

International Journal of Urban Management and Energy Sustainability (JUMES)

Homepage: <http://www.ijumes.com>



CASE STUDY RESEARCH PAPER

Studying the design of urban spaces in approach to gender justice (comparative comparison between Districts 1 and 6 of Tehran City)

Choman Kanaani

Department of Architecture, Central Tehran Branch, Islamic Azad University, Tehran, Iran

ARTICLE INFO

Article History:

Received 2024-04-12

Revised 2024-10-02

Accepted 2024-12-12

Keywords:

Equity, urban spaces, female participation, functional-operational dimension, Tehran city districts

ABSTRACT

The presence and use of urban spaces are the inherent rights of every citizen, regardless of gender. Gender blindness in urban spaces hinders women's participation in these environments. It is evident that the needs of women and men differ significantly in biological, social, and cultural dimensions; therefore, their behavioral patterns in urban spaces are also not identical. A gender equity approach seeks to identify these patterns and the needs of women, and to facilitate their integration into urban spaces, thereby enabling greater female participation and preventing their exclusion due to gender-based restrictions. The aim of this study is to analyze urban spaces concerning the level of female participation in Districts 1 and 6 of Tehran. For this purpose, these two districts were selected through a comparative method, and data were collected via field surveys and document studies. The assessment of women's status was conducted across functional-operational, environmental, aesthetic-experiential, and institutional-management dimensions. The obtained data were then analyzed using a descriptive-analytical approach with Friedman and Spearman tests. The results indicated that there is a significant relationship between gender equity and the studied districts, as well as between female participation and the promotion of gender justice. It can be concluded that there is no significant relationship between the functional-operational components and the creation of equal opportunities for women's participation in the examined districts, suggesting that improvements and upgrades are necessary in the functional-operational and institutional-management dimensions.

DOI: [110.22034/IJUMES.2024.711844](https://doi.org/10.22034/IJUMES.2024.711844)

Running Title: *Studying the design of urban spaces in approach to gender justice*



NUMBER OF REFERENCES

20



NUMBER OF FIGURES

00



NUMBER OF TABLES

09

*Corresponding Author:

Email: choman.kanaani@gmail.com

Phone: +98918170908

ORCID: <https://orcid.org/0009-0004-2741-039X>

INTRODUCTION

Gender perspective in urban space design means considering the needs, experiences and perspectives of women and men in the urban design and planning process. This is necessary in order to create fair and inclusive spaces for all people, regardless of their gender. If we define equality in society as creating the possibility of a life of choice and satisfaction for all people, considering the differences in their characteristics and needs, currently women as half of human society are deprived of the possibility of equal presence or men in the social arena. To ensure this equality, society must remove the limiting barriers by understanding the differences in the needs, positions and goals of individuals and give them the opportunity for equal social presence and participation. The city is considered as the context and manifestation of the presence of human society, the place where the characteristics and characteristics of urban society appear. Here, a two-way relationship between society, humans and space is manifested. On the one hand, it is the human community that shapes space and adapts it to its type of use over generations, and on the other hand, the characteristics of a space, the sensory and perceptual qualities resulting from it, provide appropriate facilities to the users. This mutual relationship plays a decisive role in the scope of human activity, their reaction to desirable elements and obstacles, and also their feelings towards others and society. Space affects the identity of humans, can give them a desirable feeling or confuse people or cause discrimination and deviation. One of the important and decisive issues in the way people use and feel about space is how the space responds to their needs and provides comfortable conditions for different groups. Urban spaces, by providing appropriate facilities and responding to everyone's needs, provide the possibility of the presence of different groups of gender, age, etc. in these areas, and thus are considered a platform for social interaction and satisfaction of this need of citizens. (Tamadon, 2014). The more convenient and safer the space can be for the

activities and individual and collective behaviors of citizens, the more valuable it should be. (Pakzad, 2016). Despite having more facilities than the past, today's cities have remained unable to meet the needs of their residents in better use of urban spaces. Improper urban construction and planning affect the use of urban spaces by different segments of society, so that sometimes due to lack of sufficient attention to the elderly, disabled, children and women, they are deprived of a desirable urban life. For example, women have difficulty enjoying urban spaces due to the social and cultural restrictions in the country. One of the most important criteria considered in evaluating cities and urban environments is the quality of the urban spaces in them, and it is an inevitable fact that the quality of these spaces is considered a measurement criterion for the degree of desirability of cities. One of the methods that has been used for decades to measure the quality of urban spaces has been to provide specific parameters called environmental quality components, which ultimately indicate the degree of desirability or undesirability of the environment by identifying the components (Behzadfar et al., 2013).

Today, the gender justice approach has a special place in urban planning. Gender justice means respecting the proportionality of women and men in accessing all cultural, social and economic facilities, in a way that no one's rights are violated. Gender justice is one of the dimensions of social justice (Broumand et al., 2016). The gender approach to the future of cities is related to how different matters are understood in urban politics and management, which addresses gender inequality as well as other forms of inequality and promotes social justice perspectives (Franck, 2022). The gender justice approach in the design and planning of urban spaces seeks justice and balance in equal access and the possibility of balanced use of space for different genders. Although women have more contact with urban spaces due to their essential activities and daily responsibilities, justice has not been observed in the design of these spaces

and we are faced with sexual and often masculine spaces that make it difficult for women to carry out their activities and reduce their satisfaction. In modern urban planning and urban development, despite the large presence of women in public areas and urban spaces, very little attention has been paid to the differences and diversity of needs of women and men. The gender justice approach is well aware of the fact that women, men, boys and girls have different needs and tries to respond to these different needs in an equal manner. The current lack of gender justice shows that different needs have not been met fairly. Space, as it reflects the gender structure, is itself an active factor in the process of forming this structure; therefore, in the mutual relationship between space and the gender structure, while the gender structure is materialized in space, space also plays an effective role in the realization of gender relations and its reproduction. The problem here is that the lack of attention to the gender structure in urban planning ignores the reality of the difference between the access, influence, and presence of men and women in urban spaces. Perhaps it is because of the quality and nature of urban spaces that the presence of people in spaces is decreasing day by day and we are witnessing an increase in the level of social relations in virtual spaces. The presence of women as an important social group that will also bring the presence of groups under their care is very vital and makes the necessity of urban planning with an emphasis on the gender justice approach more and more obvious. In this regard, the present study, using a descriptive-analytical approach, examines the extent of gender justice in the planning process of urban neighborhoods and its effect on the presence of women in urban spaces by making a comparative comparison between Districts 1 and 6 of Tehran.

MATERIALS AND METHODS

Methodology

The present study is applied research in terms of its purpose and descriptive-analytical research

in terms of its nature and method, and its technique is a survey. This research seeks to compare the presence of women in urban neighborhoods with a gender justice approach in District 1 and 6 of Tehran. In the descriptive part, studies and research conducted and the use of descriptive statistics are used, and in the analytical part, by analyzing the results of past research and analyzing the collected data, the research is tested with inferential statistical methods.

The following methods were used to collect information for the present study:

- Documentary or library study method, which includes books, articles, urban development plans, comprehensive urban plans, and relevant maps. With this method, the presence indicators and gender justice indicators in urban neighborhoods are determined, and then they are examined to test the hypotheses.
- Field observation or survey method includes field visits and surveys and questionnaires. Since women's presence is examined in this study, women's views should be measured through questionnaires that contain indicators of presence and gender justice. The reliability of the questionnaires is also tested through Cronbach's alpha test for a sample of 20 people, and the validity of the questionnaire questions is also measured through a survey of professors in this field.
- Using GIS information layers to determine the sampling method of neighborhood residents to fill out the questionnaires and also to prepare the required maps, the capabilities of GIS software have been used.
- The sampling method in this study is a random method and the sample size has been calculated based on the Cochran formula with an error coefficient of 0.05. Therefore, the sample size is considered to be 385 people, and the same number of questionnaires have been collected in the 1st and 6th districts of Tehran.
- In order to analyze the collected research data, two descriptive and inferential methods have been used. In the descriptive section, the

mean, median, standard deviation, etc., tables and graphs have been used to present descriptive information about the population and the statistical sample, and in the inferential section, statistical inferential tests have been used to test the hypotheses. The tool used in this study to analyze the research data is SPSS software, and the T-Test statistical method has been used to analyze the information.

Approaches related to the presence of women in urban spaces

In the history of the formation of the gender separation approach, its roots can be attributed to the pre-industrial revolution era, when women were mainly limited to domestic areas or activities close to home and had difficulty accessing spaces away from home, while men worked in more distant and public spaces (Krenichyn, 2018; Kiavar, 2022). This separation in spatial design and planning created dichotomies such as home and workplace, private and public, men and women, suburbs and city centers, in which the home was considered a refuge devoid of work activities and women were separated from urban space and public activities (Mohammadi, 2019). This trend led to urban planning becoming more aligned with men's needs and women's activities remaining limited to the home environment and its surroundings, and the zoning model in cities separated the four areas of work, housing, activity, and leisure. With the Industrial Revolution, women's sphere of activity expanded from the home to public spaces, leading to a functional separation of work and home, and protests about gender inequality demanding greater women's presence and participation in public spaces (Day, 2019). Mixed-use development projects attempted to provide women with a variety of uses and facilities to increase their share of public realms, which had previously been predominantly male-dominated (Krenichyn, 2018). Civil rights theory also stands in opposition to generalist approaches, where Marshall proposes an all-inclusive approach, but Marion Young argues that this approach

undermines women's rights because, in a sense of generality and uniformity, the differences and specific needs of vulnerable groups are ignored. Citizenship rights should be provided equally and based on group differences, with specific facilities to achieve justice (Mansouri & Majedi, 2017). Throughout history, citizenship and gender have always been intertwined, and while governments have made efforts to achieve equality, cultural and structural factors, including traditional gender roles, have prevented this goal from being fully realized, and women are often at a disadvantage compared to men (Mukhopadhyay & Singh, 2023). Based on citizenship rights, all people of any gender, age, race, and religion can equally benefit from urban facilities and spaces, and women, as members of civil society who have played a significant role in the formation of civil movements to realize their citizenship rights, have the right to fully use their citizenship rights. In pursuit of such legal realization, women, especially poor women who are usually marginalized, have demanded the realization of their spiritual and moral demands in line with social and gender justice. If a definition of the concept of pluralism is to be provided, it can be said in simple terms; when there is a plurality of opinions and ideas in a society, the necessity of dialogue and reaching a general consensus can be considered for this concept (Jupp, 2022). One of the main demands of the women's community, as one of the important groups in society, following the introduction of the pluralistic citizenship approach, is to create spaces in which various activities can be created. (Pakzad & Bozorg, 2012, Paydar, 2018) Such spaces should be formed based on two general directions. Making changes in the principles of planning on the basis that women's right to express themselves is recognized and taken into account, which also requires the recognition of women;

Strengthening the gender approach in urban governance and women's inclusion in connection with the creation of institutional structures

and strengthening them. The concept of citizenship was previously mainly raised in the field of political rights, but currently such a concept has expanded and has also spread to other areas of social needs, one of the important areas of which, as mentioned, is women's rights, which can also be expressed in areas such as women's right to participate in local areas and social organizations and movements. In general, and in a general conclusion, it should be said that pluralistic citizenship protects the rights of all individuals regardless of their social and political characteristics (Erabi, 2009). Ethical Approach to Care Women and men act quite differently in their interactions with the environment and others, and the two fall into the category of ethics of care and ethics of justice, the former relating to the type of behavior that women display in interactions with the environment and others, and the latter relating to the type of behavior that women display in interactions with men (Kiavar, 2020, Day et al., 2003, Brorumand et al., 2016). On the one hand, this model limits women due to their perceptions of self-care, but on the other hand, the care that they can receive from others and consequently provide them with opportunities can work in their favor. This approach is a model of moral and spiritual development that provides for the needs that women have in relation to care needs and sustainable relationships (Bemaniyan et al, 2008). This model introduces many opportunities in relation to providing women's care needs, and in other words, it can be said that it is a model for expressing the possibilities and limitations that women face in using urban public spaces (Foxhall & Gabriele, 2011); therefore, this principle expresses the fact that women can care for different groups according to their behavioral characteristics, because based on the limitations and needs of these groups, limitations and opportunities are also provided for women to be present in urban spaces, which can lead to the conclusion that paying attention to women's needs and priorities in the form of urban planning can also lead to meeting and reducing

the needs of other groups using urban spaces, especially the elderly, children, patients, and families (Kiavar, 2020). In general, it can be said that women prioritize the needs of groups such as family and children over their own needs, and their presence is more with the groups that are under their care. The ethics of care, as previously stated, can play a role in two aspects, both in terms of creating restrictions on women's presence and opportunities for women's presence in the enjoyment of urban spaces. The restrictions of this principle can be introduced in four categories:

- Limited resources of time, financial resources (mobility, interaction, social, services and opportunities);
- Restrictive emotions (worry and fear);
- Restrictive work responsibilities (home and childcare);
- Social norms that restrict gender norms (unfair social conditions and inappropriate planning and design of spaces).

In contrast to the restrictions stated, the possibilities of this principle can be considered to include cases through which women can increase their activities and experiences in relation to the use of the environment, which can be mentioned as the following: care for friends, family, care from strangers, care for themselves, care for public spaces and care as a basis for feminist ideal environments. (Tab.1)

DISCUSSION AND FINDINGS

In this section of the study, the findings of the study are described and analyzed, and an attempt has been made to present accurate and generalizable results using descriptive and inferential statistical methods. The contents of this section are presented in two parts. In the first part, the descriptive findings are presented separately for the variables studied in the study, and in the second part, the hypotheses are tested separately according to the type of hypotheses and using appropriate statistical tests.

Table 1: Evaluation of gender attitudes in the design of urban spaces

Education	Sub-Criteria	Questionnaire item
Quality of behavioral camps (adaptation of activity, time and space)	Designing a space for communication and social interaction;	Adapting communication spaces;
	Equipping public spaces with urban furniture;	Adapting urban furniture to women's biological characteristics;
	Job opportunities in behavioral camps for women;	Sales in commercial shops;
	Amenities	Neighborhood markets;
Gender justice	Single-gender spaces	Cultural facilities for women;
		Sports facilities for women
User interface and urban form	Transportation;	Separation of women's sports equipment;
		Separation and allocation of space for women;
	Ease of access;	The amount of social activities outside the home;
		Access to available public transportation;
Quality of environmental comfort for activities;	Readability of the environment;	Personal vehicle;
		Public transport stations;
	Children's care needs;	Physical and visual connections to the surrounding environment;
		Footpath safety
Quality of environmental security for activities	Creating defensible spaces	Finding your way back and forth (orientation)
		Eliminating spaces prone to street harassment and crime;
		Equipping retreat and cozy, private spaces in the neighborhood
	Transparency and visual awareness of spaces (public surveillance);	Lighting of footpaths;
		The presence of openings facing the street;
		Specific activities and uses
No fear of being in space;	The presence of law enforcement forces;	
	Children's security needs;	
Quality of the perceptual environment (sensory environment)	The quality of the objective perspective;	The presence of people on the streets and their monitoring of the street space;
	Urban facade structure;	Adequate lighting of spaces;
	Sense of belonging;	High-security communication routes for traffic;
Quality of the perceptual environment (cognitive environment)	Meanings;	The quality of urban spaces in the neighborhood;
		The quality of urban walls in the neighborhood;
Microclimate quality of urban spaces;	Climatic comfort;	Attachment and dependence on the neighborhood
		Continuity for easier understanding of the environment;
Reducing air pollution;	Environmental pollution;	The beauty of texture, symbols, and decorations
		The presence of sunshades and trees;
Participation	Participation in local management;	Prevailing wind;
		The level of general hygiene of the spaces;
	Participation in social activities;	Number of days with healthy weather;
Institutional management	Number of women in public administration;	Attendance at the Council of Advisors;
	Citizenship training;	Local decision-making;
	Women's employment in the informal and formal economy;	Women's presence in social calls;
Employment	Head of household;	Membership in associations and social activities;
		Presence in organizational positions in the public administration sector;
		The effectiveness and efficiency of women in charge;
		The amount of training tailored to women's needs;
		The presence of women in formal and informal jobs in the neighborhood;
		The role of women heads of households;

Descriptive findings

The descriptive findings of the study, including demographic findings, marital status, education, and occupation, are presented in the tables and charts below. (Tab.2)

Table 2: Frequency distribution and percentage of respondents by marital status

Marital Status	Frequency	Percentage
Single	150	38.96%
Married	235	61.04%
Total	385	100%

The data in the table below shows that among the respondents, 40 people, equivalent to 1.38%, had an education below a diploma level; 60 people, equivalent to 15.58%, had a diploma level; 40 people, equivalent to 10.38%, were studying; 60 people, equivalent to 15.59%, had a post-diploma level; 95 people, equivalent to 24.69%, had a bachelor's degree; and 90 people, equivalent to 23.37%, had a master's degree or higher. (Tab.3)

Table 3: Frequency distribution and percentage of respondents by education

Education	Frequency	Percentage	Cumulative Percentage
Below Diploma	40	10.38%	10.38%
Diploma	60	15.58%	25.98%
Currently Studying	40	10.38%	36.34%
Post-Diploma	60	15.59%	51.93%
Bachelor's	95	24.69%	76.61%
Master's and Higher	90	23.37%	100%
Total	385	100%	100%

The data in the table below shows that among the respondents, 80 people (20.77%) were housewives; 110 people (28.57%) were self-employed; 75 people (19.48%) were employees; 50 people (12.98%) were retired, and 70 people (18.18%) had other jobs. (Tab.4)

Table 4: Frequency distribution and percentage of respondents by occupation

Occupation	Frequency	Percentage	Cumulative Percentage
Homemaker	80	20.77%	20.77%
Self-Employed	110	28.57%	49.34%
Office Worker	75	19.48%	68.82%
Retired	50	12.98%	81.80%
Other Occupations	70	18.18%	100%
Total	385	100%	100%

Inferential findings

Examining the differences in gender justice components by district 1 and 6 of Tehran

To examine the significant difference in establishing gender justice in Tehran's districts 1 and 6, a binomial T-test was used. In the Independent sample test table, if the Levon test for equality of two variances shows that the two variances are equal, the first row of results is used. However, if the Levon test shows that the variances of the two samples are not equal, the second row of results should be used; according to the results obtained between the gender justice items, the significance level in the item: being aware of the existence of women's spaces and the suitability of the neighborhood space for women's daily activities compared to men is 0.01 and 0.00, respectively, which shows that the two variances are not equal to each other, and in the item: giving up going to a recreational space because of the gender of that space, separating some public spaces specifically for women, the type of clothing that prevents women from carrying out social activities compared to men, the significance level is 0.29, 0.76, and 0.535, respectively, which shows that the two variances are equal to each other. In this study, the T-test value for the item: Being informed about the existence of women's spaces is 17.294 and the significance level is 0.000, which means that since the significance level is less than 0.05, the two districts are statistically significantly different from each other, and this difference is at a 95 percent confi-

dence level and can be generalized to the entire society. The T-test value for the item: Refusing to go to a recreational space because of the gender of that space is 6.643 and the significance level is 0.00, which means that it can be concluded that there is a significant difference in the studied districts in terms of refraining from going to recreational spaces because of the gender of that space, and this difference is at a 95 percent confidence level and can be generalized to the entire society. The T-test value for the item: Separation of some special public spaces for women is 6.038 and the significance level is 0.00, which shows that there is a significant difference in relation to this item between the districts studied, and this difference is at a 95% confidence level and can be generalized to the entire society. The T-test value for the item: The type of clothing women wear prevents them from carrying out social activities compared to men is 1.266 and the significance level is 0.206, which because the significance level is greater than 0.05, it can be concluded that the two districts are not statistically significantly different from each other with respect to the item: Your type of clothing prevents you from carrying out social activities compared to men. The T-test value for the item: The suitability of the neighborhood space for your daily activities compared to men is 6.674 and the significance level is 0.00, which shows that there is a significant difference between the districts studied in terms of this item, and this difference is at a 95% confidence level and can be generalized to the entire society. In other words, the existence of a significant difference between the items indicates confidence in the reliability or validity of the statistics. In this study, there is a significant relationship between gender justice criteria and neighborhoods, which can be concluded that improving the components of gender justice, such as the facilities and equipment of that area, the existence of gender spaces, gender segregation of some spaces, informing women about their citizenship rights, designing spaces suitable for women's activities regardless

of existing restrictions, etc., improves the situation of the areas, which increases the presence of women in the areas and also increases women's satisfaction in the areas. (Tab.5)

Examining the differences in establishing gender justice in Districts 1 and 6 of Tehran

In this section, gender justice is tested among the districts under study. The significance level of the Leven test for gender justice is 0.008, which indicates that districts 1 and 6 of Tehran do not have equal variance. The T-test value for gender justice is 7.890 and the significance level is 0.000, which indicates that, according to the significance level, there is a significant difference between districts 1 and 6 of Tehran in terms of establishing gender justice. (Tab.6)

Investigating functional components affecting the presence of women

To examine the impact of the functional dimension components on the presence of women, the Friedman test was used in the study areas. This test can be used for both parametric and nonparametric data. This test also ranks the most effective items, in such a way that the most effective items are specified in order of importance. The relationship between urban use and form achieved the first rank in terms of impact with an average of 6.40, followed by gender justice, environmental security quality, and environmental comfort quality, respectively. The behavioral camp quality component with an average of 2.13 had a small impact on the presence of women and their activities in the spaces. (Tab.7)

Table 7: Examination of the components of the Kurdish work dimension that affect the presence of women

Post-Functional Components	Rank
User-Function and Urban Form Connection	6.4
Gender Justice	5.4
Environmental Security Quality for Activities	3.8
Environmental Comfort Quality for Activities	3.2
Behavioral Settings Quality (Compatibility of activity, time, and space)	2.1

Table 5: T-test coefficient for examining the difference between districts 1 and 6 in terms of gender justice components

F		Levene's Test for Equality of Variances		t-test for Equality of Means						
		Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Being aware of the existence of women's spaces	Equal variances assumed	6.704	0.01	17.267	669	0.00	0.808	0.47	0.716	0.899
	Equal variances not assumed			17.294	657.561	0.00	0.808	0.47	0.716	0.899
Refusing to go to an entertainment venue because of its gender identity	Equal variances assumed	1.123	0.290	6.643-	698	0.00	0.350-	0.53	0.453-	0.246-
	Equal variances not assumed			6.535-	617.94	0.00	0.35-	0.53	0.455-	0.244-
Segregation of some public spaces specifically for women	Equal variances assumed	3.166	0.076	6.038	686	0.00	0.341	0.56	0.230	0.451
	Equal variances not assumed			6.031	655.145	0.00	0.341	0.56	0.230	0.451
The type of clothing women wear prevents them from engaging in social activities compared to men.	Equal variances assumed	0.385	0.535	1.266-	694	0.206	0.66-	0.52	0.168-	0.036
	Equal variances not assumed			1.265-	671.15	0.206	0.66-	0.52	0.168-	0.036
The suitability of the neighborhood space for women's daily activities compared to men's	Equal variances assumed	97.1	0.00	6.88	687	0.00	0.085	41.	0.204	0.366
	Equal variances not assumed			6.674	547.09	0.00	0.285	0.43	0.201	0.369

Table 6: T-test coefficient for examining the difference in Tehran's districts 1 and 6 in terms of gender justice

F		Levene's Test for Equality of Variances		t-test for Equality of Means						
		Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Gender justice	Equal variances assumed	7.173	0.008	8.03	635	0.00	0.2106	0.0262	0.159	0.2621
	Equal variances not assumed			7.8	554.7	0.00	0.2106	0.0267	0.158	0.263

The table below shows the statistical significance. The obtained chi-square value is 1775.291, which is at an error level of less than 0.05 ($P > 0.05$). The significance of the Friedman test means that the ranking of the influential components of the functional dimension in the presence of women is meaningful for the female respondents, and women have different rankings in terms of the influential components in the presence of women. (Tab.8)

Table 8: Significance level of Friedman test between components of the work dimension

Test Statistics	
Sample Size (N)	509
Chi-Square	1775.291
Degrees of Freedom (Df)	4
Asymptotic Significance (Sig. Asymp.)	0.00

In the following, the Friedman test was used to examine the influential components of the functional dimension, separating the new and old contexts: (Tab.9)

Table 9: Examination of functional dimension components affecting women's presence by district

District	Component	Rank
District 1	User-Function and Urban Form Connection	4.6
	Gender Justice	3.7
	Environmental Security Quality for Activities	2.7
	Environmental Comfort Quality for Activities	2.2
	Behavioral Settings Quality (Compatibility of activity, time, and space)	1.6
District 6	User-Function and Urban Form Connection	4.6
	Gender Justice	3.9
	Environmental Security Quality for Activities	2.7
	Environmental Comfort Quality for Activities	2.4
	Behavioral Settings Quality (Compatibility of activity, time, and space)	1.44

As can be seen in the table above, the order of the ranks obtained for the components of the

work dimension is the same in both districts and there is a slight difference in the rank obtained. The first rank in both districts is reserved for the relationship between urban use and form with a score of 4.61 in district 1 and a score of 4.64 for district 2. Women often travel outside the home more than men for daily shopping, entertainment, education and training of children, work, etc., for this reason, access to public transportation is very important and preferable for women based on factors such as security and transportation costs. Women prefer public transportation systems such as buses, taxis and metro instead of using personal vehicles in district 1, which is located far from the city center and main places, and district 6 due to its compact and organic texture, with narrow streets and alleys, lack of parking, etc., and the existence of a bus system that covers both districts well has satisfied women in both districts and makes it easier for them to access the places and centers they want. The metro line passing near Zone 1 is also very effective. In both zones, satisfaction with the location of the facilities that meet women's daily needs and the ease of access to them for women, such as shopping centers, including daily shopping centers such as fruit shops, supermarkets, fruit and vegetable markets, and general groceries, as well as shopping complexes and numerous linear markets, etc. is satisfactory, especially in Zone 1, where active neighborhood centers are located, and in Zone 2, the compact texture and small area of the neighborhood provide easy access to daily shopping centers. The second place in both zones is reserved for gender justice with a score of 3.75 in Zone 1 and a score of 3.96 in Zone 6. Today, it is no secret that women, having become aware of their rights and citizenship rights, as well as their increased education and presence in society as an employed class, have not accepted gender restrictions and are also looking for appropriate and even gender-specific recreational spaces; therefore, the issue of gender justice is of particular importance to women. Women in both districts are very satisfied with the segregation of some public spaces

such as buses, parks, community halls, etc., especially in the segregation of bus or metro spaces, which women use more than men; however, they still suffer and express dissatisfaction with women's refusal to go to some recreational spaces due to their gender and the type of clothing that prevents them from carrying out some social activities compared to men, and they consider the issue of gender justice to be very effective in the level of women's presence in urban spaces. Especially in District 6, which, apart from the gender issue, faces a shortage of public and recreational spaces and also imposes more restrictions on women's presence outside the home and recreational spaces due to the traditional culture prevailing in the old fabric of this neighborhood and its residents, who are generally old and elderly, but based on the analysis of statistics obtained from respondents in District 6, in general, women's expectations and needs, as well as their awareness of their citizenship rights, are lower than in District 1. The third place in both districts is given to the quality of environmental security for activities with a score of 2.77 in the neighborhood of District 1 and a score of 2.72 in District 6. In District 1, the number of special uses that operate until late at night, as well as the main axes that have active commercial areas, as well as the presence of more law enforcement forces due to the main and busy intersections, the presence of more uses such as schools, universities, stadiums, etc., causes the continuous presence and patrolling of law enforcement forces in the district, as well as more open and public spaces and parks for children to attend and play, more public surveillance at the district level, and women's satisfaction with attendance increases. In the fourth place, both districts share the quality of environmental comfort for activities component, District 1 with a score of 2.26 and District 6 with a score of 2.24. The lowest place in both districts is given to the quality of behavioral bases for the compatibility of time and space activities with a score of 1.61 in District 1 and a score of 1.44 in District 6. Although the quality of behavioral centers is

one of the most important performance criteria for women's participation, unfortunately, this component has received the lowest rating. This rating shows that the public and open spaces available in the districts, their equipment that is appropriate for women's needs and usage, as well as sports, cultural, etc. facilities for women, have not yet met their needs and requirements, and there is a long way to go before they reach an acceptable level.

RESULT AND CONCLUSION

Today, one of the main focuses of urban design and urban planning is the processing of gender justice in the design of urban spaces. Gender justice is one of the important and fundamental issues in the current world, which occurs with equal participation of women with men in all areas, observance of women's human rights and reduction of gender discrimination in various fields. Today, most urban spaces have acquired a gendered nature, meaning that urban spaces practically impose restrictions on women's free movement. Since women always constitute half of the world's population, addressing their role in the social process is of major importance. The main goal of gender justice is to achieve justice between women and men to ensure sustainable development, and to achieve it, its foundations must be properly explained based on indigenous and Islamic cultural approaches. The necessity of women's presence in urban spaces as half of the world's population who should enjoy full citizenship rights is now accepted by everyone; Therefore, the main purpose of this research is to emphasize the role of gender justice in women's presence in urban spaces, including identifying the components of establishing gender justice, identifying the components that affect women's presence, ranking districts 1 and 6 in terms of importance to the gender approach, identifying the function of effective components of urban planning in distributing equal opportunities for women in the districtal space;

Considering the indicators under study of women's presence in 4 functional, function-

al-experiential, aesthetic, environmental and institutional management dimensions, each of which is divided into components and each of the components into items, a research questionnaire was prepared. The data obtained from the questionnaire were prepared and compiled in the form of two descriptive statistics sections including frequency table, mean and in the inferential statistics section, a binomial T-test.

To conduct the research, two districts 1 and 6 were selected using a comparative method and information was collected using field surveys and documentary studies. Based on the Cochran formula, 385 questionnaires were distributed to the statistical population of women in two districts to collect and measure the status of women in the functional-functional, environmental, experimental-aesthetic and institutional management dimensions, and then the data obtained were analyzed using a descriptive-analytical approach using Friedman and Spearman tests. The results of the tests showed that there is a significant relationship between gender justice and the studied districts, as well as between women's presence and increasing gender justice. The neighborhoods are in a similar situation with a slight difference in the functional-functional dimension components, but the situation in Tehran's 1st district is better than Tehran's 6th district due to some cultural, social and functional issues, and the judicial and social structure is one of the most important factors in women's presence in the districts. Based on the results obtained, there is no significant relationship between the functional-functional dimension components and creating equal opportunities for women's participation and presence in the studied districts, which indicates that they need to be improved and promoted in terms of the functional-functional dimension and the institutional-management dimension. In the field of the quality of the sensory and mental environment of spaces, women are marginalized and gender inequalities are clearly visible. At the end of this study, suggestions are made

to increase the presence of women at the neighborhood level, including creating gender-specific spaces for women, establishing security, creating nightlife, improving the physical and aesthetic quality of the neighborhood fabric, improving the cultural literacy of citizens, improving the social presence of women by creating appropriate job opportunities, and increasing women's participation in planning and design, and introducing gender-related issues.

REFERENCES

- Erabi, H., (2009) *Guide to Gender-Aware Urban Design (Women-Friendly City)*, Master of Urban Design, Tarbiat Modares University.
- Behzadfar, M., Jalili Sadrabad, S., Jalili Sadrabad, S., (2013), *Lighting of urban public spaces and women's presence, a case study: Tehran's Saei Park*, *Armanshahr Magazine of Architecture and Urbanism*
- Bemaniyan, M, Refeyan, M, Zabeiyan, A, (2008), "Assessment of Factors Affective the Promotion of Woman Safety in Urban Envioments", *Jornal of Woman in Development & Polities*
- Boroumand, M. and Toghiani, Sh. and Saberi, H. (2016). *Evaluation of the Effects of Urban Space Components on the Formation of Behavioral Patterns with an Emphasis on Its Genderization (Case Study of District 2 of Tehran)* *Urban Management*. No. 46.
- Boroumand, M., Rezaei, S. (2016), *Evaluation of the Performance of Women's Parks in Promoting Gender Justice in Islamic Cities; Case Study: Azadegan Mother Park, District 15 of the Urban City*, *Women's Journal, Institute of Humanities and Cultural Studies, Year 17, Issue 2*
- Day, K., C. Stump & D. Carreon (2003). "Confrontation and loss of control:
- Day, K.,(2019), "The Ethic of Care and Women,s Experiences of Public Space", *Journal of Environmental Psychology*, 20
- Foxhall, L. and Gabriele, N. (2011)". *Gender and the city before Modernity: Introduction*". *Gender & History, Vol.23 No.3 November 2011, pp. 491–509.*

- Franck, K.,(2022), "Women and Environment in Bechtel, R, & Churchmen, A, (eds) Handbook of Environmental Psychology, John Wiley & Sons, New York
- Jupp, E., (2022). "Women, Communities, and Neighbourhoods: Approaching Gender and Feminism within UK Urban Policy". *Antipode* Vol. 46 No. 5 2014 ISSN 0066-4812, pp. 1304–1322.
- Kiavar, D.,(2020). *User assessment in public spaces by gender: a survey on segmenter and kecgoren parks in Ankara.*
- Krenichyn, K.,(2018), "Woman and physical Activity in a Urban park: Enrichment and support through an Ethic of Care", *Journal of Environmental Psychology*, 24
- Mansouri, E. & Majedi, H., (2017), "Exploring the Meaning of Quality from Urban Space: Users' Viewpoint by Analyzing Conceptual Environment Codes", *Armanshahr Architecture & Urban Development*, 10(20), Autumn 2017, 63-77.
- Mohammadi, M., (2019): "Women and the Gender Justice Approach in Sustainable Development", *Urban Planning Journal*, No. 29.
- Mukhopadhyay, M, & Singh, N,(2023), "Gender Justice, Citizenship, and Development, Ottawa: Zhabaan-international Development Research Centre.
- Pakzad, J., and Bozorg, H. (2012). *Environmental Psychology for Urban Designers*. Tehran: Armanshahr Publications. Volume 1, 13-20.
- Pakzad, J. (2016): *Gender Justice in the Right to the City*, Collection of Articles of the First National Congress of Successful Iranian Women
- Pakzad, J., Bozorg, H. (2012); *Alphabet of Environmental Psychology for Designers*, Armanshahr Publisher.
- Paydar, F. (2018), *Evaluating Gender Considerations in Planning and Creating New Cities*, Collection of Articles of Identity of New Cities, Tehran, New Cities Development Company
- Tamadon, R. (2014); *Women and Urban Spaces, Urban Planning Essays*, Issue 28

COPYRIGHTS

©2023 The author(s). This is an open access article distributed under the terms of the Creative Commons Attribution (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, as long as the original authors and source are cited. No permission is required from the authors or the publishers.

