

An Analysis of the Quality of Urban Public Spaces Regarding the Criterion of tailoring them for children: a Case Study of New City of Sepahan-Shahr

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ABSTRACT

Successful people are those whose needs have received attentions in their childhood. Children need to be able to live with maximum independence possible, which requires a secure atmosphere with high quality. Public spaces have a great capacity to satisfy this dimension of children's needs. To this aim, the present study seeks to investigate the quality of public spaces for children in Sepahan-shahr having an eye on the criterion of making urban spaces appropriate for children. The adopted approach here has been a descriptive-analytic one which has a practical nature. Findings showed that criterion of tailoring spaces for children has not been satisfactory because, regarding t-test at $\alpha=0.05$, variables of 'quality of public spaces in sidewalks', 'quality of sidewalk for disabled children' and 'quality of city beautification' had means were less than the hypothesized mean ($M=3$) and obtained t was higher than the critical value in the table (1.95) and thus significant. However, means of 'quality of tourism and recreational spaces', 'quality of local places and square' were higher than the hypothesized mean ($M=3$) and the obtained t was higher than the critical value in the table (1.95) and significant and so tailoring the spaces for children was satisfactory with regard to these variables. Also, according to results of ANOVA, it was shown that there was significant difference between means of children's comments based on age at $p<0.05$ level of significance. Furthermore, mean of children's comments for children aging 11 to 14 was higher than age groups. Finally, according to results of independent t-test, it was revealed that there was significant difference between means of children's comments regarding tailoring of the quality of public spaces based on sex and that mean of boy's comments was higher the girls.

KEYWORDS: Public spaces; children; disabled Children; duality; Sepahan-shahr.

INTRODUCTION

1.1. Statement of the problem

In urban communities, three social units, i.e. "family, school, and urban spaces" have particular significance in the process of children's education and socialization. Although appropriate physical and psychological conditions for children are not expected for all parts of a city, in some areas of the urban space such as public and open spaces, appropriate conditions should be provided for children for experiencing their environments (Martha & Sandfor, 2013: 127).

Since one of the consequences of smaller families of the present age is limitations in children social experiences, the necessity of creating proper urban spaces realizing needs of children with expectations, diverse lifestyles, and different activities seems more significant because children for the first time start social interactions with their peers by experiencing neighborhoods and urban public spaces (Wiggering, 2015: 48).

Public spaces are shared between different groups and individuals (Jones, 2007: 98). These spaces form an important part of time and environment of children and adolescents' lives. In this way, improvement of the quality of these spaces can be influential in promotion of individuals, social interaction, their sense of cooperation, instruction, physical, mental, spiritual and social growth of children and make them more creative (Mozafar & Hosseini, 2014: 56). Since a favorite city for children is the favorite city of adults, therefore, a request for child-friendly cities roots in knowing this issue that cities should be houses for better support of children's rights (Atkinson & Blandy, 2005: 75). However, it is not enough to change the world only *for* children. Main essence of global movement of children and adolescents is in the fact of changing the world *with* them and *with their coordination*. We need to listen to children carefully and give them voices (Safavi-Moghadam, 2013: 3). Thus, those cities which are not ideal for children have governments that have made only few steps to this aim (UNICEF, 2011).

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The impetus for the present study comes from the notion that little attention has been paid to this notion, particularly new cities. One of these cities is Sepahan-shahr. Sepahan-shar is a new city with the responsibility of attracting extra population and has been to some extent successful in fulfilling this sense. But, according to urban experts, regarding providing high quality public spaces to remove children's needs, the city has not been that successful. In this way, basic questions the present study seeks to answer are:

- Are sidewalks and paths of high quality for children in Sepahan-shahr?
- Are public spaces of high quality for disabled children in Sepahan-shahr?
- Are public spaces well designed in terms of beautification for children in Sepahan-shahr?
- Are tourism and recreational spaces of high quality for children in Sepahan-shahr?
- Are local areas and urban squares of high quality in Sepahan-shahr?
- Is there any difference between children's ideas regarding making the quality of public spaces appropriate in Sepahan-shahr in terms of age?
- Is there any difference between children's ideas regarding making the quality of public spaces appropriate in Sepahan-shahr in terms of gender?

1.2. Significance of the study

The main purpose of urban planning is creating cities which provide appropriate areas for people's life (Bridgman, 2012: 108). New cities need to improve the quality of their urban spaces for providing services and facilities for all their inhabitants. One strategy is allowing people participate in local affairs (Institute of new European cities, 2003: 59). New cities in Iran are different from traditional ones due to having features such as lack of appropriate skeletal spaces regarding people's needs, lack of services, facilities and fair distribution of facilities, lack of identity, cultural diversities, lack of a sense of cooperation, lack of social security and status of quality of environmental quality (Rafieyan and Moloudi, 2014: 44). In Iran new cities have been formed with different roles. Among these cities is Sepahan-shahr with the responsibility of attracting extra population and has been to some extent successful in fulfilling this sense (Website of Municipality of Isfahan, Area 5, 2015). However, since there needs to be spaces with elements necessary for realization of age fairness (Sadeghi, 2011: 32). According to urban experts, it seems that the city has not been successful in providing public spaces with quality and appropriate to characteristics covering both healthy and disabled children in terms of mental and physical conditions (Deputy of Research Department of Municipality of Isfahan, Area 5: 2015). In this way, in planning for Sepahan-shahr, more attempts are required to be made in providing more secure spaces for children, especially disabled ones. Betterment of situation can promote the quality of public spaces and increase capability of children existence in this city. The present study seeks to move forward this target by taking a closer look at public spaces in Sepahan-shahr, considering qualitative problems and offering suggestions to compensate for problems for contributing to more convenient, happier, and safer presence of children in the space of this city and it approaches a child-friendly city day by day.

1.3. Literature

During recent years, some studies have been conducted on child-friendly cities (CFC) in developed countries. For the first time, in 2007, Bendigo City in Australia was considered and recognized as "child-friendly city" and the first city which has all aspects and characteristics of a child-friendly city according to UNICEF. In this city, children's rights were considered as the main priority in all approaches (Esmailzadeh Kavaki, 2011: 38).

In a study with the title of "rethinking a space for children and adolescents", Smith (2010) reinforces participation of children and adolescents in Britain and concludes that promotion of child participation is not satisfactory and offer that making use of their comments is necessary in urban decisions so as show them as active citizens (Smith, 2010).

Gilliland in his research titled "city of children and physical environment" provided a list of wants and needs of children for improving the physical environment of their lives. He also considered indices such as security and safety in the environment, a healthy environment and health care, existence of spaces for play and leisure activities for children, the ability to shape the spaces, existence and easy access to parks and natural spaces, consideration of bike paths and pedestrian and improvement in the quality of sidewalks, proper light for streets and public spaces, public transportations and appropriate consideration the special conditions for children (Gilliland, 2013).

Irwin (2014) in a research titled as "the government of cities under children", surveyed 10 to 14 year old children about improving their life environments and concluded that the existence of enough and safe play spaces with secure equipment, safe and secure public spaces, solving pedestrians' problems, creating sidewalks, the provision of adequate facilities for pedestrians, public transportation at low costs and in consideration of facilities

for children, proper management in order to beautify cities and the garbage collection and disposal system are among children's demands in the study (Irwin, 2014). Safe residence, provision of basic services for children, ensuring physical and mental security of urban spaces for children, high standards of quality of physical elements of the environment, planning and creating appropriate opportunities for creating a variety of activities, nature conservation and creation of green spaces encouraging game activities outside homes are among considered indices in the present study (Shore, 2015).

Noting the concept of child-friendly cities have no long history in Iran. For the first time in Iran, in 2006, Shi'a composed a book for children entitled "the preparation of the city for children" which was a case study of Tehran. In that, he investigated how to deal with children and their needs and conceive of them as the most important social groups who have crucial roles in the future of the country (Kazemi, 2012: 34). In another study made by Safavi-moghadam (2013) entitled "child-friendly city and children's happiness in Mashhad", it was concluded that the more desirable the city for children the more happy children are. According to performed studies, it can be stated that no global conceptual framework has been formulated for the concept of quality of public spaces. However, points have been proposed in the country regarding child-friendly city, children's cooperation and quality of urban open areas. But, no study has been carried out on analysis of quality of urban public spaces for children use, especially in small cities. It can be concluded that, seeking help from previous studies, the present study proposes a relatively new topic (Safavi Moghaddam, 2013).

Khalilian his research titled as "analyzing indices of CFC from children's perspectives", firstly clarified the significance of creating proper spaces for children. Then, stated some issues for understanding the structure of CFC environment among which paying attention to this issue that urban spaces should be the pace of children's social interactions and symbolic environments for increasing their sense of belongingness. In addition, paying attention to dimensions such as lighting, lack of undesirable sounds in spaces, well-ventilated spaces, use of appropriate materials, considering the natural and green spaces for children is an issue necessary for the architecture and design of the appropriate city in the study (Khalilian, 2015).

Kameli conducted a research titled as "child-friendly city: the landscape approach in urban environments" and concluded that CFC is a new and comprehensive answer to interacting children and urban environment. But this project marginalizes local identity of the city and children. Therefore the landscape approach as an objective-subjective phenomenon with three strategies of walking life, children's activities in collective spaces, and naturalism can create senses of security and sense of belongingness, in children and their complete development in cities (Kameli, 2015).

From the perspective of urban planning and view to children as citizens, a lot of articles and books have been written and a plenty of researches have been conducted at the global level, but the issue have received little attention is the analysis of the quality of urban public spaces with criterion of appropriateness particularly for children constructed in new cities. In addition, to what extent children's needs have been considered in policies and objectives of constructing such cities. in the line of this issue, and considering literature having conducted so far, the problem of the present study is investigated.

1.4. Methodology

The present study is practical in in terms of purpose, descriptive-analytic and inductive reasoning in terms of nature and method. Data collection were carried out through library method and field research. Population include all children with ages ranging from 11 to 18 living in Sepahan-shahr in 2015. To obtain the sample, use was made of formula. Based on the calculations performed () sample was 476.

$$n = \frac{Z^2 S^2}{D^2} \quad n = \frac{1.96^2 \times 0.31}{0.05^2} = 476$$

The purposive random sampling method was employed in the study since children were dispersed all over Sepahan-shahr. Time of the study was the first half of 2015 and place was Sepehan-shahr district. For aims of data assessment use was made of researcher-made questionnaire. The questionnaire has been designed to assess the quality of public spaces with criterion of tailoring it for children regarding five variables, namely quality of sidewalks and paths, quality of walking routes for disabled children, quality of beautification, quality of tourism and recreational areas and quality of local areas and squares. The questionnaire has 32 closed Likert-scale items (too much- much- to some extent- little- too little) and grading them was as 5, 4, 3, 2 and 1. To measure validity of the questionnaire, it was given to 7 professors and specialists and they were asked to choose one option among the five options from very bad to very good. In this way, 8 items were very bad. Average of specialists' evaluation was 4.11 (in five option Likert scale) which denotes acceptable validity. Then, to increase the validity the questionnaire was reviewed and finally 32 items were incorporated. Using Kendall coefficient, validity of the questionnaire was 0.73

which is desirable validity. To measure the reliability, after calculating variance of the items, use was made of Cronbach Alpha and it was 0.80. For aims of inferential analysis, data were processed in SPSS 22. In the present study, one sample t-test, independent t, and ANOVA. Descriptive findings were illustrated in form of GIS software and presented in tables.

1.5. Territory of research

Seppahan-shahr was established in 1992 in southwest of Esfahan on the north of Shiraz-Isfahan road in latitude of northern 32 33 47 and 33 30 79 and eastern 51 35 24 and 51 40 38 to Greenwich. Its area is about 4117912 square meters. Total length of main streets is about 40 kilometers and secondary road have a length of about 80 kilometers. Near 9559 families with 33917 people live in the city. Average height of city from sea level is 1605. The city was planned in 1996 with an area of 400 hectares of which 33.2% are used for roads, paths and sidewalks, 8.17% are used for green spaces, 20% for houses, 19% for apartments, 5% for educational sites, 4% for services and 1% for commercial purposes. The city is built on the basis of the most modern principles and houses and apartments are very luxurious. Most inhabitation is in apartments. The city has water parks and green parks. Furthermore, the largest shopping center of Isfahan (City Center) is located near this city ([www. isfahan5.ir](http://www.isfahan5.ir), 2014).

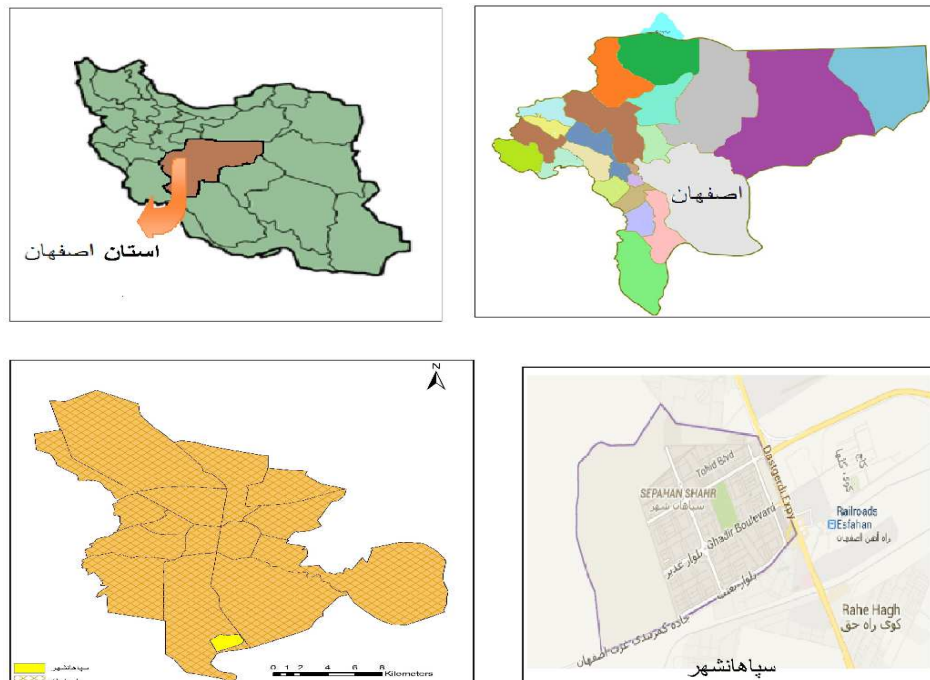


Figure 1: geographical position of Seppahan-shahr (resource: Governorate of Isfahan Province, Deputy of IT, 2015)

1.6. Study concepts

Urban public spaces

These spaces are places for exchanging thoughts and establishment of social relations shared by different individuals and social groups. Urban public spaces are scenes for showing people's everyday lives and confronting with private living environments (Collins and Kearns, 2011: 15).

Investigation of quality of urban public spaces

Quality of urban public spaces refers to a set of characteristics or traits causing discriminating an object from others which enables us to judge its superiority, similarity, or inferiority comparing with others as well as assess it in terms of aesthetics, morality, and efficiency (Malone & Hasluck, 2010:59).

Child: One of the age groups using public spaces is children. Determining the age range of children is different in different countries. According to article 1 of children rights, by child we mean people under the age of 18. Also, in article 1 of law of child support, approved in 2002, those aged less than 18 are known as children (UNICEF, 2011: 32).

Child-friendly city:

Generally speaking, 'child-friendly city' is a city in which children's wants are prioritized and social, cultural, and architectural conditions of the city are consistent with their needs. In addition, it is a city where children's basic rights are reflected in policies, rules and regulations, plans and budgets. The "child-friendly city" approach leads a city towards the path in which children have effective roles in their own cities and their ideas are significant in urban decisions. Families and societies are burdened to involve them in important issues and decision making. In fact, the child-friendly city is a place in which children feel security and convenience and are able to search and learn about their surroundings. A child-friendly city is also a people-friendly one (Karsten, 2011: 511).

Characteristics of child-friendly city from perspectives of urban planning and urbanization

Child-friendly cities are to create children's participation for shaping their surroundings. Participation is an act causing creation of interest and belongingness of children to their cities. Accordingly, characteristics of children-friendly cities can be as follows:

1. Convenience, safety and security
2. Connectedness to nature
3. Three-link with history, culture and collective identity,
4. Charm and novelty,
5. Readability,
6. Access features,
7. Existence of institutions and spaces for children,
8. Attention to children with disabilities (Azemoudeh, 2013: 23).

2. Theoretical framework

A review of approaches presented in this part of study showed that the main criteria for assessing the quality of public spaces for children has many dimensions, some of which are presented below. Experts refer to several variables for "active and constructive participation of children" in urban public spaces, though these variables are true for this social group (children and adolescents) and include other social groups too (Pourjafar & Ansari, 2013: 71).

From Harley's viewpoint, child-friendly places are introduced as places with characteristics such as commenting, participation of children and receiving information, receiving training and opportunities for children's social, cultural, physical, and psychological full development, meeting basic needs, children's shelters and health, security against damages and all kinds of abuses, green spaces encouraging play activities outside homes, providing convenient public transportation and essential services (Eckersley, 2013 :58). Drexel also considers criteria such as the existence of social cohesion and interactions, existence of a fascinating and diverse places to play and exercise for children and adolescents, spaces for social interactions and activities, shopping and public activities, the existence of safety and freedom of movement, existence of social identity for children in neighborhoods, existence of green spaces and convenient access to the nature, lack of uniformity in environments, the lack of heavy traffic, lack of social isolation and discrimination, access to a clean environment and convenient contact with the nature, public facilities and essential services as well as equipment in public spaces, and seriousness of hearing and realizing children's needs and comments (Cadzow, 2012 :168). Chawla believes that in creating appropriate places for children, making safe and secure public spaces, creating pedestrian and bicycle routes, taking into account the necessary conditions for children, a variety of different activity systems, safety against physical hazards, freedom of movement and displacement, lack of trash and waste in the environment, participating children, and creating sustainable and legible environments are among indices which should be considered (Nordstrom, 2013 :51).

Indices	Harley	Drexel	Chawla
Safety and security	✓	✓	✓
Access to nature and green spaces	✓	✓	
Participating and valuing children	✓	✓	✓
Decreasing traffic and considering public transportation, pedestrian and bicycle routes suitable for children's conditions		✓	✓
Creating and designing recreational environments, interactive games and entertainment attractive for children	✓	✓	
The existence of existence of open public spaces and facilities as well as varied activities		✓	✓
Existence of healthy environment free from garbage		✓	✓

3. Research findings

In this part, findings have been presented according to research hypotheses in tables 1 to 7.

Hypothesis 1- Sidewalks and paths are of desirable quality for children in Sepahan-shahr.

Table 1 Results of sample t-test, comparison of means of quality of public spaces regarding tailoring paths and sidewalks for children in Sepahan-shahr with hypothetical mean of 3

Level of significance	T	Standard deviation	Mean	Variable
0/01	2/52	0/61	2/93	tailoring paths and sidewalks for children

Source: research findings

In conceptualized analysis, to evaluate level of significance use was made of t-test at $\alpha = 0/05$ level. The obtained mean (2.93) was lower than the hypothetical mean (3) and the obtained t was higher than the critical value of table (1.95) and thus significant. So, it can be concluded that quality of public spaces is not of desirable quality regarding tailoring paths and sidewalks for children.

Hypothesis 2- Public spaces are of high quality for disabled children in Sepahan-shahr.

Table 2 Results of sample t-test, comparison of means of quality of public spaces regarding tailoring them for disabled children in Sepahan-shahr with hypothetical mean of 3

Level of significance	T	Standard deviation	Mean	Variable
0.001	2.44	1.52	2.83	tailoring paths for disabled children

Source: research findings

In conceptualized analysis, to evaluate level of significance use was made of t-test at $\alpha = 0/05$ level. Since obtained mean (2.83) was lower than the hypothetical mean (3) and the obtained t was higher than the critical value of table (1.95) and thus significant, it can be concluded that quality of public spaces for disabled children is not of desirable quality regarding tailoring paths and sidewalks for children.



Figure 2 A sample of paths for disabled children in Sepahan-shahr (resource: researchers)



Figure 3: a sample of nonobservance of beautification principle in spaces used for children (a local supermarket) (resource: researchers)

Hypothesis 3- Quality of public spaces are well considered in terms of beautification for children in Sepahan-shahr.

Table 3 Results of sample t-test, comparison of means of quality of public spaces regarding beautification for children in Sepahan-shahr, with hypothetical mean of 3

Level of significance	T	Standard deviation	Mean	Variable
0.001	3.33	0.71	2.89	Beautification of urban spaces for children

Source: research findings

In conceptualized analysis, to evaluate level of significance use was made of t-test at $\alpha = 0/05$ level. Since obtained mean (2.89) was lower than the hypothetical mean (3) and the obtained t was higher than critical value of table (1.95) and thus significant, therefore it can be concluded that quality of public spaces is not of desirable quality regarding beautification for children.

Hypothesis 4- Tourism and recreational spaces are of high quality for children in Sepahan-shahr.

Table 4 Results of sample t-test, comparison of means of quality of public spaces regarding tailoring tourism and recreational areas for children in Sepahan-shahr, with hypothetical mean of 3

Level of significance	T	Standard deviation	Mean	Variable
0.001	6.61	0.49	3.15	tailoring tourism and recreational areas for children

Source: research findings

In conceptualized analysis, to evaluate level of significance use was made of t-test at $\alpha = 0/05$ level. Obtained mean (3.15) was higher than the hypothetical mean (3) and the obtained t was higher than critical value of table (1.95) and thus significant. So, it can be concluded that quality of public spaces is of desirable quality regarding tourism and recreational areas for children.

Hypothesis 5- Quality of public places is appropriate regarding local areas and urban squares in Sepahan-shahr.

Table 5 Results of sample t-test, comparison of means of quality of public spaces regarding tailoring local areas and urban squares for children in Sepahan-shahr, with hypothetical mean of 3

Level of significance	T	Standard deviation	Mean	Variable
0.001	13.39	0.36	3.22	tailoring local areas and urban squares for children

Source: research findings

In conceptualized analysis, to evaluate level of significance use was made of t-test at $\alpha = 0/05$ level. Obtained mean (3.22) was higher than the hypothetical mean (3) and the obtained t was higher than critical value of table (1.95) and thus significant. So, it can be concluded that quality of public spaces is of optimal quality regarding tailoring local areas and urban squares for children.

Hypothesis 6- In in terms of age, there is significant relationship between groups of children's comments on tailoring of the quality of public places for them in Sepahan-shahr.

Table 6 Results of ANOVA- means of groups of groups of children's comments on tailoring of the quality of public places for them in Sepahan-shahr (in terms of age)

Level of significance	F	Mean of squares	Degree of freedom	Sum and squares	Source of change
0.001	40.47	4.38	3	13.14	Inter-group
		0.11	472	51.11	Intra-group
			475	64.25	Total

Source: research findings

In conceptualized analysis, to evaluate level of significance of the observed f , it was seen that there was significant difference between children's comments on tailoring of the quality of public places in Sepahan-shahr at $p < 0.05$. Here, mean of age group for those children aged between 11 to 14 years old was higher than other groups.

Hypothesis 7- In in terms of sex, there is significant relationship between children's comments on tailoring of the quality of public spaces for them in Sepahan-shahr.

Table 7 Results of ANOVA- means of children's comments on tailoring of the quality of public spaces for them in Sepahan-shahr (in terms of sex)

Level of significance	T	df	St. deviation	Mean	Statistical indexes
					sex
0.001	7.81	474	0.39	3.10	Boys
			0.26	2.85	Girl

Source: research findings

According to the results, significant difference was observed between comments of different sex groups of children regarding tailoring the quality of public places in Sepahan-shahr at $p < 0.05$. Further, analysis of means of the two groups shows that mean of boys' comments are higher than girls.

4. Discussion and findings analysis

Sepahan-shahr is one of the newly constructed regions in Isfahan which was designed in a modern style and using a checkerboard format. A large part of this region has been allocated to pathways and cars and vehicles have significant roles in this region. According to ideas of children and residents as well as urban experts, the lack of vivacity and friendly spaces in this region are among its disadvantages. These issues can be caused by neglecting children's needs because needs of children as the most vulnerable social layer can be the main common needs of other layers of the society, so not paying attention to them in the comprehensive design of this city is in fact neglecting basic needs of the society and consequently dullness and inequality of urban public spaces. According to the obtained results and considering the main research objective, i.e. investigating appropriateness of the quality of urban public spaces in Sepahan-shahr with children's conditions, it can be indicated that regarding the issue that mean scores of quality of public spaces, pathways and walkways, quality of traffic places for disabled children, and quality of beautification are smaller than the hypothetical mean (3), and their obtained t-scores are bigger than the critical value (1.95) which are significant; therefore, in mentioned domains criteria of appropriateness of public spaces for children of this city do not enjoy appropriate conditions and near 87% of children had negative attitudes towards these three components in urban spaces. But mean scores of quality of recreational and tourist spaces, quality of neighborhoods, and quality of urban squares are bigger than hypothetical mean (3) and their t-scores are bigger than the critical values (1.95) which are significant. Therefore, in mentioned domains criteria of appropriateness of public spaces for children of this city do not enjoy appropriate conditions and near 81.7% of children were satisfied with the quality of recreational and tourist spaces, quality of neighborhoods, and quality of urban squares. Although in terms of age and gender factors, there were some differences in children's attitudes rooted in differences in children's needs, different age ranges, and gender, in general, according to their attitudes, there are some problems in the quality of urban public spaces in the new region of Sepahan-shahr which necessitate urban planners and managers' attention.

5. Conclusion

Children-orientedness and attention more than ever to this valuable and vulnerable social layer is a general and extensive issue on which a lot of researches in the forms of books and articles have been conducted, but none have paid attention to the issue assessing the degree of children-orientedness of urban public spaces qualitatively and identification of weaknesses and strengths of these spaces in the discussion of urban planning and management. Accordingly, with a closer view, different parts of urban public spaces and investigation of their qualitative level and its appropriateness with children's needs based on indices of child-friendly city considered in surveying children were investigated. It should be noted that more comprehensive studies and field researchers are necessary for this subject. These studies should not be at the same temporal and facilities of the present study. In addition, it should be noted that children's needs are not only have environmental dimensions, but also needs are felt in considering to other elements such as economy and politics. Authorities should pay attention to them in order that a clear and prosperous future can be considered for children.

6. Recommendations

Recommendations have been proposed for the betterment of Sepahan-shahr for tailoring of public spaces for children:

- ❖ Improving infrastructure of the city in accordance with needs of disabled children's needs
- ❖ Short time of availability of public spaces for children
- ❖ Appropriate lighting at nights
- ❖ Deployment of different functions and different activities at night
- ❖ Creation of spaces for hesitation, relaxation and recreation of children, particularly disabled ones
- ❖ Creation of environmental attractions focusing on green and open areas
- ❖ Promotion of attractive activities in sidewalks for encouraging children and families to walking
- ❖ Creation of necessary and global facilities for facilitation of disabled children
- ❖ Safe and easy availability
- ❖ Distinguishing function of local paths to sidewalks and improvement of sidewalks besides safe lanes for bicycle riding of children and adolescents, especially those ending to main routes
- ❖ Paths with no barrier and with appropriate steep and pavement

Beautification of public spaces for children

- ❖ Using traditional art in accordance with Iranian and Islamic culture for beautification of spaces and improvement of identity roots of children such as beautiful inlay, traditional and modern sculptures, etc.
- ❖ Beautiful lighting in public spaces and creation of happy places for children
- ❖ Advancement of adolescents' cooperation in order to keep local areas clean and improvement of urban views such as planting flowers and making buildings pretty
- ❖ Using adolescents' comments in how city can be beautiful through holding painting competitions
- ❖ Using children's comments in what colors are best for gardens, flower places and sidewalks

Tailoring tourism and recreational areas for children

- ❖ Using standard playgrounds with happy colors
- ❖ Using safe playgrounds
- ❖ Improvement of green recreational spaces
- ❖ Using welfare appropriate services and toilets especially for disabled children in parks
- ❖ Using appropriate lighting in recreational places at nights
- ❖ Using appropriate furniture
- ❖ Available recreation areas
- ❖ Using plastic blocks instead of blocks made of cement
- ❖ Fountains and nice plants in parks
- ❖ Appropriate entry of parks and recreational areas regarding disabled people
- ❖ Guiding signs especial for disabled adolescents

Tailoring local areas and city squares for children

- ❖ holding fairs with concepts such as children and adolescents' painting for child-friendly cities
- ❖ increase of funds for desirable functions for adolescents (sport and cultural centers and green spaces)
- ❖ decrease of functions disproportionate with housing centers and decrease of crowded. Changing them into adolescents' other functions such as changing fix centers to centers for children, creation of cure centers and playgrounds.
- ❖ Making use of global experiences and using 'child-friendly city' and cooperation of local organs in providing vast level of recreational services regarding age groups
- ❖ Making spaces for sitting of children and families near child-friendly spaces in order to create indirect surveillance of adults
- ❖ Increase of funds for exercise of adolescents such as swimming pools, open salons, volleyball saloons, etc.
- ❖ Flexibility of urban furniture in local areas for use of different age groups using permeable designs
- ❖ Establishing theatres, holding child plays in open areas, cinemas and programs that attract children
- ❖ Increase of cultural centers, IT cultural centers, mosques and libraries
- ❖ More availability of recreational spaces and green spaces for adolescents
- ❖ Better addresses of local areas employing urban elements in public spaces
- ❖ Designing limitation edges in spaces for more safety of bicycle lanes
- ❖ Making spaces calm using green spaces and planting trees and flowers all around them

- ❖ Identification and organizing of public spaces capable of crimes
- ❖ Equipping public spaces for more presence of inhabitants especially adolescents

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