World Journal of Environmental Biosciences

Available Online at: **www.environmentaljournals.org**

Volume 8, Issue 3: 56-64

ISSN 2277- 8047

The Role of Developing Pedestrianism as a Means of Transportation in Socio-Cultural and Contextual Dimensions of the Urban Spaces

Azadeh Avazpour

MA graduate, Geography and Urban Planning, Islamic Azad University, Shirvan Branch, Shirvan, Iran.

ABSTRACT

Nowadays, the extreme dependency on vehicular traveling, hence the negligence of walking and organizing of its specific spaces, is amongst the substantial problems of the urban life. Public spaces and areas constitute one of the essential and necessary elements of today's urban life and the most important part of the cities. Walking is one of the most stable methods of transportation and can cause a sustainable development of the cities from various contextual, social, environmental, cultural, economic, and political aspects. Moreover, as the primary ground of the pedestrians' movements, walkways act as the growth centers in the cities' levels and have a considerable effect on the correction and provocation of their peripheral spaces. The primary goal of the present study was the investigation of the role of developing "pedestrianism" as a way of transportation on the socio-cultural and contextual dimensions of the urban spaces. The study method was descriptive-analytical, and background-descriptive or extensive (survey) research has been applied in parts of the study stages. The study population included the residents of Vali-e-Asr Estate Residents in Bojnourd with the population of its neighborhoods reaching 3800 individuals based on the census in 2016. A simple randomized sampling method was used. The descriptive and inferential analyses of the data were performed by SPSS. According to the study results, there was a significant relationship between the contextual, spatial, social, and cultural dimensions with pedestrianism development.

Keywords: *walkway, transportation, sociocultural dimensions, contextual dimensions, urban space*

Corresponding author: Azadeh Avazpour
e-mail ✉ Azadeh.avazpour @ gmail.com
Received: 02 March 2019
Accepted: 27 July 2019

1. INTRODUCTION

Until before the industrial revolution, the size and proportions of the elements constituting the city have been based on human scales, and the urban movement patterns, as well, have been based on the pedestrians' movements. Furthermore, the human scale and pedestrian movement have formed the structure of the urban domiciles. However, it was with the formation of the industrial revolution and the subsequent modernism mindsets and, particularly, the proposing of the theory of "city in proportion to personal car" that the role and importance of the pedestrians' spaces were diminished, and the walking citizen gradually lost his position and priority in the urban space (Asadollahi, 2004, p.32).

Since the late 1960s and with the revealing of the adverse effects of the automobiles' presence in the cities and also following the clarifications by such thinkers as Jean Jacobs, the city-building knowledge predominantly became inclined towards limiting the vehicular movements for the revitalization of the urban spaces in such a way that the public areas were defined as the most important part of the cities and urban environments (Tibbalds, 1992, p.15). In addition, the ability to create a face-to-face relationship has caused the urban spaces to be essentially proposed as a container for the formation of social capital and paying attention to the enhancement of their qualities as one of the most important goals of the urban designing knowledge during the contemporary era (Madanipour, 2005, p.249).

One of the most important properties of the cities, distinguishing them from the other human dwelling places, is the human beings and goods' speed of movement therein. Transportation has become one of the most important challenges of contemporary urbanization worldwide. On the other hand, nowadays, the emphasis is intensively being made on the sustainable development and paying attention thereto in various aspects of the human beings' lives, and many scientific and practical interventions are being made for substituting the methods complying with the environment in lieu of linear developments. Encouraging the pedestrians' movement and creation of the walkways and the related facilities have been focused from this same perspective, and various studies are expressive of the pioneering countries' more than three decades of history in this regard (Dixon, 2017, p.25).

Citizens like walkways for the security and comfortability of its spaces and the absence of vehicles and pollution. Citizens gradually get accustomed to the presence in the city and performing of civil activities and spend more time in the urban spaces and this can per se contribute to the improvement and enhancement of the culture and habit of urbanization, including the observance of the others' rights and feeling responsibility before the society. This issue is born out of the sustainable city mindset in such a manner that the increase in the social justice and equality of the citizenship rights are amongst the most essential principles of a sustainable city and this principle is vividly visible in the walkways as one of the important elements of the sustainable urban development. The creation of high quality and sustainable urban environments has always been a challenge for urban designers and planners. The modern perception of the urban planning is being navigated towards the promotion of the pedestrians' movement and, in the meanwhile,

limiting the excessive use of vehicles (kilo Monokrousou and Maria, 2017, p.3). The decrease in the amount and density of the vehicles' traffic, reduction in the movement of heavy vehicles on the local streets, decrease in the contact points on the densely congested junctions and intervening to reduce the frequency of the accidents and their intensities cause an increase in the walking likelihood. Therefore, the pavements should be constructed in places wherein there is low traffic of the vehicles (Kaplan et al, 2016, p.55).

Walkways play an effective role in discovering and perceiving the contextual and social environment of the city. The more the spaces and facilities of the pedestrian's favorable walking are increased, the more it will be likely for the pedestrian to readily perceive the urban environment and take advantage of the visual, cultural, and social values therein. The pedestrian's perception is disordered due to the presence and movement of the vehicles. Thus, the real visage of the city remains hidden behind its machine veil. The individuals' mental image of the city is influenced by the activities on the streets and the presence or absence of the walkers. Thus, the existence of the walkway in the city contributes to the enhancement of the individuals' mental image of the city (Aremu and Vijay, 2016, p.51).

In walking spaces unlike vehicular movement spaces, nonvisual senses also play an active role in comprehending the environment. The existence of various kinds of sounds and odors, the possibility of touching the surfaces and volumes, and the possibility of tasting the foods and drinks provide multisensory conceptions and diverse psychological and affective impressions in the walkway space. The same diversity and complexity add to the attractiveness and motivational power of the walkway. This is undoubtedly enumerated amongst the qualitative values of the environment that result in the pedestrians' presence therein and guaranteeing the walkway's sustainability for long years (Shahbazi, 2009, p.98).

Considering the air pollution, noise and the disorder in the great cities' visages as well as the cities' distancing away from the healthier and more human spaces, it is currently necessary to offer solutions for creating liveliness and happiness, and elevate the people's health in the cities and put these solutions into practice following thorough research on them. Performing such studies also causes awareness in officials and researchers as well as the people. So, they can better and more seriously approach these problems and pave the way for further research and coming up with novel theories in this regard. Amongst the solutions is the creation of the pedestrian-oriented routes that have not been either theoretically or in urban planning and designing of the cities taken into account during the shortage of urbanization in Iran. The current research paper deals with the role of "pedestrianism" development, as transportation means in the socio-cultural and contextual aspects of the urban spaces, for it is one of the issues the favorability of which brings about an increase in the individuals' walking frequency.

2. STUDY BACKGROUND

Pourahmad et al (2018) performed a study named "investigating the effect of the contextual-spatial aspects on the pedestrianism in Tehran (case study: Amir Abad and Tehran University Neighborhoods)". The study method in the current research paper is a descriptive-analytical survey. A questionnaire was used for inquiring about the citizens' ideas. The study population included the inhabitants of Amir Abad and Tehran University Neighborhoods, out of which 384 individuals were selected randomly using Cochran Formula. In order to make their research more precise, the authors increased the study sample volume's number to 400 individuals. The data were analyzed using SPSS v. 21 and LISREL v. 8. The study results indicated that there is a relationship between the contextual-spatial dimensions and the encouragement of walking. In addition, the factor loads obtained for all of the study indices are reflective of the idea that the indices selected for assessing the spatial-contextual dimensions giving rise to the encouragement of walking correctly evaluate them in such a way that safety index with a factor load of 0.99 amongst the contextual dimensions, and security index with a factor load of 4.57 amongst the spatial dimensions accounted for the highest effect. Additionally, the effect of the contextual and spatial dimensions on the encouragement of walking is direct and positive in such a way that the contextual aspects and spatial aspects were found respectively explaining 0.34 and 0.42 percentages of the variance in walking encouragement.

Yazdani (2015) conducted research under the title "barriers to the development of walking as a transportation model in Isfahan in regard of the contextual-spatial dimensions (case study: Isfahan's Sepah Street)". Nowadays, the majority of the urban public spaces and streets are severely influenced by the cars' dominance due to the immethodical increase in the vehicles' numbers and dependency of the urban life pattern to them. The formation and development of the majority of the urban spaces, streets, and even alleys in Iran's new cities are based on the vehicular scales and traffic-related issues. The narrow paths existent in the margins of the vehicular routes in the streets of the cities as the walkway seem to be the residues of the main vehicular routes remaining only for the emergency coming and going of the pedestrian citizens. Isfahan is amongst the few cities in Iran that still relatively exercising pedestrianism in some of its urban spaces and streets. Sepah Street is amongst the historical remnants of Isfahan's Safavid Era Baghshahr that was used in that period as a path connecting Chahar Bagh Square, Alighapou Edifice, and Imam Square. It is now accommodating a very large volume of pedestrians and tourists on a daily basis due to the existence of these ancient artworks. Nevertheless, the presence of the mechanized vehicles has caused the diminishing of some of the properties of the walkways' urban spaces and the process-oriented characteristics thereof. Thus, considering the fact that these pedestrian-oriented features exert a large deal of effect on the qualitative and quantitative formation of the city's contextual structure and enhancement of the citizenship life's quality, the present study seeks identifying the barriers and problems of developing walking on this street and offering the possible, necessary and required solutions for the recovery of these properties and facilitating and encouraging walking as a transportation model.

Shahivandi and Ghal'ehno'ei (2014) carried out research entitled "the investigation and analysis of the pedestrianism capability of the pedestrian paths in Isfahan". The study made use of a survey research method and selected 400 individuals as the study sample volume using Cochran Formula. Various scales were subsequently used for assessing different qualitative and quantitative aspects of the walkways. To analyze the data, the TOPSIS evaluation method was employed and cluster analysis

was the method of choice for categorizing the study axes. The study results indicated that there is a very high difference amongst the walkways in Isfahan in terms of the enjoyment of the 54 scales taken into account. The governor hall and Chahar Bagh's routes were found more talented for walking encouragement in contrast to the other paths. Qa'emiyeh Axis was also found to have a more unfavorable status in comparison to the other paths.

Noga and Nurit (2017) performed a study to find out why people walk through investigating the issue on Israel's national trail (INT). The primary goal of this study was to reach a better perception of the reason why people use INT. They also investigated the behavioral, experiential, spatial and contextual phenomena accompanied by this activity. In this exploratory research, they assumed that walking on INT incorporates two universalism dimensions. In its capacity as a common motility system, it is used by long-distance mountain climbers from all around the globe and, in its specific aspect, it enables walking with the full recognition of such concepts as "spatial attachment", "sense of place", "government and nationalization" and "socialization of the civil awareness" within the special format of the nation, culture, and history of Israel as evidenced in the scientific studies. In general, the findings' analysis through Parson's specificity lenses in contrast to the globalism pattern showed that the walking on INT as a movement system is specified by many general and universalism aspects of hiking as well as by a number of specialism aspects enabling the perception of the unprecedented role of hiking in Israeli society.

Neto (2015) conducted a research entitled "the index of walkability, evaluation of the quality of the constructed environment, and designing a city in street level using multidimensional and satellite images" to point to the importance of the walkable urban environments in the current vehicle-oriented cities, so as to simultaneously enumerate the planning for pedestrianism amongst the significant priorities of modern urban planning. The author of this study made use of citizens' surveys and polling to compare the pedestrianism indices (within the format of 48 indicators) with their wants and perceptions. The results of the study signified that there is a significant correlation between pedestrianism and citizens' perceptions.

Litman (2014) dealt in a study under the title "the economic value of pedestrianism ability" with the economic benefits of pedestrianism by the use of comprehensive analysis techniques in line with increasing the general public's support of pedestrianism and non-mechanized methods of movement.

In a study entitled "towards the pedestrian-oriented urban neighborhood units", Newman and Waldron (2012) realized these neighborhood units as having smaller ecological footprints, better healthiness, and higher levels of social capital. The pedestrian-oriented neighborhood units are institutions exemplifying the village/city setting the ground for life in a human scale and, in the meanwhile, having energy, excitement, and agility of a global city, as well.

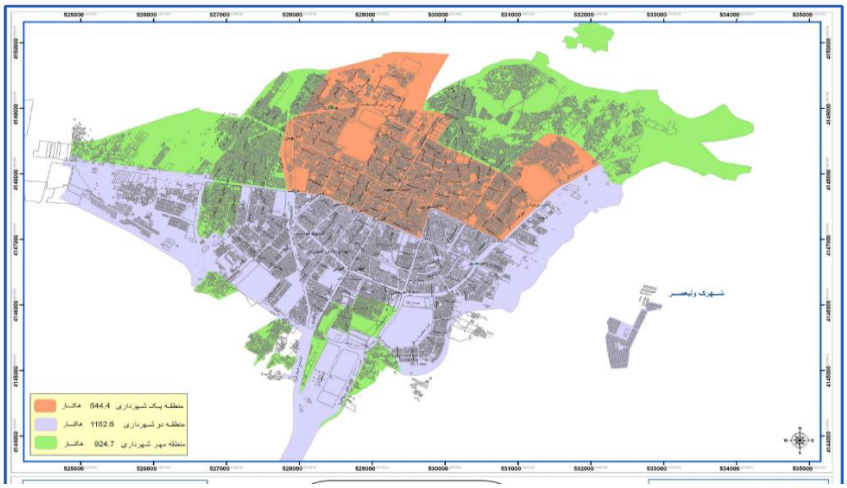
3. STUDY METHOD

The present study is descriptive-analytical research. Descriptive background methods or extensive (survey) research has also been used in a part of the study stages. Part of this study that is related to the study literature has been conducted based on the descriptive method, and the other part that is related to the field study activities has been carried out based on the analytical-survey method. The study takes advantage of a simple and random sampling method, and a researcher-constructed questionnaire has been utilized for gathering the data. The questionnaire's validity has been confirmed as opined by the experts and specialists' panel regarding the study subject, and the pretest was the method of interest for determining the reliability of the study instrument (30 individuals outside the primary sample volume). The Cronbach's alpha value obtained was equal to 0.852. The study population of the present study included the residents of Vali-e-Asr Estate accommodating 3800 individuals according to a census in 2016. The study sample volume was collected based on a random method, and Cochran Formula was employed for estimating the study sample volume at a 95% probability level of accuracy (Hafiznia, 2014, p.142). The study sample volume reached 384 persons and it was increased to 400 persons by the authors in order to make the results more accurate. To perform the descriptive and inferential analysis on the data, SPSS Software, version 21, was used. Pearson correlation coefficient and multiple regressions were applied to perform the inferential analyses.

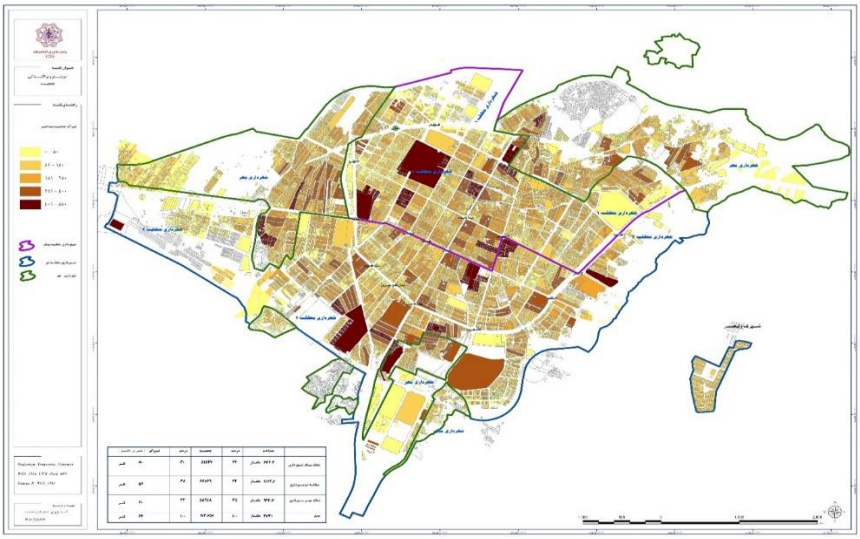
In this study, the path's accessibility, continuity, safety, convenience, and diversity of the uses have been used as indices pertinent to contextual dimensions and dynamicity. The attractiveness, social interaction, security, and compliance with nature have been used as indices pertaining to spatial dimensions. Indices like social security, social participation, instruction and culture-building, and social identity have been applied in the social dimension. In cultural dimensions, such indices as the existence of an environment fitting the spending of leisure time, existence of cultural centers, permission for playing sports and the other activities, and holding street festivals have been utilized.

3.1. Introducing the Study Area

Bojnourd is the capital city of Khorasan-e-Shomali Province in the northeast of Iran on the foothills of Aladagh Mountain Range. The city shares borders with Turkmenistan in the north and it is bordered by Shirvan and Esfarayen Cities in a stretch from its northeast to southeast. It is also limited by cities like Jajarm, Ashkhaneh, and Raz in a stretch from its southwest to northwest. Bojnourd is the capital city of Khorasan-e-Shomali Province reaching in the area to 36 square kilometers. Its position in the northeast of Iran is in the longitude of 57º 20' and latitude of 37º 28' on the southern section of Kappedagh Mountain Range, the eastern side of Aladagh Mountain Range, and northern side of Alborz Mountain Range. The city is about 1070 meters above sea level. It is 821 kilometers from the city to Tehran.



Map 1: The map of Bojnourd city.



Map 2: The study area, Vali-e-Asr Estate.

4. FINDINGS

According to the results obtained from the study, 48% of the study sample volume is female and 52% is male. 23% of the study participants were 20 years old and younger, 24% were between 20 and 30 years of age, 20% were between 30 and 40 years of age, 15% were between 40 and 50 years of age, and 18% were 51 years old and older. Concerning the education level, 18% were illiterate, 22% had a diploma, 18% had an associate degree, 31% had a BA degree, and 11% had MA and higher degrees.

4.1. There is a significant relationship between contextual dimensions and pedestrianism development.

A significant correlation was documented between the contextual dimensions and pedestrianism development because the significance level was found equal to 0.000 which is below the study's alpha coefficient (α=0.05). So, it is generally concluded that the contextual dimensions influence pedestrianism development. The correlation between variables was found at a good level and statistically acceptable.

Table 1: The correlation coefficient of the pedestrianism development and contextual dimensions.

		Pedestrianism development	Accessibility	Path's continuity	Safety	Convenience	Diversity of use
Pedestrianism development	Pearson correlation	1	0.850	0.620	0.845	0.652	0.714
	Significance level		0.000	0.000	0.000	0.000	0.000
	Number	384	384	384	384	384	384

Table 2: The fit estimation of the regression model for pedestrianism development with respect to contextual dimensions.

Correlation coefficient	Determination coefficient	Adjusted determination coefficient	Standard deviation
0.852[a]	0.841	0.838	7.92590

According to the statistics in table 2, it can be stated that the correlation coefficient is equal to 0.852. The amount of the determination coefficient was 0.841. This is reflective of the idea that 0.841 of the changes in the contextual dimensions pertain to pedestrianism development and the rest depend on other factors. Of course, the problem of this method is that the degree of freedom is not taken into consideration. Due to the same reason, in order to overcome this problem, the adjusted determination coefficient is utilized, and it was found equal to 0.838 in the present study.

Table 3: The regression variance analysis of the relationship between the contextual dimensions and pedestrianism development.

Source of variations		Sum of squares	Degree of freedom	Squares' mean	F-value	Significance level
	Regression effect	823.421	1	823.421	13.108	0.000[b]
	Residual	5653.796	382	62.820		
	Total	6477.217	383			

The results of variance analyses indicated that the significance value computed for this statistic is equal to 0.000. This indicated the regression's significance in 99% level (sig. value=0.000).

Table 4: The regression model of the effect of contextual dimensions on pedestrianism development

Model		Non-standardized coefficient		Standardized coefficient	T	Significance degree
		B	Standard error	β		
1	Fixed value	26.082	3.616		7.214	0.000
2	accessibility	1.057	0.292	0.357	3.620	0.000
3	Path's continuity	0.466	0.164	0.177	2.839	0.005
4	Safety	0.482	0.090	0.335	5.355	0.000
5	Convenience	0.712	0.120	0.414	6.521	0.000
6	Diversity of land use	0.145	0.095	0.521	4.250	0.000

Based on the results obtained in the study, there is a significant relationship between contextual dimensions and pedestrianism development and variables like accessibility, path's continuity, safety, convenience, and diversity of land use predict pedestrianism development. The significance degree of all the variables is below 0.05 and it is confirmed. Amongst the contextual indicators, diversity of land use, convenience, accessibility, safety, and continuity of path respectively have the highest effect on pedestrianism development.

4.2. There is a significant relationship between spatial dimensions and pedestrianism development.

A significant correlation was found between the spatial dimensions and pedestrianism development because the obtained significance level (significance value=0.000) was below the study's alpha coefficient (α=0.05). So, it is generally concluded that spatial dimensions influence pedestrianism development. The correlation between the two variables is at a good level and statistically acceptable.

Table 5: The correlation coefficient of the relationship between the spatial aspects and pedestrianism development.

		Pedestrianism development	Dynamicity and attractiveness	Social interaction	Security	Nature-compliance
Pedestrianism development	Pearson correlation	1	0.520	0.714	0.654	0.635
	Significance degree		0.000	0.000	0.000	0.000
	Number	384	384	384	384	384

Table 6: The fit estimation of the regression model for pedestrianism development with respect to spatial dimensions.

Correlation coefficient	Determination coefficient	Adjusted determination coefficient	Standard deviation
0.785[a]	0.754	0.753	8.65240

According to the statistics in Table 6, it can be stated that the correlation coefficient is equal to 0.785. The amount of the determination coefficient is 0.754 indicating that 0.754 of the spatial dimensions' variations pertain to pedestrianism development and the rest depend on the other factors. Of course, the problem of this method is that it falls short of taking a degree of freedom into account. Due to the same reason, the adjusted determination coefficient is usually used for removing this problem, and it was found equal to 0.753 in the current research paper.

Table 7: variance analysis of the regression in the relationship between spatial dimensions and pedestrianism development.

Source of variations		Sum of squares	Degree of freedom	Squares' mean	F-value	Significance level
	Regression effect	11434.322	1	5717.161	58.922	0.000[c]
	Residual	24936.674	382	97.030		
	Total	36370.996	383			

The results of the variance analysis indicated that the significance level calculated for this statistic is 0.000, indicating the significance of the regression in 99% level (sig=0.000).

Table 8: The regression model of the effect of spatial dimensions on pedestrianism development.

Model		Non-standardized coefficient		Standardized coefficient	T	Significance degree
		B	Standard error	β		
1	Fixed value	21.775	3.813		5.710	0.000
2	Dynamicity and attractiveness	1.253	0.145	0.473	8.628	0.000
3	Social interaction	1.038	0.142	0.392	7.330	0.000
4	Security	0.449	0.077	0.311	5.823	0.000
5	Nature-compliance	0.254	0.074	0.265	4.854	0.000

Based on the results obtained in the present study, there is a significant relationship between the spatial dimensions and pedestrianism development and dynamicity and attractiveness, social interaction, security and nature-compliance are respectively the most important predictors of pedestrianism development. The significance degrees of all the variables were found below 0.05 and they were confirmed. Amongst the spatial dimensions, dynamicity and attractiveness, social interaction, security, and nature-compliance had the highest effects on pedestrianism development.

4.3. There is a significant relationship between social dimensions and pedestrianism development.

The social dimensions and the pedestrianism development were found to be significantly correlated because the significance level found herein (sig=0.000) was smaller than the study's alpha coefficient (α=0.05). So, it is generally concluded that the social aspects exert an effect on pedestrianism development and that the correlation between the social aspects and pedestrianism development is at a good level and statistically acceptable.

Table 9: The correlation coefficient in the relationship between pedestrianism development and social aspects.

		Pedestrianism development	Social security	Social participation	Instruction and culture-building	Culture-building and identity
Pedestrianism development	Pearson correlation	1	0.745	0.654	0.687	0.628
	Significance degree		0.000	0.000	0.000	0.000
	Number	384	384	384	384	384

Table 10: The fit estimation of the regression model for pedestrianism development with respect to social dimensions.

Correlation coefficient	Determination coefficient	Adjusted determination coefficient	Standard deviation
0.741	0.738	0.734	9.41528

According to the statistics in table 10, it can be stated that the correlation coefficient is equal to 0.741 and the amount of the determination coefficient is 0.738 indicating that 0.738 of the social dimensions' variations pertain to pedestrianism development, and the rest depends on the other factors. Of course, the problem of this method is that it falls short of taking a degree of freedom into consideration. Due to the same reason, the adjusted determination coefficient is usually used for removing this problem and it was found equal to 0.734 in the current research paper.

Table 11: The variance analysis of the regression in the relationship between spatial dimensions and pedestrianism development.

Source of variations		Sum of squares	Degree of freedom	Squares' mean	F-value	Significance level
	Regression effect	6205.971	1	6205.971	53.079	0.000[b]
	Residual	30165.025	258	116.919		
	Total	36370.996	259			

The results of the variance analysis indicated that the significance level calculated for this statistic was 0.000, indicating the significance of the regression in 99% level (sig=0.000).

Table 12: The regression model of the effect of social dimensions on pedestrianism development.

Model		Non-standardized coefficient		Standardized coefficient	T	Significance degree
		B	Standard error	β		
1	Fixed value	28.097	3.644		7.710	0.000
2	Social security	1.179	0.162	0.413	7.286	0.000
3	Social participation	1.018	0.151	0.356	6.718	0.000
4	Instruction and culture-building	0.515	0.077	0.357	6.729	0.000
5	Social identity	0.411	0.111	0.439	4.954	0.000

Based on the results obtained in the present study, there is a significant relationship between the social dimensions and pedestrianism development and such indices as social security, social participation, instruction and culture-building, and social identity are the predictors of the pedestrianism development. The significance degrees of all the variables were found to be below 0.05 and they were confirmed. Amongst the social dimensions, social identity, social security, instruction and culture-building, and social participation correspondingly have the highest effects on pedestrianism development.

4.4. There is a significant relationship between cultural dimensions and pedestrianism development.

A significant correlation was evidenced between the cultural dimensions and pedestrianism development because the significance level found herein (sig=0.000) was smaller than the study's alpha coefficient (α=0.05). Therefore, it was generally concluded that the cultural aspects exert an effect on pedestrianism development and that the correlation between the cultural aspects and pedestrianism development is at a good level and statistically acceptable.

Table 13: The correlation coefficient in the relationship between pedestrianism development and cultural aspects.

		Pedestrianism development	Favorable environment for spending leisure time	Existence of cultural centers	Permission for playing sports	Street festivals and activities
Pedestrianism development	Pearson correlation	1	0.841	0.689	0.768	0.847
	Significance degree		0.000	0.000	0.000	0.000
	Number	384	384	384	384	384

Table 14: The fit estimation of the regression model for pedestrianism development with respect to cultural dimensions.

Correlation coefficient	Determination coefficient	Adjusted determination coefficient	Standard deviation
0.565[a]	0.319	0.314	9.81657

According to the statistics in table 14, it can be stated that the correlation coefficient is equal to 0.565 and the amount of the determination coefficient is 0.319, indicating that 0.319 of the cultural dimensions' variations pertain to pedestrianism development and the rest depend on the other factors. Of course, the problem of this method is that it falls short of taking a degree of freedom into account. Due to the same reason, the adjusted determination coefficient is usually used for removing this problem and it was found equal to 0.314 in the current research paper.

Table 15: The variance analysis of the regression in the relationship between cultural dimensions and pedestrianism development.

Source of variations		Sum of squares	Degree of freedom	Squares' mean	F-value	Significance level
	Regression effect	11605.164	2	5802.582	60.215	0.000
	Residual	24765.832	257	96.365		
	Total	36370.996	259			

The results of the variance analysis indicated that the significance level calculated for this statistic is 0.000, indicating the significance of the regression in 99% level (sig=0.000).

Table 16: The regression model of the effect of cultural dimensions on pedestrianism development.

Model		Non-standardized coefficient		Standardized coefficient	T	Significance degree
		B	Standard error	β		
1	Fixed value	18.476	4.515		4.093	0.000
2	Favorable environment for spending leisure time	1.354	0.169	0.446	7.998	0.000
3	Existence of cultural centers	1.184	0.158	0.390	7.475	0.000
4	Permission for playing sports	0.507	0.075	0.351	6.741	0.000
5	Street activities and festivals	0.522	.082	0.362	6.370	0.000

Based on the results obtained in the present study, there was a significant relationship between the cultural dimensions and pedestrianism development, and such indices as a favorable environment for spending leisure time, the existence of cultural centers, permission for playing sports and the other street festivals and activities are the predictors of the pedestrianism development. The significance degrees of all the variables were found to be below 0.05 and they were confirmed. Amongst the cultural dimensions, favorable environment for spending leisure time, the existence of cultural centers, street activities and festivals, and permission for playing sports had the highest effects on pedestrianism development.

5. CONCLUSION:

The present study aimed at investigating the role of "pedestrianism" development as a means of transportation in the socio-cultural and contextual aspects of urban spaces. Walking is considered as the integral component of the transportation systems, and walking conditions have substantial environmental, social, and economic effects. Walking is the oldest form of mankind's movement in the space, and it can be enumerated amongst the natural rights of the urban space users. According to the study results, there is a significant relationship between the contextual dimensions and pedestrianism development. Variables like accessibility, route's continuity, safety, convenience, and diversity of land use are predictors of pedestrianism development. The entire variables' significance level was below 0.05 and it was confirmed. Amongst the contextual indicators, diversity of land use, convenience, accessibility, safety, and continuity of the path were found respectively with the highest effects on pedestrianism development. This finding is consistent with the results obtained by Ahmadipour et al (2018) and Yazdani (2015).

In elaborating this study hypothesis, it can be stated that when the individuals can readily access the walkways and the routes are continuous and if they are not forced to continuously change their place and feel security and safety in the diverse array of the land uses in respect to their different tastes and also if they can choose their walkway of interest, pedestrianism can be rendered feasible and developed.

According to the study results, there is a significant relationship between the spatial dimensions and pedestrianism development and variables like dynamicity and attractiveness, social interaction, security and nature-compliance are the predictors of pedestrianism development. The significance degree of all the variables was found below 0.05 and it was confirmed. Amongst the spatial dimensions, dynamicity, and attractiveness, social interaction, security and nature-compliance were respectively found having the highest effect on pedestrianism development. The results of this study are consistent with what has been found by Pourahmad et al (2018) and Yazdani (2015).

It can be stated in elaborating this finding that the walkways should be fascinating to the individuals and enable social interaction, for this can per se induce the individuals with happiness and feeling security. The existence of green trees and spaces promotes walking, and the individuals begin walking with higher motivations.

According to the present study's results, there is a significant relationship between the social dimensions and pedestrianism development and indices like social security, social participation, instruction and culture-building, and social identity predict pedestrianism development. The significance levels of all the variables were found below 0.05, hence confirmed. Amongst the social dimensions, social identity, social security, instruction and culture-building, and social participation were found with the highest influence on pedestrianism development. This finding is consistent with the results obtained by Neto (2015). It can be stated in elucidating this study hypothesis that walking has its own grounds, the preparation of which should be taken into consideration. Social identity and social security are two of these grounds for the fact that the existence of identity and security causes the individuals to feel they are close to the environment and find themselves as part of a region. Amongst the other factors that can be pointed out for pedestrianism development is instruction and culture-building, in line with instigating social participation in every neighborhood and region. In case that the individuals start walking alone, a sort of discoordination occurs inside them. This feeling can be removed with their participation with the other individuals.

According to the present study's results, there is a significant relationship between the cultural dimensions and pedestrianism development and the indices like the existence of a favorable environment for spending leisure time, the existence of cultural centers, permission for playing sports and other

street activities and festivals predict the pedestrianism development. The significance levels of all the variables were found below 0.05, hence confirmed. Amongst the cultural aspects, the existence of a favorable environment for spending leisure time, the existence of cultural centers and on-street activities and festivals, and permission for playing sports have the highest effect on pedestrianism development. The results of the present study are consistent with the findings by Shahivandi and Ghal'ehno'ei (2014). It can be stated in clarifying this hypothesis that now that walking has reached its lowest level amongst the individuals, a sort of culture has to be constructed for developing walking. Amongst the factors facilitating the achievement of this goal, providing a favorable environment for spending leisure time and walking can be pointed out. Efforts should be made in this regard, and environments should be made that set the ground for increasing the individuals' frequency of walking. Walking can be actualized meanwhile using the cultural centers and cultural services. Holding street festivals and advertising for walking can play effective roles in developing walking.

The modern, it is suggested that municipality centers should do their best to set the ground for walking and allocate a budget every year for the development of walking and preparing its infrastructures. Efforts should be also made parallel to the diversification of the green spaces and land uses as well as for paving the way for the individuals' spending of their leisure time through walking in the particularly dedicated walkways, so that the pedestrianism index can be elevated.

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