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Investigating and evaluation of the indicators affecting development of childfriendly cultural complexes with an approach to reconciliation with historical spaces (case study: Shiraz)

Investigación y evaluación de los indicadores que afectan el desarrollo de complejos culturales amigables con la infancia con un enfoque de reconciliación con los espacios históricos (estudio de caso: Shiraz)

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ABSTRACT

The present study aims to investigate the indicators of a child-friendly city and to introduce strategies for designing child-friendly spaces and centers with an approach to reconciliation with historical spaces, in order to advance the city toward a child-friendly city and promote its goals. The present study is descriptive-analytical in terms of nature, applied in terms of purpose, and combined (quantitative and qualitative) in terms of method. This study was conducted in a historical context in Shiraz for children aged 4 to 12 years. In order for location finding and selecting the desired site, the factors were extracted based on theoretical foundations, and according to SWOT table, the weaknesses, strengths, opportunities, and threats of the three sites were analyzed. Finally, using AHP tool, site number 1 was considered as the most suitable site for designing the complex. Then, using quantitative method, the information and factors were analyzed according to the theoretical framework including spatial, physical, and functional factors affecting improvement of quality of the environment, including 21 indicators in the form of 5-point Likert scale from very high to very low using SPSS software. According to the information obtained about the spatial factor of "shape and size of the space" indicator, the physical factor of "color" index and the physical factor of "fantasy" index had the greatest impact on designing children's cultural center with an approach to reconciliation with Shiraz's historical spaces. In the end, according to investigations of the theoretical foundations and theories of theorists and the obtained results, architectural solutions and ideas affecting the designing of complexes were presented in the form of solutions for using light, color, geometry and proportions, nature, and shape and size of the space.

Keywords: cultural complex, child-friendly, reconciliation with historical spaces, Shiraz

RESUMEN

El presente estudio tiene como objetivo investigar los indicadores de una ciudad amiga de la infancia e introducir estrategias para el diseño de espacios y centros amigables con la infancia con un enfoque de reconciliación con los espacios históricos, con el fin de hacer avanzar la ciudad hacia una ciudad amiga de la infancia y promover sus objetivos. El presente estudio es descriptivo-analítico en términos de naturaleza, aplicado en términos de propósito y combinado (cuantitativo y cualitativo) en términos de método. Este estudio se realizó en un contexto histórico en Shiraz para niños de 4 a 12 años. Para encontrar la ubicación y seleccionar el sitio deseado, se extrajeron los factores con base en fundamentos teóricos, y de acuerdo con la tabla FODA, se analizaron las debilidades, fortalezas, oportunidades y amenazas de los tres sitios. Finalmente, utilizando la herramienta AHP, se consideró el sitio número 1 como el sitio más adecuado para diseñar el complejo. Luego, utilizando el método cuantitativo, la información y los factores fueron analizados de acuerdo al marco teórico incluyendo factores espaciales, físicos y funcionales que inciden en la mejora de la calidad del medio ambiente, incluyendo 21 indicadores en forma de escala Likert de 5 puntos de muy alto a muy bajo con el software SPSS. Resultados: De acuerdo con la información obtenida sobre el indicador factor espacial de "forma y tamaño del espacio", el índice de factor físico de "color" y el índice de factor físico de "fantasía" tuvieron el mayor impacto en el diseño del centro cultural infantil con una aproximación a la reconciliación con los espacios históricos de Shiraz. Conclusión: Al final, de acuerdo con las investigaciones de los fundamentos teóricos y las teorías de los teóricos y los resultados obtenidos, se presentaron soluciones e ideas arquitectónicas que inciden en el diseño de complejos en forma de soluciones para el uso de luz, color, geometría y proporciones, naturaleza, y forma y tamaño del espacio.

Palabras clave: complejo cultural, amigable para los niños, reconciliación con espacios históricos, Shiraz.

1. INTRODUCTION

Children are the most sensitive and affected age group in society; and in the most sensitive and important years of their lives, that is, when the foundations of their personality, mental, physical, and social development are formed until the time they enter the city, they need to experience social life in their own scale. This requires provision of a child-friendly and intimate space; a space away from hustle and bustle of the larger world, a world full of joy with beautiful colors in which children will have the opportunity to express new thoughts and nurture and develop their talents, and an appropriate ground will be provided for children's creativity (Hosseinpour & Najafi, 2012).

In the past, although no special space was considered for children, but due to closer and more compatible styles of architecture and urban development with the climate, nature, culture, and general conditions of traditional societies, children could easily find their specific and required position, space, and territory (Behroozfar, 2001). Today, advancement of science and communications and its impact on all aspects of life have created changes in children's desires and needs and have led to computer games and the like to replace children's direct understanding of space and gaining natural and social experiences and emergence of disorders in natural process of children's development. Unfortunately, in many cases it can be seen that children's special environments are designed without attention to their actual needs. Therefore, in order to achieve flourishing and creative abilities of children, attention should be paid to creating compatibility

between spaces and their needs. Open residential spaces, in addition to providing light of indoor spaces and natural ventilation, are considered as an opportunity for more communication with nature and as places for social interactions. Given the limitations of indoor space of residential units and the traditional history of existence of yards in Iranian life, outdoor space is an opportunity to expand the functions of indoor spaces and link it to the outdoor space (Shafayi & Madani, 2010).

Meanwhile, child-friendly cities seek to engage children in shaping their surrounding environment; a practical participation that causes the child's interest and attachment to the city (Ismailzadeh Kovaki & Kiani, 2014). Accordingly, the characteristics of child-friendly cities can be expressed as follows: 1) comfort, safety, and security, 2) linking with nature, 3) linking with history, culture, and collective identity, 4) attractiveness and novelty, 5) readability, 6) access to facilities, 7) existence of institutions and spaces related to children, and 8) paying attention to disabled children (Azmoudeh, 2012).

Various parameters can be used in child-friendly cultural complexes. One of these parameters is historical spaces that due to being attractive for children can be used in these complexes. Through these spaces, it is possible to create the necessary culture from the childhood age in order to reconcile with historical spaces as the heritage of the past, because lack of attention to historical spaces and the approach of reconciliation with historical spaces can cause lack of attention to and destruction of historical spaces in the country. Among the indicators of reconciliation approach to historical spaces include correct and innovative use of architectural designs and principles understandable for children in cultural complexes.

Historical space refers to all the remnants of the past that have cultural value. These works can include tangible works (such as ancient buildings) or intangible works (such as customs and traditions of a region) that today attempts are made to preserve them for future generations. Efforts to reconcile old physical spaces with modern life, or in other words, to "modernize" historical urban textures and revitalize buildings and textures with appropriate function, emphasizing preservation and survival of "cultural value of place" are of great importance (Mardomi & Ebrahimi, 2013).

Accordingly, the present study aims to examine the indicators of a child-friendly city and to introduce strategies for designing child-friendly spaces and centers with an approach to reconciliation with historical spaces, in order to advance the city toward a child-friendly city and to promote its goals, such that engaging children in creation of the built environments around them and, as a result, analyzing their views about preservation of historical spaces will be considered more by architects, designers, and urban planners. Observing the above-mentioned indicators in designing the center while acquainting children with historical spaces in cities and other places and making them understand the importance of architecture of historical spaces can bind the next generation to designing more suitable child-friendly spaces. The factors influencing the design of a child-friendly cultural complex can have a significant impact on children's reconciliation with historical spaces. In addition, children as potential social capital of society need attention and care and have a special share in cities and urban spaces. Perhaps the only solution to stop and prevent future urban crises is to empower children through acquainting them with historical spaces and creating innovation in designing the spaces of child-friendly cultural complexes with an approach to reconciliation with historical spaces. Therefore, it is necessary that children, through getting acquainted with historical spaces and acquiring the necessary skills, will get ready to manage and live in future cities and attach more importance to preserving historical spaces.

2. MATERIALS AND METHODS

The present study is descriptive-analytical in terms of nature, is applied in terms of purpose, and is combined (quantitative and qualitative) in terms of method. This study was conducted in a historical context in Shiraz for children aged 4 to 12 years. In order for location finding and selecting the desired site to present a child-friendly cultural complex with an approach to reconciliation with historical spaces, the factors that were involved in selecting the site of the complex were examined. These criteria were based on analysis of case studies similar to the complex as well as the theoretical foundations mentioned on the factors affecting the research subject. After conducting studies on the selected sites, the weaknesses, strengths, opportunities, and threats of the site were analyzed through SWOT table in accordance with the mentioned criteria and factors. Finally, in order to select more accurately, the most appropriate site was evaluated using AHP tool or hierarchical analysis method, by performing a series of weight comparisons of each factor compared to other options. After conducting the examinations, site number 1 was considered as the most suitable site for designing the complex. Then, using quantitative method, a series of information and factors were examined according to the theoretical framework of the research. The statistical population is consisted of a number of people in the community and tourists. The sample size was estimated to be 380 people according to Cochran's formula. A questionnaire was used to collect the data. The spatial, physical, and functional factors affecting improvement of quality of the environment consisting of 21 indicators were assessed in the form of 5-point Likert scale from very high to very low. Validity of the questionnaire was confirmed by using the opinions of experienced professors of University of Architecture. The alpha coefficient was also estimated to be above 0.7, indicating reliability of the questionnaire. Data analysis was performed using descriptive statistics (mean) and inferential statistics (Friedman) in SPSS software.

3. RESULTS AND DISCUSSION

Criteria for selecting the complex site

The criteria and sub-criteria for location finding of residential lands have been extracted from primary studies of the experts and specialists from the Center for Architectural and Urban Development Studies. These proposed criteria and sub-criteria are proposed as follows: spatial and site value, socio-cultural, economic, land ownership and legal criteria, environmental, land access and location, passive defense, and security.

The complex site in question has a special, unique, and relatively new function. Therefore, in addition to the mentioned criteria, based on the approval of various organizations and based on reviewing and analysis of case studies and theoretical foundations, the diagram for the considered criteria is presented in (figure 1).

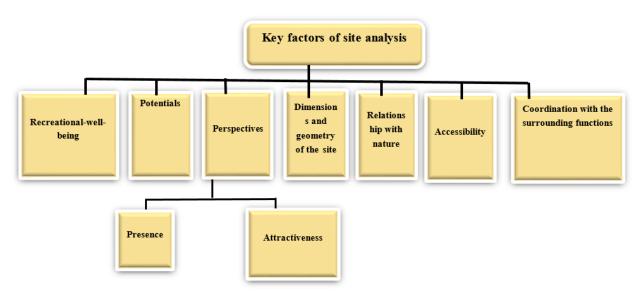


Figure 1: Criteria for site selection

Selected sites

Based on the stated factors and criteria, three sites in the same region were selected according to their approach and function. (Table 1) shows the location and region of each of the three selected sites.

Table 1: General position of the selected sites

Site	General site specifications	Aerial map of the site
Site number 1	Located on Hafezieh Street next to the National Library; Approximate area: 3.2 hectares	
Site number 2	Located in Qasr Al-Dasht Street, next to Salamat sidewalk; Approximate area: 1500 square meters	

Site number 3	Located on Golestan Street, between Adabiat and Kolbeh crossroads; Approximate area: 3200 square meters	

Site analysis through SWOT method

Then, using SWOT method, the strengths, weaknesses, opportunities, and threats of each selected site were examined according to the factors obtained for the complex according to (Tables 2-4).

Table 2: SWOT table; Site Number 1

Factors	S	W	0	T
Coordination with	Completely suited to	Existence in the	This site due to lack	Possibility of being
the surrounding uses	the surrounding uses	historical context	of special uses on	used for
			the site can be as a	inappropriate uses
			special space in the	
			area	
Accessibility	Adjacent to	•	Creation of a	
	accessible		suitable sidewalk	
	connections			
Communication with	It has many trees	•	Possibility of	
nature	and the trees are		creating green space	
	evergreen			
Dimensions and	Being located in	Suitable for the	Large size and	
geometry of the site	urban area and	designing idea	dimensions in which	
	adjacent to nature		suitable spaces for	
			children can be	
			designed	
View	Historical		Attractive	
			Security	
Potentials	Being located in an	Concentration and	Presence in the axis	
(attractiveness and	area of the texture	attractive density of	of mysticism	
presence)	with a long history	travel in the area		
	and social roots			
Recreational-welfare	There are spaces		Creation of a	
	near the site		recreational complex	
	attracting more users		in the area	

Table 3: SWOT table; Site Number 2

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Factors	S	W	0	T
Coordination with the	Completely coordinated	Being far from		Disturbance for the
surrounding uses	because there is a	the texture		residential texture
	pedestrian path there			
Accessibility	Existence of only one	Traffic in the		Creation of crowd
· ·	access point	entrance		and traffic for the
	_			residents there
Communication with	Being located in Qasr	Shortage of	Possibility of	Destruction of

nature	Al-Dasht	per capita	creating green space	some of the trees
	Neighborhood with a	green space on	and enough lands	
	very good climate	the site itself	for doing this	
Dimensions and geometry	Being located in a		Use of good	
of the site	wooded area and		quietness and	
	adjacent to pristine		silence of the area	
	nature		for designing the	
			complex	
View	The site being located	Lack of	Encouraging people	
	in the entrance of Qasr	suitable view	to create this	
	Al-Dasht			
	Neighborhood which			
	has a view of Qasr Al-			
	Dasht gardens			
Potentials (attractiveness	Being located in a	Concentration		
and presence)	relatively quiet area	and attractive		
	with a long history and	density of		
	social roots	travel in the		
		area		
Recreational-welfare		Lack of any		Not encouraging
		historical		for this
		buildings		

Table 4: SWOT table: Site Number 3

Factors	S	W	0	T
Coordination with the surrounding uses	Completely coordinated because it is close to axis of mysticism		Creation of a cultural complex suitable for residents of the	Disturbance for the residential texture
Accessibility	Existence of only one access point	Traffic in the entrance	region	Creation of crowd and traffic for the residents there
Communication with nature	Lack of good climate		Creation of a green space in the region	
Dimensions and geometry of the site	Suitable; has good dimensions	Being located near to the old texture		The site is consisted of two sections and a street passes through the middle of the site, threatening children
View		No good view	The complex can be created in floors in order to have good view but it is not suitable for children	
Potentials (attractiveness and presence)	Being located in a relatively quiet area with a long history and social roots	Concentration and attractive density of travel in the area	Openness of back of the land for further expanding it Expansion of tourists' activity	

Recreational-welfare	Existence of gyms	Lack of any	Being adjacent to the
	near the site	historical	National Garden
		monument or	
		recreational	
		complex in the	
		site	

Analysis of the sites using AHP method or hierarchical analysis

In the first step of this section, using AHP technique, the characteristics considered for the sites were evaluated and weighted using paired comparisons.

1. Prioritization of the research criteria in site 1

As can be seen in (Figure 2), among the site criteria from the viewpoint of the respondents, accessibility criterion with a coefficient of 0.297 is in the first priority, and the site dimensions and gloss criterion with a coefficient of 0.068 is in the last priority, with a discrepancy rate of 0.10.

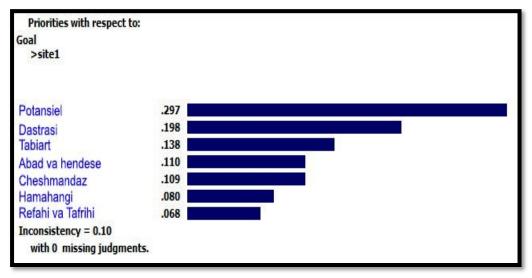


Figure 2: Prioritization of factors related to site number 1

2. Prioritization of the research criteria in site 2

As can be seen in (Figure 3), among the site criteria from the viewpoint of the respondents, accessibility criterion with a coefficient of 0.271 is in the first priority, and the site dimensions and gloss criterion with a coefficient of 0.054 is in the last priority, with a discrepancy rate of 0.09.

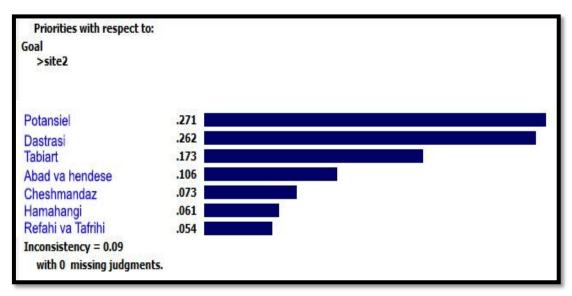


Figure 3: Prioritization of factors related to site number 2

3. Prioritization of the research criteria in site 3

As can be seen in (Figure 4), among the site criteria from the viewpoint of the respondents, accessibility criterion with a coefficient of 0.326 is in the first priority, and the site dimensions and gloss criterion with a coefficient of 0.052 is in the last priority, with a discrepancy rate of 0.09.

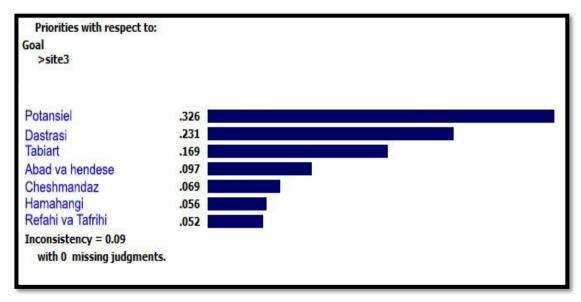


Figure 4: Prioritization of factors related to site number 3

4. Prioritization of the studied sites

As can be seen in (Figure 5), site 1 with a coefficient of 0.571 is in the first priority; site 2 with a coefficient of 0.286 is in the second priority, and site 3 with a weight of 0.143 is the third with a discrepancy rate of 0.000.

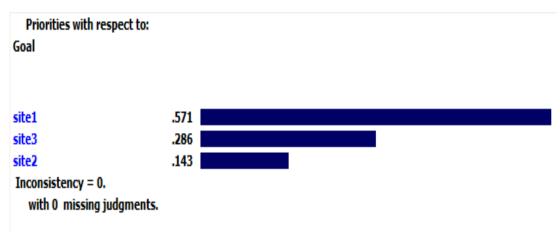


Figure 5: Prioritization of the research sites

5. Final prioritization of the research criteria

As can be seen (Figure 6), among the research criteria from the respondents' point of view, potential criterion with a weight of 0.301 is in the first priority; access with a weight 0.217 in the second priority; nature with a weight 0.152 in the third priority; dimensions and size with a weight 0.106 in the fourth priority; view with a weight of 0.090 in the fifth priority, coordination with a weight of 0.072 in the sixth priority, and recreational and welfare of the site with a weight of 0.063 is in the last priority, with a discrepancy rate of 0.07.

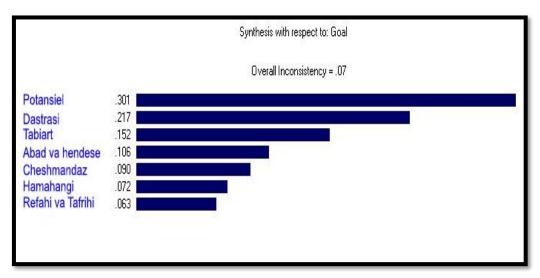


Figure 6: Prioritization of the main research criteria

In this section (Figure 7) and (Figure 8) are presented for sensitivity analysis.

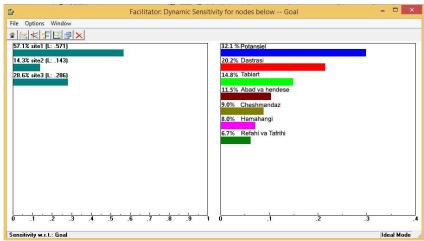


Figure 7: Performance sensitivity analysis

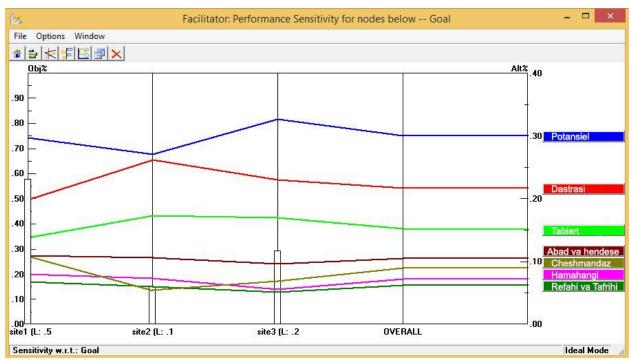


Figure 8: Dynamic sensitivity analysis

Investigating the research questions

The first question: What are the factors affecting designing of a child-friendly cultural complex? In this section, a summary of the results of the studies conducted on the articles of researchers who have presented studies in the fields close to the research question is provided in (Table 5).

Table 5: Factors affecting designing of a child-friendly complex

Num	Researcher	Title of the article/ project/	Key points
ber		report	
1	(Mortazavi, 1997)	Educational spaces from psychological point of view	1. The benches in a classroom and the way they are arranged; 2. Proper dimensions of classrooms; 3. Creation of spaces for the student to move and

			participate
2	(Harandi & Akrami, 1998)	Open space in elementary schools	1. Interactive games and activities; 2. Fun and refreshing natural open spaces; 3. Natural features and elements such as hills in which children can climb and sit or move
3	(Haj Yakhani & Salehi, 1993)	Choosing the right color for educational space	1. Color; 2. Light; 3. Sound; 4. Equipment
4	(Lotf Ata, 2008)	The impact of environmental factors on learning behavior in educational environments (elementary schools) in cities	 Proportions of the elements; 2. Scale; 3. Type of space organization; Color; 5. Light; 6. Sound; 7. Open space of the yard
5	(Nasr Esfahani & Moinpour, 2002)	The impact of class physical factors on students' progress	Classroom heating and ventilation; Corganization and arranging of classrooms; 3. Educational equipment
6	(Mardomi & Delshad, 2010)	Flexible learning environment	1- Revitalizing communication paths and transfer spaces to areas for learning; 2. Extending learning areas from closed spaces to semi-open spaces such as terraces and completely open spaces such as yards; 3. Creation of (active) collective areas changeable for multifunctional uses (rest, group learning, and); 4. Transparency and possibility of presence in all activities taking place in the complex although visually

The second question: What are the factors affecting children's reconciliation with historical spaces?

In this section, a summary of the results of the studies conducted on the articles of researchers who have presented studies in the fields close to the research question is provided in (Table 6).

Table 6: Factors affecting children's reconciliation with historical monuments

Indicators of children's reconciliation with historical environments	Mutual emotions and attention	Through which each person reveals his/her responsibility toward paying attention to his/her friend to show that he/she cares.
	Common interests and activities	Usually, children become friends through playing with each other. Continuing the relationship leads to expansion of interaction of friendship to situations and interests other than playing. Carrying out joint activities, although is not the most important component of friendship model, but is one of the most important parts of this model.
	Commitment and loyalty	Leads to a deeper understanding based on personal experiences and ultimately leads to empathy and trust between children. Loyalty is the goal of mutual friendship while maintaining mutual interests.
	Mutual understanding	More than 30 percent of primary school children have described mutual understanding and loyalty as the characteristics of interaction and friendship between themselves.
	Equality	The place for establishment of balance and equality becomes possible through freedom to communicate and express ideas without fear of others.

The third question: What are the effects of the factors affecting designing of a child-friendly cultural complex on children's reconciliation with historical spaces?

According to the information provided in (Table 7), the variable of spatial factors has the highest mean value. This means that according to the respondents to the questionnaire, spatial factors have the greatest impact on designing children's cultural complex with an approach to reconciliation with historical spaces in the city of Shiraz. The second most influential factor is physical factors; and functional factors also have the lowest obtained mean, which means that they have less effect on designing children's cultural complex.

Table 7: Descriptive statistics of the mean of the research variables

	Number	Mean	Median	SD	Lowest value	Highest value	Coefficient of changes	Variance
Spatial	200	4.1550	4.1429	0.30842	3.43	4.86	1.43	0.095
Physical	200	3.7786	3.8571	0.54096	2	5	3	0.293
Functional	200	3.6781	3.7143	0.56930	2.14	5	2.86	0.324

According to Tables 8 and 9, given the number obtained for significance level and as it is less than 0.01, it is concluded that Friedman's test of differences of means is significant for the research variables. Simply put, the means obtained for these three variables differ from each other, and respondents to the questionnaire regarding designing of children's cultural complex with an approach to reconciliation with historical spaces of Shiraz have different rankings about the studied characteristics (Table 8) and (Table 9).

Table 8: Ranking of the research variables

	Mean rank	Final rank
Spatial	2.54	1
Physical	1.84	2
Functional	1.63	3

Table 9: Friedman test for ranking

Number	200
Chi-square statistic	98.542
Degree of freedom	2
Significance level	0.000

Based on the information obtained on spatial factor, it was observed that the factor of "shape and area of the space" has the greatest impact on designing of children's cultural complex with an approach to reconciliation with historical spaces of Shiraz from the viewpoint of respondents to the questionnaire (Table 10).

Table 10: Examining the questions of spatial factor

Spatial factors	Question	Mean
	Shape and area of space	4.535
	Spatial relationship	4.41
	View	4.265
	Vibrancy	4.195
	Proximity	4.11
	Proportions	4
	Accessibility	3.57

Based on the information obtained on physical factor, it was observed that the factor of "color" has the greatest impact on designing of children's cultural complex with an approach to reconciliation with historical spaces of Shiraz from the viewpoint of respondents to the questionnaire (Table 11).

Table 11: Examining the questions of physical factor

Physical factors	Question	Mean
	Color	4.125
	Decorations	4.065
	Attractiveness	3.96
	Light	3.81
	Details	3.81
	Form	3.645
	Furniture	3.31

Based on the information obtained on functional factor, it was observed that the factor of "fantasy" has the greatest impact on designing of children's cultural complex with an approach to reconciliation with historical spaces of Shiraz from the viewpoint of respondents to the questionnaire (Table 12).

Table 12: Examining the questions of functional factor

functional factors	Question	Mean
	Fantasy	4.528
	Diversity	4.075
	Curiosity	3.875
	Changeability	3.47
	Flexibility	3.39
	Elements being stimulant	3.265
	Composition and continuity	3.15

Examining all questions, it was observed that the factor "shape and area of space" with an average of 4.535 has the greatest impact among the questions on designing of children's cultural complex with an approach to reconciliation with historical spaces of Shiraz.

The solutions for using light in the complex are shown in (Table 13).

Table 13: Principles of lighting in complexes

Theorist	Year	Strategies	Results
Ladd	1990	Directing the light into interior space	The light should specify and define the
			space through depth, and create very
			exciting and stimulating spaces
Sancar Fahriye &	2010	Putting forms under light that create	Prevention from impairment of
Cansevercan		light shade	visibility
Carmona et al.	2003	Not controlling the light	movement toward manifestation of light
			of nature
Osman El Hassan	2013	Use of gentle light	The difference between art of an
			architect and his/her works regarding
			urban decorations
Kingston et al.	1856	Attention to form, texture, color of the	Relaxation and more reduction of stress
		environment	in the environment

Here, the most important strategies for use of light in the complex according to the subject's approach can be summarized in (Figure 9).

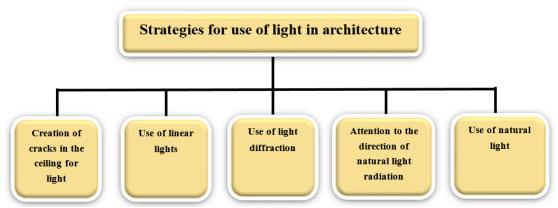


Figure 9: Strategies for use of light in architecture

The architectural strategies for use of color are shown in (Table 14).

Table 14: Principles of color in architecture

Theorist	Year	Strategies	Results
Ladd	1990	Effects of color on mind	Classification of colors according to their
			emotional value
Kingston et al.	1856	Use of main colors	Positive impacts on mind
Ismailzadeh Kovaki	2014	Coloring the environment	People's adaptation to the environment
& Kiani			
Carmona et al.	2003	Leading to physiological	Creation of better behavior in people and
		changes	not behaving aggressively
Ismailzadeh Kovaki	1867	Depending on people's cultural	Colors creating different feelings in
		backgrounds, color creates	different cultures;
		different feelings in people	Example: red
			France: aristocracy; Egypt: sense of
			death; India: creativity; Japan: Anger;
			China: happiness, etc.

Strategies for use of geometry and proportions in the complex can be summarized in (Figure 10).

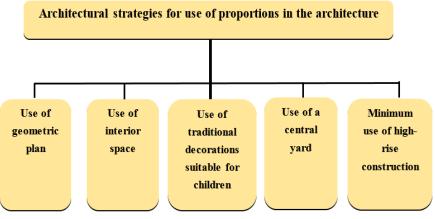


Figure 10: Strategies for use of proportions; source: author

Strategies for use of nature are shown in (Table 15).

Table 13. Strategies for use of nature from the viewpoint of architects and theorists, source. Azimzadegan, 2010		
Theorists	Year	Theories
Kingston et al.	1856-1912	Trust in Form's subordination to function
		Trust in use of natural forms and organic architecture
Gresham & Elliot	1941-1959	Coordination with architectural context, use of natural materials
Walter & Of Gilmore	1941-2003	Experiencing and sense of nature in architecture
		Use of nature and its elements such as light, water, vegetation
Marshall	2006	Optimal use of materials and inspiration from features of change,
		growth, and movement in nature
Rochelle	1814-1926	Use of natural geometry in architecture
Sancar Fahriye &	2010	Architects should use natural laws
Cansevercan		

Table 15: Strategies for use of nature from the viewpoint of architects and theorists: source: Azimzadegan, 2016

According to theorists, it can be said that only those strategies for use of nature that deal with the direct relationship between architecture, human, and nature will create vibrancy in cultural environments and ultimately lead to inner peace of children in question and cause establishment of an appropriate relationship between nature and architecture. The most important of these strategies can be seen in (Figure 11).

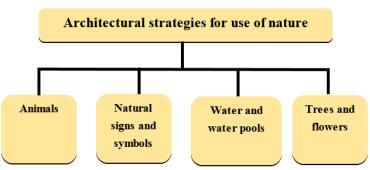


Figure 11: Strategies for use of nature; source: author

Strategies for use of shape and area of space

According to examinations, many features have been introduced for connecting open space to the closed one. So, by analyzing these features a classification is presented for them (Table 16).

Goal		Feature
	**	
Convertibility	Use	A detailed space and connection
		Deployment space
	Spatial feeling	Sense of spatial continuance
		Gradual flowing
		Place of simultaneous ambiguities
		A sense between indoor and outdoor
		A feeling of freedom
Permeability	Permeability	relative influence of two spaces on each other
		Transference
		Semi-open

		Semi-solitude
		Semi-enclosed
	Flexibility	Diversity of activities
		Continuance of activities
		Gradual change
		Supporting territory
Visual continuity	Influence of view	Continuance of view path
		Perspective
	Sequence	Transparency
		Reflection

4. CONCLUSION

Here, according to the obtained results, the architectural solutions are presented that make a child-friendly cultural center with an approach to reconciliation with historical spaces which leads to the space becoming desirable and also children's reconciliation with historical spaces:

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