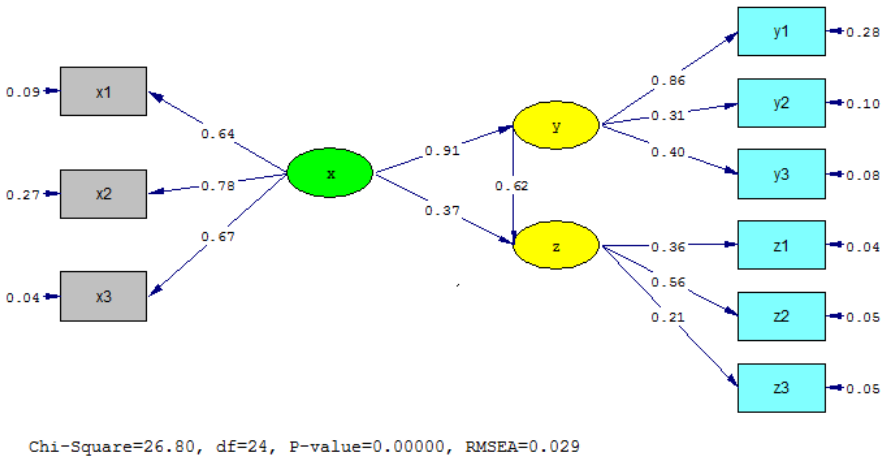

Figure 7. Diagram of Factor Coefficient and Path Coefficient of Research Model

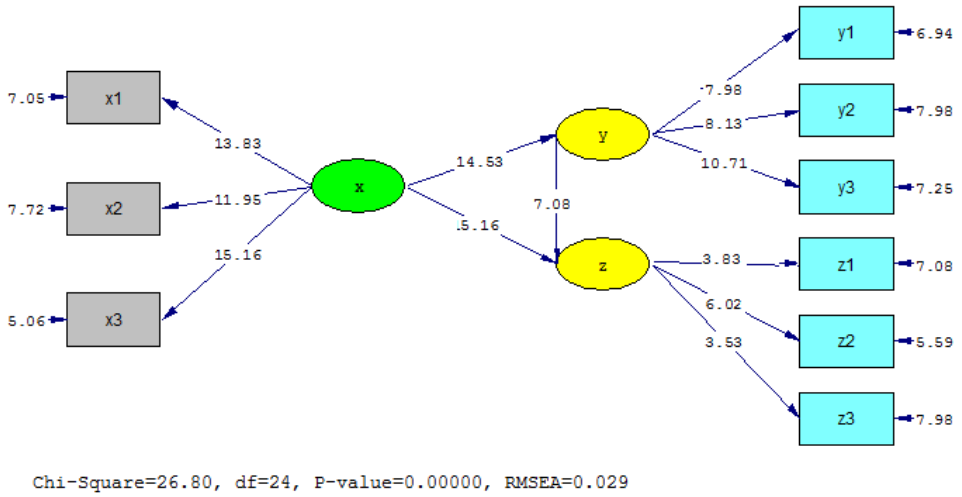

Figure 8. Diagram of T-statistic Values for Research Model

According to the above diagrams, a summary of the results obtained from the model fit is shown in Table 7, and the results of this table are used to test the research hypothesis. As mentioned, paths with a t-value greater than 1.96 or less than -1.96 are significant.

The path coefficient between the dimensions of physical improvement of the landscape based on the role of environmental comfort in people's behavior and the dimensions of perceptual and visual improvement of the landscape based on the role of environmental comfort in people's behavior is equal to 0.91, which is a positive value .The value of the corresponding t-statistic is equal to 14.35, which is greater than 1.96, so it can be concluded with 95% confidence that this path coefficient is significant at the error level of 0.05 and the existence of a significant and direct (positive) relationship between the dimensions of physical improvement of the landscape by relying on the role of environmental comfort in human behavior and improving the perceptual and visual dimension of the landscape by relying on the role of environmental comfort in human behavior is confirmed. The path coefficient between the dimensions of the physical improvement of the landscape based on the role of environmental comfort in the behavior of individuals and the dimensions of functional and activity improvement of the landscape based on the role of environmental comfort in the behavior of individuals is equal to 0.37 which is a positive value. The value of the corresponding t-statistic is equal to 5.16, which is greater than 1.96, so it can be concluded with 95% confidence that this path coefficient is significant at the error level of 0.05 and the existence of a significant and direct (positive) relationship between the dimensions of physical improvement of the landscape by relying on the role of environmental comfort in people's behavior and the dimensions of functional and activity improvement of the landscape by relying on the role of environmental comfort in people's behavior is confirmed. The path coefficient between the perceptual and visual improving dimensions of the landscape based on the role of environmental comfort in people's behavior and the functional and activity improving dimensions of the landscape based on the role of environmental comfort in people's behavior is equal to 0.62, which is a positive value. The value of the corresponding t-statistic is equal to 7.08, which is greater than 1.96, so it can be concluded with 95% confidence that this path coefficient is significant at the error level of 0.05 and the existence of a significant and direct (positive) relationship between the dimensions of cognitive and visual improvement of the landscape by relying on the role of environmental comfort in people's behavior and the dimensions of functional and activity improvement of the landscape by relying on the role of environmental comfort in people's behavior is confirmed.

Table 7. Test Results

Test Relationship	Path Coefficients	T-statistics	Result
Improving the physical dimension of the landscape by relying on the role of environmental comfort in people's behavior → Improving the perceptual and visual dimension of the landscape by relying on the role of environmental comfort in people's behavior	0.91	14.53	Is significant
Improving the physical dimension of the landscape by relying on the role of environmental comfort in people's behavior → Improving the functional and activity dimension of the landscape by relying on the role of environmental comfort in people's behavior	0.37	5.16	Is significant
Improving the perceptual and visual dimension of the landscape by relying on the role of environmental comfort in people's behavior → Improving the functional and activity dimension of the landscape by relying on the role of environmental comfort in people's behavior	0.62	7.08	Is significant

5. Conclusion

Environmental comfort is an important and fundamental component of man-made environments. On the other hand, environmental comfort is the feeling of satisfaction and comfort resulting from the coordination of physiological, psychological and physical aspects of man and his environment, which causes individual and social behaviors in the urban environment. In this regard, due to comfort and security in the urban space, the person feels the need to spend time in spaces, entertainment, establishing citizen interactions and interaction with the environment. Therefore, the result indicates that in Khosravi Street, due to the existence of commercial and mixed uses, there has been relative vitality and this has caused the presence of many pilgrims and passers-by. Existence of environmental comfort in this regard can play a significant role in the social and individual behaviors of these passers-by, pilgrims and attendees. Therefore, by creating spatial openings and allocating and injecting greenery and security, citizenship and environmental interactions can be caused. Creating a porch and playing with shadows and sun along the street wall, in addition to stimulating visual features, can also intensify and encourage behavioral patterns such as pause and improve the economic dimension. The relationship between the uses of the two sides of the wall, especially in the office and mixed commercial uses sector, can be effective in improving the silhouette of the surrounding landscape and cause pilgrims to travel and use this potential. Finally, applying the color and smell of Iranian Islamic architecture on the texture and wall of the axis can affect the warmth and intimacy of this axis. On the other hand, to improve the physical dimension, relying on the importance of environmental comfort on the behavior of people on Khosravi Street, the focus is on the importance of height changes in index buildings in the first place, the importance of openness in terms of temperature changes, the importance of stoic forms, and the definition of spatial territory and the importance of soft spaces in the direction of environmental comfort. Therefore, by creating and defining these factors, it is possible to achieve environmental comfort through the physical dimension of the landscape and consequently the citizenship behavior derived from it. Also, to improve the perceptual and visual dimension of the landscape, relying on the role of environmental comfort in people's behavior, it is possible to achieve this improvement to a large extent by giving importance to color and form diversity in urban furniture and creating attractive buildings, and finally, by dragging the activities to the outside space and applying lighting and 24-hour land uses, the security and promotion of the functional and activity dimension of the landscape is achieved, relying on the role of environmental comfort in people's behavior.

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