Measuring and evaluating the quality of urban walkways from the perspective of the creative urban space

Ameneh Ekrasardashti 1, Hassan Sajadzadeh 1,* and Farshid Aram 2

1 Department of Urban Planning and Urban design, Bu-Ali Sina University, Hamedan, Iran; H.sajadzadeh@gmail.com
2 Escuela Técnica Superior de Arquitectura, Universidad Politécnica de Madrid-UPM, Madrid 28040, Spain; Farshid.aram@alumnos.upm.es
* Correspondence: sajadzadeh@basu.ac.ir

Abstract: In recent years, urban planners and designers have paid attention to improve the creative factors in big and small cities in order to make the urban environment more attractive. It seems that improving desirable urban environmental qualities and walkability approaches such as flexibility, happiness, and vitality, provides the necessary background for creating creative urban spaces. The case study zone is urban walkways in Rasht that has been completed four years ago. In this paper, after conceptualizing the nature of the creative city, as well as reviewing the views of the thinkers regarding the qualities of the environment, a conceptual model of creative urban space has been developed. Then, the indicators and criteria of creative urban space have been evaluated through the questionnaire and analysis through SPSS software and regression model, Pearson and Friedman. The result of the analyses of the five spatial, functional, social, perceptual, and environmental components and their relationship is expressed that factors such as paving streets, the development of local markets, the Suitability of urban walkways for physically and mentally handicapped people, the use of cultural elements, the use of diverse urban furniture and nightlife after building urban walkways play an important role in the realization of urban creative space in Rasht city.

Keywords: Urban walkways; Creative city, Urban Space

1. Introduction

Cities have always been centers of invention, innovation, and creativity. They have played important roles in the history of human development, creativity, and growth (Volker & Kistemann, 2011; Hosseini et al., 2021). Mumford believes that there are many relationships in the early cities that lead to social innovation and creativity in urban life (Shar’e Poor, 2010). In his view, the city is the manifestation of civilization, which has created many innovations over the centuries. Urban space can also be a good environment for creativity in the city. Since one of the elements of creativity of development in the city is space, therefore, the existence of a favorable public space in the city can provide a suitable platform for attracting the creative class and the emergence of the activity of this social group (Jacobs, 1969). Spaces including desirable environmental qualities such as: diversity, vitality, flexibility, etc., can be the basis for attracting people, profitability to various dimensions of society, such as: production of knowledge and creativity, increasing social capital, creating and strengthening the urban social network and so on. These spaces, due to their very nature, allow the right of entry and the presence of any class, age, race, and trade without any limitations to the general public. It provides a suitable space for gathering and collecting citizens by establishing communication and interactions between them through building communication with the urban
environment. On the other hand, public spaces can be a place to show the creativity of every citizen, because today, the cost of displaying creativity, for example, exhibitions or art galleries, makes creative people more likely to prevent their creativity (Sa’idi, 2010).

In the past two decades, creativity and its relationship with urban spaces have become important discussions in the fields of economics, geography, sociology, and urban studies (Durmaz, 2014). The city’s creativity movement emanates from two basic approaches to reaching a creative city, one that was introduced by Charles Landry (2000) and another by Richard Florida (2005). The first person to discuss the “creative city” is Charles Landry, who writes in 1995-2000 in relation to the creative cities and its branches (landry, 2004). The main idea is that creative professions simply are not motivated by material rewards, but they want a “creative”, “tolerable” and “exciting” place for life (florida, 2002, Vanolo, 2008). In addition, Richard Florida believes that cities are the ground for creativity, which have always been the wheels of the movement, focus, and guidance of human creative energy. Having a creative city needs a ground through which citizens can shape a creative city (Florida, 2002). Also, the creative city is home to art creativity, scientific and technological innovation, and the voice of growing cultures (Ebrahimi, 2008).

On the other hand, urban walkways, having the most social interaction and the appropriate place to establish collective activities and improving the quality of urban space (Aram, Solgi and Holden, 2019), can be a good foundation for becoming a creative space (Nosal, 2009). In fact, once the creativity is put in place, there is an opportunity for citizens to engage in interactions, and this can only be done in urban spaces (Rezghi, 2017). The purpose of this study is to measure the quality of cultural urban walkways from the perspective of the creative city. In a field study on the pedestal of the central part of Rasht city in Iran, physical, functional, social, perceptual and environmental components are studied to measure the quality of the realization of creative urban space.

2. Urban Walkways

Due to the dominance of the car in cities and the diminution of pedestrian presence, the importance of walkability in developing countries is steadily increasing (Iranmanesh, 2008; Chahardowli et al., 2020). Creating a desirable urban environment requires adequate knowledge of walking characteristics and needs, abilities and desires to traffic. It is only based on these features that the walking can be successfully promoted (PQN final report, 2010; Fathi et al., 2020). Walkability capability is the level of utility of the artistic environment for the presence of people, life, shopping, meeting, spending leisure time and enjoying it in one area (Baghaee et al., 2021). The diversity of people’s presence, especially the presence of children, the elderly and people with special disabilities, indicates the quality, success, health and safety of a walkway space (Nosal, 2009; Mansournia et al., 2021; Aram et al., 2020). There are several goals for urban walkways construction projects. Most importantly, urban walkways are designed to improve the safety and mobility of the pedestrians, in addition to helping to walk as a transport mode with an enjoyable experience of walking. Another goal of the sidewalk construction projects is to create a space for various social, cultural and tourism activities and contribute to the region’s economic growth (Iranmanesh, 2008).

2.1. The history of the creative city

The term “creativity”, which has been defined and discussed in many disciplines, including psychology, sociology, anthropology, and economics, has been transformed into an inclusive field of study. The definition of creativity depends on the general characteristics of the community and on the particular discipline to be examined. This term can be broadly defined as the emergence of something transcendent and appropriate from the perspective of a person, group or community (Sawyer, 2006:33). The philosophy of the creative city is that in every city there is always a much greater capacity than imagined in the first place. In this city, urban authorities provide public services and social and economic infrastructure with the most up-to-date, most efficient, most beautiful and most productive way (Mashhad Islamic Council’s research center, 2006). A creative city is predicted by Momford (1983) and Jacobs (1961), a diverse city, and a different city is, in fact, a fair city (Kate Shaw, 2014:9). Part of this widespread expansion of creative city ideals was achieved through the
launch of the World Wide Web Ideas Network at UNESCO in 2004 and was quickly taken into consideration in Europe, America, Asia, and developed countries around the world. (Akbari Motlaq:2013). The creative city has a long unknown history. The idea of the creative city originates from the work of Lewis Mamford (1938), named Cities of Culture and Jane Jacobs (1961), in the book The Death and Life of American Cities. Both of them portrayed a good city as a diverse city with community, economics, culture and art, diversified from production, public participation, and creativity. Years later (Landry & Bianchini, 1995) they suggested that creativity is effective in the local economy. Charles Landry described the creative city as a tool for urban innovators and emphasized that, in modern urban economics, the value of cultural industries as the interconnected sector is the fastest growing (Landry, 2000: 6). Landry and Bianchini also emphasize the creative talent of the native, who, if nurtured, can renew the public and social life of the city (Landry, 2000:22).

![Figure 1. Evolutionary Process of Creativity Approach](image)

2.2. *The theoretical framework of the creative city*

The foundations of the creative city can be considered in three areas of economy, culture and location. Trusted urban environments are managed with recreational and cultural freedoms to attract and retain creative people. Cities are formed as a cultural system by human and natural heritage and are the product of the values and beliefs of their citizens. For this reason, cities must create strong urban environments in order to generate wealth, and culturally establish integrity through better programs of location, economy and culture (AuthentiCity, 2008:21). People, businesses, spaces, links and prospects are the five pillars of creative cities, which considering them is vital for the creation and development of creative cities in the future (Ebrahimi, 2008). There is a strong link between space and creativity. Creative people need space to live, work and show their work. The spaces of a city, both natural and artificial, arouse, adapt and express the creativity of their inhabitants. Because of the most important elements of the creative city, there are desirable and efficient spaces for attracting creative society and displaying innovation and creativity. The idea behind the Florida Theory is known as the “Creative Class”; in short, the city’s economic development depends on the level of attendance and concentration of technology professionals, artists, musicians and, in general, the highly educated group of society, which he calls the “creative class”. Florida believes this is a creative class that creates a dynamic and growing community and attracts other elites. On the other hand, society embraces a creative class that has three components of technology, talent and adaptability (Florida, Gates, Knudsen & Stolarick, 2006). Florida has revealed the pivotal role of “quality of space” in attracting a creative group to a city or metropolis, according to its extensive research on the factors attracting the creative class to cities around the world, especially the United States. Indeed, contrary to previous theories, which considered the attraction of people to a city as a good job and economic factors, he claims that, in the creative group’s perspective the quality of the place together with economic criteria, and even in some cases more than them is important to choose one city for working.
and living. As a result, he is one of the most important ways of attracting and retaining the creative group by promoting the quality of the place and providing the environmental preferences of the creative group (Dadpour, 2011).

By reviewing Florida's many criteria for recruiting a creative group, as well as Landry’s criteria in relation to the creative city, the following are achieved. These are general features of a place to attract more people, especially the creative community. (Florida, 2002). The quality of the urban environment as a kind of concept, on the one hand, is created by the representation of tangible features from the physical environment and, on the other hand, by observer through the perception and identification and evaluation of tangible features (Gulkar, 1996:45). In fact, the quality of the place can be influenced by the users who are present at that location, including the minds, activities etc. on the contrary, this quality influences the absorption or repulsion of individuals, the type and manner in which individuals perform activities, conceptions and mental imagery etc. The public space has the advantages and characteristics that can play a crucial role in creating a creative city, such as: vitality, diversity, identity, attractiveness, economic value and participation, and subsequently improving the quality of life of citizens (Mohammadi, Majid far: 2010). In order to attract a creative class in a city, that city should include the elements that have been raised by various theorists: dynamic public spaces, multicultural diversity, restaurants and cafes, historical and cultural architecture, leisure facilities, investing in artistic fields (Kate Shaw, 2014:3). After reviewing various sources and exploring the ideas of urban planners, effective qualities on the desirability of the spaces and environmental factors affecting the development of the creative pedestrian have been gathered, which includes the following table with 5 components and 44 scales.

In order to achieve the final quality of the urban walkways quality, the criteria have been developed in different aspects in accordance with the creative city approach. selected criteria have been formulated as a form based on the precise adaptation of the indicators and factors affecting the improvement of quality of life and the creation of urban walkways, after studying scientific resources from various thinkers in the field as well as accurate field studies on the case study and the final model of the qualities of the creative urban walkways.

![Figure 2](image-url)

**Figure 2**: Qualities of the walk from the perspective of creative theorists.

**Table 1**: Creative City Indicators from the Viewpoint of Theorists
| index | Sub index | theorist | Measurement metrics for creative city qualities |
|-------|-----------|----------|-------------------------------------------------|
| physical | Pakzad(2007) | Hatefi farajian(2016) | * Existence of rhythm and harmony in elements |
|        | Hatefi farajian(2016) | Smith(2002) | * Existence of rhythm in the view |
|        | Hatefi farajian(2016) | Landry(2004) | * Existence of rhythm on the floor |
|        |                         |           | * Continued walking distance from beginning to destination |
|        |                         |           | * Space unity along the way |
|        |                         |           | * Creative scheme |
|        |                         |           | * Visual Art |
| optional | Variety | Pour ahmad (2013) | * Different usability in space |
|        | DETR(2000) | Gehl(2002) | * Ability to use space at different times |
|        | Florida(2002) | Landry & Bianchini(1995) | * Flexibility in doing planned and unplanned activities |
|        |           | kate shaw(2014) | * The existence of proper construction proportions |
|        | Pakzad (2007) | Pour ahmad (2013) | * Existence of diverse and dynamic range of color spectra along the specific path |
|        | Deter(2000) | Mateo&babiano(2003) | * User variety |
|        |           | Montgomery(2003) | * Variation of activities: formal, inclusive, participatory and individual activities |
|        |           | Hatefi Farajian(2016) | * A combination of relaxed and exciting spaces and attention to the human scale of space |
|        |           |           | * Indigenous and local economy |
|        |           |           | * All inclusiveness |
| flexibility | Pakzad (2007) | Pour ahmad (2013) | * Pleasant space for the presence of the people |
|        | Deter (2000) | Mateo&babiano(2003) | * Psychological comfort |
|        |           | Montgomery(2003) | * 24-hour usage |
|        |           | Hatefi Farajian(2016) | * Existence of walking activity after working hours |
| social | vitality | Landry(2000) | * Existence of vibrant activity at different hours of the day |
|        | Florida(2002) | Montgomery(2003) | * Existence of complexity, attractiveness and visual pleasure in the city’s artificial environment |
|        | Hatefi Farajian(2016) | kate shaw(2014) | * Performing night shows |
|        | kate shaw(2014) | Pakzad (2007) | * Presence |
|        |           | Pour ahmad (2013) | * The existence of pause spaces and behavioral sites |
|        | Abbas Zadeh and Tamri(2012) | Mohammadi (2010) | * The existence of diverse furniture in the path |
|        | Mohammadi (2010) | Abbas Zadeh (2012) | * Providing spaces for gatherings at different night hours |
|        | Abbas Zadeh (2012) | Shokouhi (2010) | * Organized and random social communication |
|        | Shokouhi (2010) |           | * Long presence in space |
### Table 2. The qualities of creative urban walkways from the viewpoints of theorists

| Theorists                | Indicator of creativity                                                                 |
|--------------------------|----------------------------------------------------------------------------------------|
| Richard Florida          | Desirable features of the creative group include: informal activities, interactive activities, inclusive activities |
|                          | Cultural facilities include: special music halls, art exhibitions, theater and more          |
|                          | Health and cleanliness of the city and the natural environment             |
|                          | Preservation of historic buildings and old neighborhoods in the city                |
|                          | Variety of people in terms of: race, age, cultural, gender and, etc.                |
|                          | The desirability of a common territory, such as: favorable transportation, convenient housing, proximity to the workplace, proximity to nature etc. |
| Charles Landry           | Differentiation, tolerance, vitality                                      |
|                          | Educational environment                                                          |
|                          | Communicability                                                                  |
| UNESCO                   | Folk art                                                                        |
|                          | Media art                                                                       |
|                          | Design                                                                          |

| cognitive identity       | Landry (2000)                                                                 |
| Montgomer (2003)         | Hatefi Farajian (2016)                                                        |
|                         | * Comfort and pleasure in space                                                 |
|                         | * Festivals and cultural events                                                 |
|                         | * Street performances                                                           |
|                         | * The existence of collective memories in space                                 |
|                         | * The existence of valuable and outstanding architectural buildings              |
|                         | * The existence of historical works                                             |
|                         | * The existence of native and memorable activities                               |
|                         | * Ability to distinguish paths from other paths and identify them               |
|                         | * The presence of outstanding physical, visual and sign elements                |
|                         | * The existence of memorable buildings                                          |
|                         | * The existence of memorable usages                                            |
|                         | * The existence of memorable environmental elements                              |
| Sense of belonging       | Stubbs (2004)                                                                 |
|                          | Pour Ahmad (2013)                                                              |
| environmental greenery   | Florida (2002)                                                                |
|                          | * Preservation of natural heritage                                             |
| environmental sustainability | Landry (2000)                           |
|                          | * Energy efficiency by focusing on climate and indigenous materials             |
|                          | Florida (2002)                                                                |

Preprints (www.preprints.org) | NOT PEER-REVIEWED | Posted: 28 May 2021
3. Materials and Methods

In order to measure the quality of urban walkways to improve the creative urban space from the studied area, based on 5 components of spatial, social, functional, perceptual and environmental quality, a questionnaire of 60 questions including indicators and criteria of the creative city was set. 300 questionnaires were considered to select sample size according to the busiest hours of presence of people in the range and by the Morgan test. SPSS software version 19 was used to analyze the questionnaires. The reliability of the questionnaire was measured by Cronbach’s alpha method and the number was 0.088, which indicates the reliability and validity of the questionnaire. Also, with field observations and observation carried out on the urban walkways and recording the cultural and creative activities of space at different times and hours, a category and field observations of activities have taken place, which is compared and analyzed with a better understanding of the questionnaire analysis.

3.1. Introducing the scope of the study

The collection of urban walkways of Rasht city is located in the central part of it. The project was launched in 2011 with constructing urban walkways in Alam Al-Hoda, one of the 4 streets leading to the municipality square. And in 2016, the Municipality Square and its other three streets also turned into an urban walkway.

Figure 3, The study area

The cultural urban walkways of Rasht city on the three routes of Imam Khomeini Street from the big market to the Shohadai Zahab Square, Saadi Street from Shahid Beheshti Square to Shohada Square and Shariati Square to the municipality square. This project is the first central part recreation project at the metropolitan level in the country. The area of the central part of Rasht is 26,500 square meters. The route studied has the main square of the city and the four routes leading to it. The construction of this urban walkways in the center of Rasht is the first step in the reconstruction of the city of Rasht, which starts from the Zarjub River and extends to the Aynak Lagoon.

4. Results

One of the output tables of the multivariate regression test is the Model Summary table, which evaluate the correlation coefficient between the variables and the adjusted coefficient of determination. The results of the table indicate that the correlation coefficient (R) between the variables is 0.558, which indicates that there is a strong correlation between the set of independent variables and the dependent variable. On the other hand, the value of the adjusted coefficient (R Square) is 0.311, which indicates that 1.31% of the total creative city index in the central urban
walkways of Rasht depends on the variables listed in the equation. Then, the fitness of the model is evaluated in the ANOVA table. Considering the significance of the F value at the error level of less than 0.002, it can be concluded that a regression model consisting of 5 independent variables and a dependent variable was a good model. and it determines which of the five spatial, social, functional, perceptual, and environmental components are more important than the level of satisfaction in this urban walkways. The next output is the coefficients table, which shows the effect of each of the components in the model.

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---|----------|--------------------|---------------------------|
| 1     |   |          |                    |                           |

Table 3, The qualities of creative urban walkways from the viewpoints of theorists

| Model | Sum of Squares | df | Mean Square | F   | Sig. |
|-------|----------------|----|-------------|-----|------|
| 1     | 57.805         | 5  | 11.561      | 138.17 | 0.001 |
| Residual | 128.174   | 190 | 0.675       |       |      |
| Total  | 185.980        | 195|             |       |      |

Table 4, ANOVA

The table above shows the impact of each of the five urban walkways indicators on realization of the creative with urban walkways of Rasht city. According to the above results, only 3 indexes including functional ($\beta$: 0.150), social ($\beta$: 0.326), and environmental ($\beta$: 0.188) have sig less than 0.05. This suggests that there is a meaningful relationship between these three indicators of the quality of these urban walkways and the dependent variable of satisfaction, and has gained citizens’ satisfaction. The most influential indicator according to people is the standardized coefficient ($\beta$) of the social index. In table 6, using Friedman’s test, we examine the difference between the average user opinion of the indicators of urban creative space. In this table, based on the value of the Chi-Square test, which is meaningful at an error level of less than 0.01, it should be noted that the significance and role of each of the substructures in the creative arena in assessing the level of satisfaction of the people with this urban walk has been meaningful. The results show that diversity and quality of

| Model | Non-standard coefficients | Standardized coefficients | t    | Sig. |
|-------|---------------------------|---------------------------|------|------|
|       | B            | Std. Error | Beta  |      |      |
| Citizens’ satisfaction physical | 0.091 | 0.171   | 0.047 | 0.531 | 0.596 |
| functional | 0.307 | 0.151   | 0.150 | 2.027 | 0.044 |
| social | 0.772 | 0.182   | 0.326 | 4.242 | 0.000 |
| environmental | 0.188 | 0.078   | 0.188 | 2.402 | 0.017 |
| cognitive | 0.135 | 0.096   | 0.092 | 1.402 | 0.163 |
couches, indigenous activities and the presence of different classes of society, women, children and the elderly respectively, the attachment and memory of space, the quality of coffee shops and the diversity of uses, especially cultural and climate-related uses are at the top of the list, and on the other hand, people's level of satisfaction is low in components such as creative imagery, indigenous economies, attractive uses, vitality, and street activities.

| Chi-Square:1785.528 | Asymp.Sig:0.00 |
|---------------------|----------------|
| environmental       | cognitive      | social            | functional      | physical |
| 29.95               | Preservation   | Memorable         | Women presence  | Attractive      | creative  |
| of nature heritage  | 20.94          | 8                 | 21.85           | uses            | view      |
| 35.89               | Attention to climate | 16.58   | appointme      | Child friendly  | 28.88     | Uses compatibili   |
| 30.57               | Variety of green space | 21.11  | 34.0 8         | Elderly presence| 27.42     | 23.11  | Space Unity     |
| 19.87               | Cultural message | 23.8 0           | Disabled presence| 32.98           | Cultural uses| 30.88 | Building       |
| 21.11               | Historical building | 24.9 5 | Street activity| 31.94           | Variety of uses| 30.35 | View satisfaction|
| 28.8               | exhibitions     | 26.80            | Active uses at night| 30.85           | Color satisfaction|
| 22.6               | 24-houre uses   | 27.23            | Recreationa l uses| 36.01           | furniture |
| 23.0               | vitality        | 23.11            | 29.78           | Local economic |
| 22.8               | Security at night| 29.78            | 21.3 Special occasions| 31            | Space variety |
| 29.6               | Interact with stranger | 26.1 2 | Presence in space |
| 26.3               | Mental comfort  | 26.3             | 23.1 All inclusive |
| 40.5               | Native activity | 8                | 0.8 All inclusive |

Considering that, according to Table 5, social, functional and environmental factors had a significant relationship with the realization of creative urban space, Pearson correlation coefficient was used to measure the correlation of these components in Table 7. The results of the analysis show that there is a significant relationship between environmental, social and functional (meaningful level less than 0.05). The beta coefficient also shows the degree and level of this effect, the environmental and social component has a beta coefficient of 0.207, which indicates a direct and two-way relationship with 0.207. There is also the highest correlation between functional and social components with 0.578. In another analysis of interpreting of certain activities in space, the existing activities are categorized and the following figures are extracted.
Field observations also confirm the validity of questionnaire analyzes, as shown in the diagram above. In this walkway, by organizing various events at various festivities and events as well as diverse activities all day and, most importantly, to provide a suitable field for the presence of different people, has caused the involvement of people in space so that spontaneous activities such as street music, street performances, nightlife, and other artistic and cultural activities are always seen in these streets.

![Figure 4](image)

**Figure 4. Cultural and Creative Activities in the City of Rasht**

5. Discussion and Conclusion

This research has been conducted to measure the quality of urban walkways from the perspective of creative urban space. Among the determined components and their qualities in realizing the creative urban walkway, social, functional and environmental components show a direct and indirect impact. On the other hand, between the three components mentioned, the social component is directly related to both the functional and environmental components. In this sense, by promoting the indicators mentioned in the social component, environmental and functional components are also promoted. Also, by measuring the indices of the mentioned components separately, we found that in terms of citizens, the qualitative and qualitative characteristics of the coffee shops (27.42 ), cultural usage(32.98), and general variety of uses(31.94), Native activities(40.58) exhibitions (28.88), interactions with strangers (29.63), the presence of women(40.48), the presence of the elderly(30.42),
the presence of children (34.08), memorability (35.98), attention to the historical building (21.11), place attachment (21.11), attention to environmental climate features (35/89) have the greatest impact on improving the quality of the environment in order to reach the creative urban walk.

This paper seeks to measure and evaluate the rate of feasibility of making creative urban spaces after turning the streets in central urban fabric into urban walkways. Based on this, the research findings showed that after turning the streets in central fabric of Rasht city into urban walkways implemented by public sector, the participation of inhabitants for paving streets, improving urban furniture as well as considering showcases and building facades for shops have been increased by their owners and activities like holding cultural and artistic ceremonies and festivals, public arts, developing collective memories, the presence of different age and sex groups, the presence of physically and dynamically disables, developing nightlife, developing local economy, preserving cultural heritage, the participation of inhabitants in promoting spatial qualities, urban happy spaces and etc. which all are indicators of creative urban space, has increased in these walkways.

![Figure 5](Preprints (www.preprints.org) NOT PEER-REVIEWED Posted: 28 May 2021)

Figure 5, Strategies to promote the city’s creative indicators on the cultural urban walkways of Rasht, Source: authors

Based on this, suggestions important can be made for turning urban walkways into creative urban spaces.

- Creating a suitable field for activities related to local arts, tourism attraction, creative industries
- Facilitate citizen participation in urban walking
- Attention to holding celebrations, commemorations and local celebrations in the process of urban walkways
- Attention to the facilities necessary for the participation of all strata as well as diverse social groups in the process of urban walkways

**Funding:** This research received no external funding

**References**

1. Abbaszadeh, Shahab, Soda Tarmari (2012) Investigating the Impact Factors for Improving Qualitative Qualities through Increasing the Levels of Social Interests, *Journal of Journalism, Urban Research, Quarterly.*
2. Akbari Motlagh, Mostafa (2013), feasibility study on sustainable development of urban economics based on creativity and innovation with an emphasis on global experiences, National Conference on Creative Cities, Ideas and Challenges, International Campus of Tehran University

3. Aram, F., Solgi, E., Baghaee, S., Higueraes Garcia, E., Mosavi, A., & Band, S. S. (2020). How parks provide thermal comfort perception in the metropolitan cores; a case study in Madrid Mediterranean climatic zone. Climate Risk Management, 30. https://doi.org/10.1016/j.crm.2020.100245

4. Aram, F., Solgi, E., & Holden, G. (2019). The role of green spaces in increasing social interactions in neighborhoods with periodic markets. Habitat International, 84, 24–32. https://doi.org/10.1016/j.habitatint.2018.12.004

5. AuthentiCity. (2008). "Creative City Planning Framework A Supporting Document to the Agenda for Prosperity: Prospectus for a Great City" Prepared for the City of Toronto.p21.

6. Beca, S. T. of. (2007). Pedestrian planning and design guide. Report. Wellington, N.Z.: Land Transport New Zealand.

7. Baghaee, S., Nosratabadi, S., Aram, F., & Mosavi, A. (2021). Driving factors behind the social role of retail centers on recreational activities. Cogent Business and Management, 8(1). https://doi.org/10.1080/23311975.2021.1905218

8. Bell, M., Fosse, N., Lamont, M., Rosen, E., Smith, R., Warfield, K., … Narayan, D. (2002). The creative city: a matter of values. Journal of Urban Affairs, 15(5), 225–249. https://doi.org/10.1093/wbro/15.2.225

9. Chahardowli, M., Sajadzadeh, H., Aram, F., & Mosavi, A. (2020, June 1). Survey of sustainable regeneration of historic and cultural cores of cities. Energies. MDPI AG. https://doi.org/10.3390/en13112708

10. Dadpour, Sarah (2011), Attraction of creative class in Tehran with the help of urban design; Sahab Scientific Journal, Number 55, pp. 51-65.

11. Dter (2000), urban planning in the planning system, London, DETR & CABE

12. Durmaz, S. B. (2015). Analyzing the Quality of Place: Creative Clusters in Soho and Beyoğlu. Journal of Urban Design, 20(1), 93–124. https://doi.org/10.1080/13574809.2014.972348

13. Ebrahim, Mehran (2010), Meeting of the People: Concepts, Policies, Studying in the Unforeseen Successive Cities; Tehran University of Science and Technology, Tirmach, Cultural Center, Tehran.

14. Fathi, S., Sajadzadeh, H., Sheshkal, F. M., Aram, F., Pinter, G., Felde, I., & Mosavi, A. (2020). The role of urban morphology design on enhancing physical activity and public health. International Journal of Environmental Research and Public Health, 17(7). https://doi.org/10.3390/ijerph17072359

15. Florez, J., Muniz, J., & Portugal, L. (2014). Pedestrian Quality of Service: Lessons from Maracanã Stadium. Procedia - Social and Behavioral Sciences, 160, 130–139. https://doi.org/10.1016/j.sbspro.2014.12.124

16. Florida, R. (2002). The Transformation of Everyday Life. In The Rise of the Creative Class (pp. 1-17,353-354). New York City: Basic Books. https://doi.org/10.1111/j.1467-8691.2006.00398.x

17. Florida, R., Knudson, B., & Stolarick, K. (2010). The University and the Creative Economy. Education in the Creative Economy - Knowledge and Learning in the Age of Innovation, (December), 45–76. https://doi.org/10.1037/0022-0663.94.3.545

18. Gehl, J. (2002). Public Spaces and Public Life, City of Adelaide, (A.Ghafari, Trans). The Danish Architectural Press.

19. Ghorbani, Rasool, Hossein Abadi, Said, Taani, Ali (2013) The Cities of the Kilah, An Approach to the Middle East, Theory of Culture, Theory of Culture, Saltsum, No. 11, pp. 18-10

20. Hatefi Farajian, Fereshteh, Farah Habib, 3Fatemeh MohammadniaGharraei (2016), Strategies to Make a Creative Urban Space with an Emphasis on Interactive Lighting (Case Study: Ahmadabad Avenue of Mashhad-Iran), International Journal of Architecture and Urban Development. NO1

21. Hosseini, F., Sajadzadeh, H., Aram, F., & Mosavi, A. (2021). The impact of local green spaces of historically and culturally valuable residential areas on place attachment. Land, 10(4). https://doi.org/10.3390/land10040351

22. Jacobs, J. (1961). The Death and Life of Great American Cities. In New York (Vol. 71, p. Alexander, C., Ishikawa, S., Silverstein, M. (19). https://doi.org/10.2307/794509

23. Jacobs, J. (1961). The Death and Life of Great American Cities. In New York (Vol. 71, p. Alexander, C., Ishikawa, S., Silverstein, M. (19). https://doi.org/10.2307/794509

24. Kambiz, Razh, Maedeh Razi: Analysis (1396) Indicators Effective on the Creation of a Creative City, Silk Journal, No. 4, p. 76
25. Landry, C. (2000). The Creative City and Beyond. In The Creative City: A Toolkit for Urban Innovators (pp. 197–223).

26. Landry, C., & Bianchini, F. (1995). The creative city. Demos (p. 31). London: Demos.

27. Leyden, K. M. (2003). Social Capital and the Built Environment: The Importance of Walkable Neighborhoods. American Journal of Public Health, 93(9), 1546–1551. https://doi.org/10.2105/AJPH.93.9.1546

28. Mansournia, S., Bahrami, B., Farahani, L. M., & Aram, F. (2021). Understanding children’s perceptions and activities in urban public spaces: The case study of Zrêbar Lake Waterfront in Kurdistan. Urban Studies, 58(2), 372–388. https://doi.org/10.1177/0042098020903008

29. Mateo-Babiano, I. (2003). Pedestrian Space Management as a Strategy for Achieving Sustainable Mobility. From the website: http://www.oikos-international.org/fileadmin/oikos_international / international/Summer_Academies_old_ones / edition_2003/Papers/paper_babiano.pdf

30. Methorst, R., Monterde i Bort, H., Risser, R., Sauter, D., Tight, M., & Walker, J. (2010). PQN Final Report. COST Office (pp. 1–140). WALK21. https://doi.org/978-0-9566903-0-2

31. Mohammadi, Kamal, Majidfar, Farzan (2010) The era of Creative Cities, The Magazine of Shahr-e-Municipality, 100, pp. 21-16

32. Montgomery, J. (2003). Cultural quarters as mechanisms for urban regeneration. Part 1: Conceptualising cultural quarters. Planning Practice and Research, 18(4), 293–306. https://doi.org/10.1080/1561426042000215614

33. Mumford, L. (1938). The Culture of Cities. Metropolis Center and Symbol of Our Times, 311. https://doi.org/10.1017/CBO978107415324.004

34. Nasim Iranmanesh, Pedestrianisation a great necessity in urban designing to create a sustainable city in developing countries, 44th ISOCARP Congress 2008

35. Nosal, B. H. (2009). Creating Walkable and Transit-Supportive Communities in Halton, Region Health Department of Halton University, p7

36. Owen, N., Humpel, N., Leslie, E., Bauman, A., & Sallis, J. F. (2004, July). Understanding environmental influences on walking: Review and research agenda. American Journal of Preventive Medicine. https://doi.org/10.1016/j.amepre.2004.03.006

37. Pakzad, Jahanshah (2007), Design Guide for Urban Spaces in Iran, Center for Architectural Urban Studies and Research, Shahidi Publishing House, Third Edition, Pages 281-279

38. Pourahmad, Ahmad, Arzoo Sharifi (2013), Measurement and comparison of pedestrian quality in Haft Houz and Moghaddam neighborhood of Tehran, Journal of Geographic Space, No. 6

39. Radiation, Parvin. (2012) The Space of Mythology. Village seminar Tehran: Mayor of Tehran.

40. Saedi, Hadi (2006) City Hall, Mystery Magazine, 100

41. Sawyer, K. R. (2006). Explaining Creativity - The Science if Human Innovation. Creativity and Consciousness: Philosophical and ... (pp. 1–363). https://doi.org/10.1016/0140-1750(88)90050-4

42. Sharapour, Mahmoud (2006): Sociology of the city; Farsum, Tehran, Publishing House

43. Shaw, K. (2014). Melbourne’s creative spaces program: Reclaiming the “creative city” (if not quite the rest of it). City, Culture and Society, 5(3), 139–147. https://doi.org/10.1016/j.ccs.2014.07.002

44. Shojaei, Delaram, Parvin Partay (2014), Effective Factors for Increasing Competitiveness in Global Relations with Negative Scores of Tehran, Journal of Bagh-e-Nozeh, p. 34

45. Shokouhi Dolatabadi, Mahmoud, Mohammad Masoud (2010), Infrastructure for Increasing Social Capital, Scientific-Research Journal of Iranian Scientific Society of Architecture and Urban Development, No. 1, p. 66-55.

46. The Center for the Study of Islam (Meshad, 2010), the city of Khreshhal

47. UNESCO (2007): “Creative Cities Network”. From the website: https://en.unesco.org/creative-cities

48. Vanolo, A. (2008). The image of the creative city: Some reflections on urban branding in Turin. Cities, 25(6), 370–382. https://doi.org/10.1016/j.cities.2008.08.001

49. Völker, S., & Kistemann, T. (2011). The impact of blue space on human health and well-being. Salutogenetic health effects of inland surface waters: a review. International Journal of Hygiene and Environmental Health, 214(6), 449-460.

50. Zacharias, J. (2001). Pedestrian behavior and perception in urban walking environments. Journal of Planning Literature, 16(1), 3–18. https://doi.org/10.1177/08854120212093249
