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Measuring and Evaluating the Quality of Urban Walkways from the Perspective of the Creative Urban Space; Case Study: Central Urban Walkways in Rasht City of Iran[*]

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ABSTRACT

In recent years, urban planners and designers have taken benefits of creativity and cultural and social attractions in urban spaces, as an opportunity to create an environment along with well-being and reconsideration in vitality and an opportunity for the creative class to be present in urban spaces. The current article aims to assess the appropriate qualities of the urban environment as a result of the sidewalk approach to evaluate and measure the creative city on the cultural sidewalk of Rasht in Iran. Consequently, regarding the research method, after explaining the nature of the creative city and also examining the thinkers' views concerning environmental qualities, a conceptual model of creative urban space has been developed. Then, via questionnaire and analysis through SPSS software and regression model, Pearson and Friedman, the indicators and criteria of creative urban space have been evaluated. The results of the analysis of the five physical, functional, social, perceptual, and environmental components concerning the creative urban space reveal that the social, active, and functional components have a more significant level than the other components. Attention to the creative economy, cultural assets, spatial flexibility, urban placemaking, attention to indigenous and local forces and knowledge, promotion of indigenous economy, etc., creative urban environment was achieved. Lastly, based on analysis and empirical evidence, some suggestions are presented to improve the quality of urban spaces to achieve a creative city.

Keywords: Creative City, Urban Sidewalks, Environmental Quality.

1. INTRODUCTION

In recent decades, along with the improvement of the environmental quality of urban spaces, such as the improvement of the quality of sidewalks in urban axes and streets, we are observing the possibility and opportunity of urban creativity. Due to the dominance of cars in cities and the declining presence of pedestrians, the importance of pedestrianization in developing countries is constantly increasing (Iranmanesh, 2008, p. 1). Creating a satisfactory urban environment necessitates the use of local and indigenous knowledge and skills. Based on these characteristics, walkability can be successfully upgraded (Methorst, Monterde-i-Bort, Risser, Sauter, Tight & Walker, 2010, p. 11). The variety 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 pedestrian space (Nosal, 2009, p. 7). Mumford believes that in the early city many relationships led to social innovation and creativity in urban life (Sharepour, 2010, p. 48). According to him, the city is the manifestation of civilization that has created many innovations over the centuries. The existence of a favorable public space in the city can provide a good context for attracting the creative class and the occurrence of the activities of this social group (Jacobs, 1969). Spaces that can include desirable environmental qualities such as diversity, vitality, flexibility, etc., pave the way for attracting people, benefit to various dimensions of society such as the production of knowledge and creativity, increase social capital, create and strengthen the urban social network and. Due to their nature, these spaces allow the right to enter and attend any class, age, race, and guild without any restrictions to the public, and provides an appropriate space for citizens to gather and communicate by establishing communication and interaction between them by establishing a connection with the urban environment. On the other hand, public spaces can be a place to showcase the creativity of every citizen, because today, the high cost of displaying creations, such as exhibitions or art galleries, makes creative people often prevent them from presenting their creativity (Saeedi, 2010).

Guiding urban decisions towards the creative city is one of the most important issues in the field of urban management today, and the idea of the creative city, which has been proposed since the 1980 decade, is directly related to urban regeneration (Ratiu, 2013, p. 125). In the last two decades, creativity and its relationship with urban spaces have become important discussions in the fields of culture, economics, geography, sociology as well as urban studies (Durmaz, 2015). Consequently, one of the most significant necessities of addressing the creative city is comprehensive attention to social, cultural and economic dimensions to improve the quality of urban spaces. Creativity in cities needs the creation of soft and hard infrastructure, including mental infrastructure, the way the city views opportunities and problems, and provide spatial conditions and fostering creativity is through legal structures and incentive packages (Mokhtari Malekabadi, Marsousi Ali Akbari, & Amini, 2015, p.162). The Creativity Movement in a city stems from two basic approaches to achieving the creative city, one proposed by Charles Landry (2000) and the other by Richard Florida (2005). The first to raise the issue of the "creative city" was Charles Landry, who outlined the branches of creative cities in years 1995 to 2000 (Landry, 2000). Likewise, the creative city is home to artistic creativity, scientific and technological innovations, and the voice of growing cultures (Ebrahimi, 2010).

Paying attention to the issue of creative urban space is important because the good design and management of a public domain evokes social interactions and arouses curiosity in people. This allows citizens to learn what is happening in the environment through their interactions with their fellow human beings or elements of space. In this way, citizens have grown intellectually, which leads to creativity. Creativity occurs when there is an opportunity in the city for citizens to interact, and this can only happen in an urban space. The absence of such spaces in the big cities of Iran, both physically and functionally, has been a terrible blow to the body of our urban spaces and has ultimately caused people to flee from the public arena. This study tries to elucidate the solutions to this problem by improving the quality of sidewalks.

In the city of Rasht, there is not a creative public space that, on the one hand, introduces art to the text of people's daily lives and, on the other hand, offers them the creative experience of space. This way, by explaining these types of spaces, citizens will be present in the public arena for different creative experiences in urban spaces and various activities. Since the city of Rasht has taken a step in the direction of cultural regeneration in recent years and its central part has become a sidewalk, it seeks to use more and more of the existing cultural potentials to recover the quality of its urban spaces. This study, while examining the conceptual background of the creative city in the second part, extracted indicators and significant aspects of the creative city based on five indicators: physical, functional, social, perceptual, and environmental, and then in the third part using inferential tests such as regression test, Pearson and Friedman, in the fourth section, assesses and evaluates urban pedestrian spaces from the perspective of a creative city. Lastly, in the fifth section, the discussion and conclusion are discussed based on the research findings, and some suggestions are presented. Based on this, the following hypotheses can be expressed.

1. Paying attention to the spatial quality dimensions such as paving urban bodies and paying attention to the appearance and urban landscape will play a central role in improving the quality of urban spaces from the perspective of a creative city.

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2. The possibility of the presence of informal markets and temporary retailers from an economic and cultural perspective plays a significant role in the manifestation of a creative city in urban spaces.

3. Promoting recreational users and paying attention to the diversity of urban functions and functions play an important role in creating a creative city.

2. RESEARCH BACKGROUND

The term creativity, as defined and discussed in many fields, including psychology, sociology, anthropology, and economics, has made it a pervasive field of research. The definition of creativity depends on the general characteristics of society and the specific disciplines by which it is studied. The term can be broadly defined as the emergence of something transcendent and appropriate from the perspective of an individual, group, or society (Sawyer, 2006, p. 33). The concept of a creative city is focused on cultural productions, i.e. the production of cultural goods and services that are related to activities that are the center of creativity (Rabbani Khorasgani, Rabbani, AdibiSedeh, & Moazani, 2011, p. 161). Nowadays, most artists are looking for cities that have a rich cultural heritage to innovate and hold creative ideas. The idea of the creative city was that it could be used more than the potential that exists in one place (Redaelli, 2011, p. 87). Kakiuchi in a study entitled "Culturally Creative Cities in Japan: Reality and Prospects, City, Culture and Society", concluded that the promotion of traditional handicrafts and other capacity-building measures that help increase the attractiveness of the city is indirectly the equipment of cultural tourism service providers; therefore, creative city policy can increase cultural assets and help change previous growth models to service and sustainable model). (Kakiuchi, 2015). Likewise Savini and Dembski (2016) in an article entitled "Manufacturing the creative city: Symbols and politics of Amsterdam North" found that by looking at symbolic actions, languages , and objects, one can explain that how through symbols that link past images of the manufacturing industry and the human labor force, this political change has been transferred (Savini & Dembski, 2016). Cities have always been a place for innovation, novelty, and creativity and have historically been important for human development, creativity,

and growth (Kistemann, 2011). The philosophy of the creative city is that in any city there is always a much greater capacity than first thought. In this city, city officials provide public services and social and economic infrastructure in the newest, most efficient, most beautiful, and most productive way.

A creative city as predicted by Mumford (1983) and Jacobs (1961), is a diverse city, and a diverse city is a fair city (Shaw, 2014, p. 9). On the other hand, sidewalks with the highest amount of social interactions and a suitable place to establish collective activities and improve the quality of urban space, can be a good ground for becoming a creative space (Nosal, 2009). Part of this widespread distribution of creative city ideals was made possible by the launch of the Global Network of Creative City Ideals in UNESCO in 1995, and quickly gained attention in Europe, the Americas, Asia, and developed countries around the world (Akbari Motlagh, 2013). The main idea is that creative professions are not simply motivated by material rewards, but they need "creative", "tolerable" and "exciting" places for life (Florida, 2002; Vanolo, 2008).

Florida believes that cities are the context of creative manifestation that have always been the wheels of movement, concentration, and direction of human creative energy. Having a creative city necessitates a platform through which citizens can form a creative city. (Florida, 2002). Creative cities have a long unknown history. The idea of a creative city originates from the work of Lewis Mumford (1938) named Culture of Cities and Jane Jacobs (1961) in the book The Death and Life of Great American Cities. They both portrayed a good city as a diverse city with a community, economy, culture, and empowerment, a diversity derived from production, public participation, and creativity. Years later Landry and Bianchini (1995) suggested that creativity is effective in the local economy. Charles Landry considered the creative city as a tool for urban innovators and emphasized that in the modern urban economy, the value of cultural industries as an interconnected sector is growing rapidly. (Landry, 2000, p. 6). Likewise, Bianchini and Landry emphasize indigenous creative talents that if developed can revitalize the public and social life of the city (Landry, 2000, p. 22) The formation of the creative city is described in the figure below.
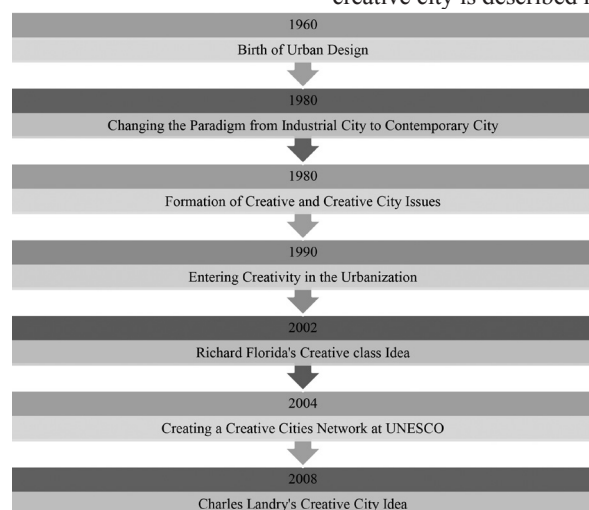

| 1960 |
| Birth of Urban Design |

| 1980 |
| Changing the Paradigm from Industrial City to Contemporary City |

| 1980 |
| Formation of Creative and Creative City Issues |

| 1990 |
| Entering Creativity in the Urbanization |

| 2002 |
| Richard Florida's Creative class Idea |

| 2004 |
| Creating a Creative Cities Network at UNESCO |

| 2008 |
| Charles Landry's Creative City Idea |

Fig. 1. The Evolutionary Process of the Creative Approach

The basics of a creative city can be considered in three areas: economy, culture, and place. To attract and retain creative people, reliable urban environments are managed with recreational and cultural freedoms. Cities as a cultural system are shaped 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 to generate wealth and create cultural integration through better programs between place, economy, and culture (AuthentiCity, 2008, p. 21). The proposed idea in Florida's theory is known as "creative class", in short, it means the economic development of the city with the presence and concentration of professionals advanced technology, artists, musicians, and generally educated class of society which he called "creative class". According to Florida this the creative class that creates a dynamic and growing community and attracts other elites to society. On the other hand, those societies attract creative classes that have three components of technology, talent, and adaptability (Florida, Gates, Knudsen, Stolarick, 2006). Florida, regarding his extensive research on the factors that attract the creative class to various cities around the world, especially the United States, revealed the pivotal role of "place quality" in attracting creative groups to a city or urban area. Contrary to previous theories that the reason for attracting people to a city was the existence of suitable jobs and economic factors, he claims, from the creative group's point of view, the quality of a place along with economic criteria and in some cases even more than them is important for choosing a city for work and life. As a result, he states that one of the most important ways to attract and retain the creative group is to improve the quality of the place and provide the environmental preferences of the creative group (Dadpour, 2011). A creative city with an emphasis on neighborhood and urban spaces, offer identity, the context of using technology in space, the discovery of the talents of the people and a body based on culture and collective spaces, and public spaces suitable for the presence of people, and uses the introduced species as a basis for the formation of cultural and social identity finally, determines the defined performance at different levels in the public space. The structure of the creative city has features that are the foundation of the public space with the high presence of people. These characteristics according to the studied topics and the design of the creative city are as follows:

a) The creative city accelerates social progress in the form of social and cultural institutions.

b) In this city, there is no domination over each other and there is an opportunity for all classes and groups equally.

c) Diverse neighborhoods and prepared spaces

d) Activities and uses proportionate to the scale of performance and flourishing the talent of the people

e) Public spaces with high accumulation capacity

f) Proper access and connection of public spaces

g) A neighborhood with an identity and cohesion that makes a cohesive local community possible.

h) Activity and spatial variety with creative planning

i) Existence of an open and democratic social arena for expressing ideas and expressing popular opinions

j) Participation in urban and local programs through cultural planning (Irandoost & Gholami, 2005, p. 5).

Table 1: Creative City Indicators from the Viewpoint 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, Culture, 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	Viability and Well-Being	Differentiation, Tolerance, Vitality
	Clarity, Trust, Access	Educational Environment
	Exploration and Innovation	Communicability
UNESCO	Nutrition	Folk Art
	Literature	Media Art
	Movie and Music	Design

The place quality can be affected by the people who use it and are present in that place, including mentalities, activities, etc., or vice versa, this quality can affect the attraction or repulsion of people, the type and manner of activities, perceptions, and mental image, etc. Public space has advantages and characteristics that can play a very significant role in creating a creative city; such as vitality, diversity, identity, attractiveness, economic value, and participation, followed by improving the quality of life of citizens (Mohamadi & Majidfar, 2010, p. 40). To attract a creative class in a city, that city must include elements that have

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been proposed by numerous theorists: lively public spaces, multicultural diversity, restaurants and cafes, historical and cultural architecture, leisure facilities, investment in artistic fields (Shaw, 2014, p. 3). After reviewing various sources and research in the theories of urban engineering thinkers, the qualities affecting the desirability of spaces and environmental indicators affecting the formation of creative sidewalks have been collected, which includes the following table with five components and 44 measures.

Table 2: The Qualities of Creative Urban Walkways from the Theorists' Viewpoints

Index	Sub Index	Theorist	Measurement Metrics for Creative City Qualities
Physical	Integration	(Pakzad, 2004) (Hatefi Farajian, Habib, & Mohammadnia Gharaei, 2016; Smith & warfield, 2007; Landry, 2000)	- Existence of rhythm and harmony in elements - Existence of rhythm in the view - Existence of rhythm on the floor - Continued walking distance from beginning to destination - Space unity along the way - Creative scheme - Visual Art
Optional	Variety	(Pourahmad, Hajisharifi, & Ramezanzadeh Lasboyee, 2012) (Detter, 2000; Gehl, 2002; Floreida, 2002; Landry & Bianchini, 1995; Show, 2014)	- User variety - Variation of activities: formal, inclusive, participatory, and individual activities - A combination of relaxed and exciting spaces - attention to the human scale of space - Indigenous and local economy - All inclusiveness
	Flexibility	(Pakzad, 2004; Pourahmad, Hajisharifi, & Ramezanzadeh Lasboyee, 2012) (Detter, 2000; Mateo-Babiano, 2003; Montgomery, 2003; Hatefi Farajian, Habib, & Mohammadnia Gharaei, 2016)	- Different usability in space - Ability to use space at different times - Flexibility in doing planned and unplanned activities - The existence of proper construction proportions - Existence of diverse and dynamic range of color spectra along the specific path - Enclosure
Social	Vitality	(Pakzad, 2004; Pourahmad, Hajisharifi, & Ramezanzadeh Lasboyee, 2012; Abbaszade & Tamri, 2012; Mohamadi & Majidfar, 2010)	- Psychological comfort - 24-hour usage - Existence of walking activity after working hours - Existence of vibrant activity at different hours of the day - Existence of complexity, attractiveness, and visual pleasure in the city's artificial environment - Performing night shows
	Dynamism	(Montgomery, 2003; Landry, 2000; Florida, 2002; Hatefi Farajian, Habib, & Mohammadnia Gharaei, 2016; Show, 2014)	- Presence - The existence of pause spaces and behavioral sites - The existence of diverse furniture in the path
	Sociability	(Montgomery, 2003; Landry, 2000; Hatefi Farajian, Habib, & Mohammadnia Gharaei, 2016) (Shojaee& Partovi, 2015; Abbaszade & Tamri, 2012; Shokouhi dolat abadi, & Masoud, 2010) (Gehl, 2002; NZTA, 2009; Hatefi Farajian, Habib, & Mohammadnia Gharaei, 2016; Leyden, 2003; Show, 2014)	- Providing spaces for gatherings at different night hours - Organized and random social communication - Long presence in space - Comfort and pleasure in space - Festivals and cultural events - Street performances
Cognitive	Identity	(Montgomery, 2003; Landry,2000; Hatefi Farajian, Habib, & Mohammadnia Gharaei, 2016)	- 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

Index	Sub Index	Environmental	Measurement metrics for creative city qualities
Cognitive	Readability	(Partovi, 2012; Pourahmad, Hajisharifi, & Ramezanzadeh Lasboyee, 2012) (Detter, 2000; Montgomery, 2003; Hatefi Farajian, Habib, & Moham-madnia Gharaei, 2016)	- Ability to distinguish paths from other paths and identify them - The presence of outstanding physical, visual, and sign elements
	Sense of belonging	(Pourahmad, Hajisharifi, & Ra-mezanzadeh Lasboyee, 2012)	- The existence of memorable buildings - The existence of memorable usages - The existence of memorable environmental elements
Environmental	Greenery	(Florida, 2002)	- Preservation of natural heritage
	Sustainability	(Landry, 2000; Florida, 2002)	- Energy efficiency by focusing on climate and indigenous materials

To attain the final quality framework of creative sidewalks, the studied criteria in its various dimensions have been formed regarding the creative city approach. Selected criteria according to the exact implementation of indicators and effective factors in improving the quality of life and the creation of creative sidewalks after studying scientific sources from various thinkers in the field and also detailed field studies are compiled in the sample and the final model of creative sidewalk quality has been explained in the form of Figure.
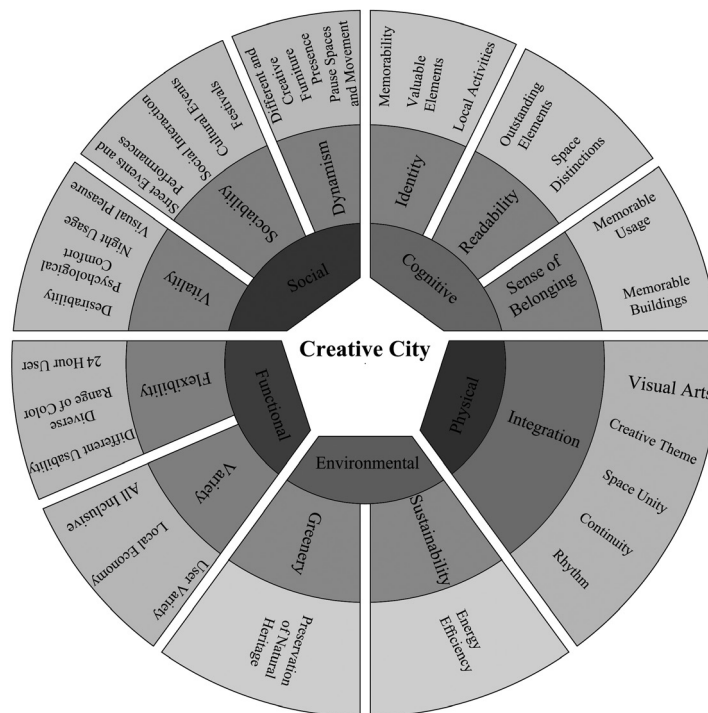

Fig. 2. Diagram of Sidewalks Quality from the Perspective of a Creative City Based on the Theorists Views

3. METHOD

To assess the qualities of the creative sidewalk and to assess the level of people's satisfaction with the study area based on five physical, social, functional, perceptual, and environmental components, a 60-item questionnaire has been prepared including the main indicators and sub-indicators of the creative city. 300 questionnaires have been considered to select the sample size according to the busiest hours of presence in the area and by the Morgan test. SPSS 19 software was used to analyze the questionnaires. The reliability of the questionnaire was measured by Cronbach's alpha method and the number 0.088 was obtained, which indicates the reliability of the questionnaire for further analysis. Regression, Pearson, and Friedman tests were used to measure citizens' satisfaction with the five indicators of the creative city.

Likewise, with field surveys of space, recording the creative and cultural activities of space at different hours and days, a general classification of activities has been done, which is compared and analyzed with SPSS analyzes for a better result.

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4. INTRODUCING THE STUDY AREA

The Rasht sidewalk complex is located in the central part of the city. The sidewalk construction project of this complex started in the year 2011 with the cobbling of the Alam al-Hoda axis, which is one of the four streets leading to the Municipality Square, and in the year 2016, the Municipality Square and its three other streets became the pedestrian axis.

The cultural sidewalk of Rasht in the three axes of Imam Khomeini Street from the entrance of the Grand Bazaar to Shohada Zahab Square, Saadi Street from the entrance of Ustad Sara to Shohada Zahab Square, and Shariati Street to the Municipality Square is the first project to recreate the central texture of metropolitan areas in the country. The area of the central sidewalk of the city of Rasht is 26 thousand and 500 square meters and has been put into operation with a credit of more than 16 billion Tomans. The axis intended for the study has a square which is the main square of the city and has four axes leading to it. This project aims to upgrade the role of pedestrians in the city of Rasht. The construction of this sidewalk continues in the form of the city regeneration plan. The cultural sidewalk in the center of Rasht is the first step of the Rasht city regeneration plan that starts from Zarjoub River and extends to Eynak Lagoon.
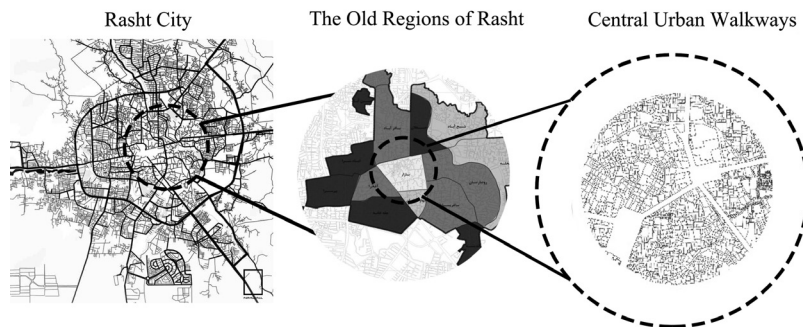

Rasht City The Old Regions of Rasht Central Urban Walkways

Fig. 3. Location of the Study Area

5. ANALYSIS OF FINDINGS

One of the output tables of the multivariate regression test is the Model Summary table, which examines the correlation coefficient between the variables and the adjusted coefficient of determination. The results of the table indicate that the value of the correlation coefficient (R) between the variables is 0.558, which indicates that there is a very strong correlation between the set of independent variables and the dependent variable of the research. The value of the adjusted coefficient (R) Square is equal to 0.311 percent, which indicates that 1.31 percent of the total creative city index on the central sidewalk of Rasht depends on the variables mentioned in the equation. Then the fit of the model is evaluated in the ANOVA table. Considering the significance of the value of F test in the error level less than 0.002, it can be concluded that the research regression model consisting of five independent variables and one dependent variable is a good model and determines which of the five components of physical, social, functional, perceptual and biological has been more important in the level of satisfaction on this sidewalk. The next output is the coefficients table, which shows the effect of each of the components in the model.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.558[a]	.311	.293	.82134
a. Predictors: (Constant), Cognitive, Environmental, Social, Physical, Functional				

Table 4: ANOVA

	Model	Sum of Squares	df	Mean Squares	F	Sig.
1	Regression	57.805	5	11.561	17.138	.000[a]
	Residue	128.174	190	0.675		
	Total	185.980	195			
a. Predictors: (Constant), Cognitive, Environmental, Social, Physical, Functional						
b. Satisfaction with Space: Dependent Variable						

The table below shows the effectiveness of each of the five indicators of creative sidewalks on citizens' satisfaction on the sidewalks of Rasht. Based on the above results, out of the five mentioned indicators, only functional indicators ($\beta=0.150$) and social ($\beta=0.326$) and environmental ($\beta=0.188$) have a sig. level of less than 0.50. This indicates that there is a significant relationship between these three indicators of the qualities of the mentioned creative sidewalk and the dependent variable of satisfaction and has gained the satisfaction of citizens. The most effective index in the eyes of the people according to the standardized coefficient (β) is a social index. Therefore, achieving a creative urban space requires measures to improve both perceptual and physical indicators.

Table 5: Analysis of the Effectiveness of Each Coefficients

Coefficients					
Model	**Non-standard Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
Citizens' Satisfaction	1.190	0.473		-2.519	0.013
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

To interpret the results of the Friedman test, to find out whether the difference between the mean votes of the individuals from the indicators is significant or not, we must use the results of the table entitled "Test Statistics". In this table, citing the value of the Chi-Square test, which is significant at an error level less than 0.10, it should be said that statistically, the importance and role of each of the sub-indicators of the creative sidewalk in assessing the level of people's satisfaction with this sidewalk has been significant.

Table 6: Friedman Test

Asymp.Sig:0.00								Chi-Square:1785.528	
Environmental		Cognitive		Social		Functional		physical	
Creative View	21.85	Attractive Uses	21.85	Women Presence	40.58	Memorable	20.94	Preservation of Nature Heritage	29.59
Space Unity	23.11	Uses Compatibility	28.88	Child Friendly	34.08	Appointment	16.58	Attention to Climate	35.89
Paving	25.43	Café Shop	27.42	Elderly Presence	30.42	Sense of Belonging	21.11	Variety of Green Space	30.57
Building	30.88	Cultural Uses	32.98	Disabled Presence	23.80	Cultural Message	19.87		
View Satisfaction	30.35	Variety of Uses	31.94	Street Activity	24.95	Historical Building	21.11		
Color Satisfaction	30.85	Active Uses at Night	26.80	Exhibitions	28.89				
Furniture	36.01	Recreational Uses	27.23	24-houre Uses	22.64				
Edge of the Elements	28.62	Local Economic	23.11	Vitality	23.07				
		Space Variety	29.78	Security at Night	22.89				
				Special Occasions	21.31				
				Interact with Stranger	29.63				
				Presence in Space	26.12				
				Mental Comfort	26.37				
				All Inclusive	23.11				
				Native Activity	40.58				

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The results analyze show that the diversity and quality of benches, indigenous activities, and the presence of different sectors of society, respectively women, children, and the elderly, the attachment and memories of the space, the quality of coffee shops and the diversity of land uses, especially cultural land use are the priority of people. On the other hand, the level of people's satisfaction in components such as creative appearance, local economy, attractive land uses, and vitality and street activities is low, so to promote the components of the creative city in this space, we will need to improve and organize these components.

We use the Pearson correlation coefficient to measure the relationship between the three components of social, environmental, and functional.

Table 7: Pearson Correlation Coefficient

		Environmental	Social	Operational
Environmental	Beta Coefficient	1	0.207**	0.091
	Sig. (2-Tailed)		0.003	0.202
	N	200	200	200
Social	Beta Coefficient	.0.207**	1	0.578**
	Sig. (2-Tailed)	0.003		0.000
	N	200	200	200
Functional	Beta Coefficient	0.091	0.578**	1
	Sig. (2-Tailed)	0.202	0.000	
	N	200	200	200
**. Correlation is Significant at the 0.01 Level (2-Tailed).				

The results of the analysis show that there is a significant relationship between environmental and social components as well as social and functional (the level of significance is less than 0.50). The beta coefficient also shows the extent and degree of this effect. For example, the environmental and social component has a beta coefficient of 0.207, which indicates a large direct and two-way relationship as 0.207, and the promotion of each leads to the promotion of the other. In another analysis that captures specific activities in space, the existing activities are categorized and the following diagram is extracted..
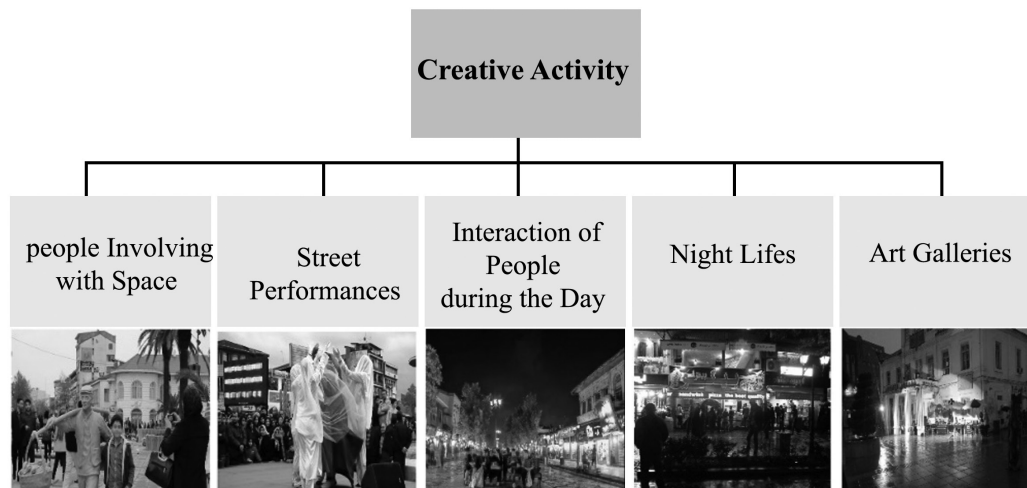

Fig. 4. Cultural and Creative Activities on the Sidewalk of Rasht

Field observations also confirm the validity of the questionnaire analysis according to the above figure. As in regression analysis, the social index was obtained as one of the indicators with high satisfaction, this was also confirmed by field studies and observations of the activities in the axis. This sidewalk by holding various programs in various festivals and ceremonies as well as keeping the space active at all hours of the day and night by the people and officials and most importantly providing a suitable ground for the presence of people, especially young people, allow people to flourish and get involved in the space so that spontaneous activities such as street music are always seen in different parts of this axis.

6. DISCUSSION AND CONCLUSION

This study was conducted to measure cultural sidewalks from the perspective of the creative city to determine the degree of citizens' satisfaction with the components of the creative city in space. To this end, 300 questionnaires were filled out, 41% of the respondents

were male and 58% were female. After collecting the questionnaires and analyzing them by SPSS, we have reached the results that the identified components and their qualities in the realization of creative sidewalks, social, functional, and environmental components have a direct and greater effect on citizens' satisfaction. On the other hand, among the three mentioned components, the social component has a direct relationship with both functional and environmental components. This means that by improving the indicators mentioned in the social component, environmental and functional components are also promoted. Likewise, by measuring the indices of the mentioned components separately, it was determined that from the citizens' point of view, the quantitative and qualitative characteristics of furniture, (1.36), facades of buildings (35.30) and their color (85.30), quantitative and qualitative characteristics of cultural uses (98.32) and in general the diversity of land uses, (94.31), indigenous activities (58.40), exhibitions, (89.28), interactions with strangers (63.29), the presence of women (58.40) and the elderly, (42.30), being child-centered (08.34), being memorable, (89.35), attention to historical buildings (11.21), attachment to space (11.21), attention to

climatic characteristics of the environment (8935), have the greatest effect on improving the quality of the environment to achieve a creative sidewalk.

The sum of investigations in this study indicates the significant effect of social, functional, and environmental indicators on the level of citizens' satisfaction with urban spaces. Regarding the sub-indicators set for these dimensions of urban space such as 24-hour use, the existence of pauses spaces and various movements, live performances and shows, festivals and cultural events, local and art markets, diversity of uses and green space are all indicators of the creative city. It can be concluded that the existence of creative city indicators and bringing the urban space to the qualities that are expected of a creative urban space can increase the level of citizens' satisfaction with that space. Consequently, to achieve a sidewalk with the qualities of a creative city, the promotion of other dimensions of the mentioned indicators should be considered. Since social, functional, and environmental components have a higher priority for citizens, promoting these components in the study area, can have a significant effect on creating opportunities to achieve a creative environment.
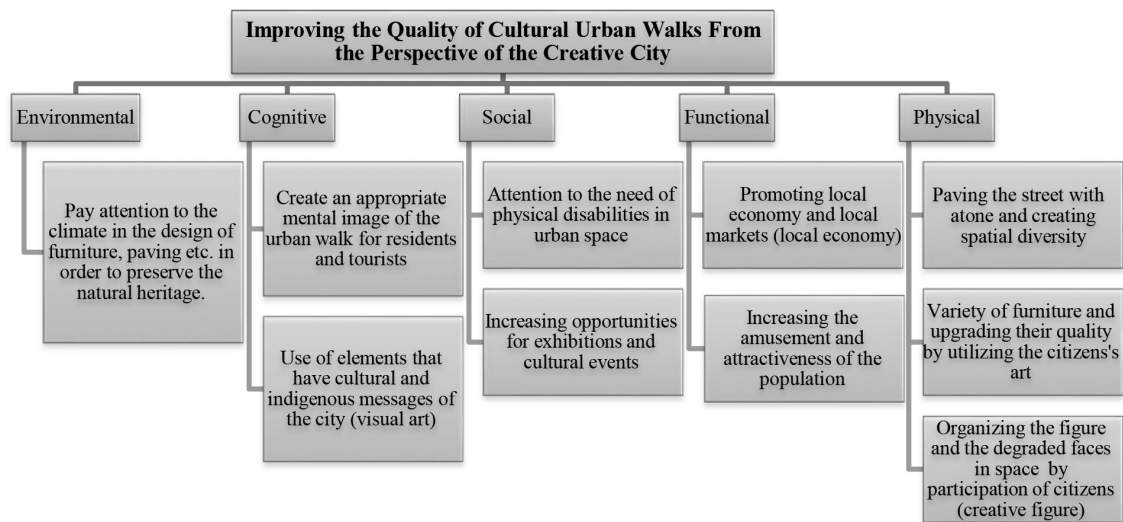

Fig. 5. Strategies to Improve the Indicators of the Creative City in the Cultural Sidewalk of Rasht

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