A Model for Developing Child-Friendly Urban Spaces with an Emphasis on

Play and Sports

Vahid Afshon[1]
Mostafa Afshari[2]* iD
Lena Motalebi[3]

[1] Ph.D. Student of Sport Management Shoushtar Branch, Islamic Azad University, Shoushtar, Iran
[2] Associate Professor of Sport Management , Sport Sciences Research Institute, Tehran, Iran
[3] Assistant Professor of Sport Management Shoushtar Branch, Islamic Azad University, Shoushtar, Iran

*Correspondence:
Mostafa Afshari, Associate Professor of Sport Management , Sport Sciences Research Institute, Tehran, Iran
Email: afshari.ua@gmail.com
ORCID : 0000-0001-8378-8312
DOI:
10.22098/rsmm.2025.16417.1437

Abstract

Purpose: Child-friendly city is one of the urban planning theories, in line with the allocation of citizenship rights to children with the aim of creating an opportunity for children to shape or change their surrounding environment. The present study was conducted with the aim of examining the presentation of a model for the development of child-friendly urban spaces with an emphasis on play and sports.

Methods: The research will be applied from the perspective of the objective, qualitative in terms of the nature of the data, as well as the method of implementation (exploratory), and the interview tool was used. The grounded theory strategy is used to conduct the research. In grounded theory, the purposive sampling method is used, which is also referred to as theoretical sampling. In this method, samples are selected by the researcher according to specific criteria and initial findings. Strauss and Corbin's grounded theory analysis method was used to analyze the data.

Results: The research findings showed that by being in society, the child becomes familiar with social norms, can interact with peers, and can move towards active and creative games, and the amount of computer games is reduced. In this case, there is also joy in the family and children are less isolated at home.

Conclusion: The lack of a clear framework, principles, and indicators for evaluating Iranian urban spaces and their planning and management, along with a superficial view of this concept and approach, has led to their failure. In this study, a model for developing child-friendly urban spaces has been examined with an emphasis on play and sports.

Keywords: urban spaces, urban planning, child-friendly city, citizenship rights.

Introduction

The growth of urban populations and the increase in migration to cities have led to uncontrolled expansion of urban areas, a decline in human well-being, a move towards suburbanization, and numerous problems for various urban managers, especially in developing countries (Baumgart, 2017). Urbanization is a global trend that is expected to continue, and by 2025, it is estimated that approximately 60% of the world's children will live in urban areas (Zhang et al, 2023). The population of urban children is increasing rapidly, and there is a growing interest in promoting child-friendly cities and communities. Accordingly, UNICEF has developed a framework for building child-friendly cities and communities (Chan, 2021). One of the most important requirements for sustainable urban development is to improve the quality of life of all human groups, and urban planning truly achieves the goals of a desirable city when the desires and needs of all citizens are taken into account, taking into account age requirements. In addition to adults, urban spaces also have a young audience who are more at risk from urban spaces than adults due to their specific physical, age, and mental conditions. Today, more than one-third of the world's population is under 21 years of age and constitutes an important part of the urban population; while Article 1 of the Universal Declaration of the Rights of the Child defines a child as someone under 21 years of age. Therefore, children and adolescents, as members of society with their own set of desires and needs, are users of the artificial environment (Wood, Bornat, & Bicquelet-Lock, 2019). An environment with priority for the survival and development of children, with the aim of creating a better society for the development of children (Chen-ran, W., & Tao, 2022). Today, many children live in extreme poverty and high-risk neighborhoods, which are among the most vulnerable groups in society. However, they are the link between past and

future generations. Accordingly, planning for the sustainability of the neighborhood as the first public place for children's interactive experiences, within the framework of the child-friendly city approach, can provide an opportunity for all children to fulfill their desires (Taefenasarabadi et al., 2021).

While ensuring a bright future for a society depends on the proper growth and education of children, and children are considered the link between past and future generations in every society and are responsible for transmitting traditions, cultures, beliefs, and ... in every society. Also, creating a suitable environment for child development can pave the way for ensuring the social health of the next generation. A city that does not pay attention to its children has not paid attention to its past, present, and future generations (Tahmasebzadeh, 2018). The increasing focus on citizen participation in urban planning has also increased awareness of children's participation, but children are also marginalized in urban planning processes (Wilhelmsen, 2023). In our country, children and adolescents have been ignored in the planning process, despite the concern of designers and planners to improve environmental qualities with public participation (and the large share of children and adolescents in the population).

This is while adolescents are more sensitive, vulnerable and under deeper psychological stress compared to other groups, and their participation in leisure activities is of great importance, because they are at an age when they are very interested in relying on friendships in their free time and are always looking to adapt, communicate and spend time with their friends so that they can learn more about themselves and their role and value in society. This age group is more important among other users of urban spaces, because they are in a more vulnerable and sensitive stage of their lives and their interaction with the environment plays a significant role in their

future (Moayedfar & Safaei, 2019). On the other hand, the problems caused by increasing urbanization and also the transformation of children's activities have caused this segment of society to distance itself from urban play spaces (Chen et al, 2020). Therefore, children, as one of the vulnerable segments of society who are the future builders of society, should be more involved in urban planning (Baderam & Bordbar, 2021). A problem that often occurs in urban areas is the transfer of use of spaces designated for creating parks and playgrounds for the community, especially children, to construction (Ali et al., 2020), and given that public spaces in cities are formed based on the principles and criteria of adult use, and most urban spaces are largely lacking in quality for children to use and far from the characteristics of a child-friendly city (Moayedfar & Safaei, 2019). A child-friendly city is an environment in which children express their desires and can influence issues related to themselves. The goal of the child-friendly city approach or city design for children is to guarantee children's rights in various urban areas (Nan, 2020). A child-friendly city can act as an educational unit that facilitates and empowers children's potential so that they can grow and develop and are protected from violence and discrimination (Agung & Hariri, 2021). The concept of a child-friendly city means how governments govern these cities based on the interests of children. It also refers to cities in which children's basic rights such as health, transportation, protection, education, and culture are respected (Adams, Savahl, Florence, & Jackson, 2019). These cities should also provide children with appropriate urban services. These services should be developed in a way that meets the requirements of child-friendly cities by respecting the principles and standards, especially the availability of entertainment services, safe roads, services for people with special needs, and the density of kindergarten classes in learning and teaching (Mohamed, 2024). A child-friendly city has a

high priority for addressing the needs and protecting the rights of children in an urban environment. The availability of play spaces in urban areas has had a positive impact on the ability of urban children to participate in safe, enjoyable, and group play (Harumain et al., 2023).

Research on child-friendly cities, especially in Europe, has been gaining attention since the 1980s. Most of this research has focused on giving children citizenship and addressing their needs and wants (Drianda & Kesuma, 2020). Children are naturally highly mobile and rarely sit still. There is no need to spend time and energy teaching them about physical activity, and they are active enough. Recent studies on children around the world have shown that they are not very active in poor urban areas, and various studies have shown that their physical activity levels are lower than the standard for maintaining health, and little attention has been paid to children's physical activity and play in the design of urban spaces (Nam, & Nam, 2018). Given the growth of car life and apartment living and the lack of suitable spaces for children to play and exercise, children have suffered from many problems, including overweight, inactivity, and decreased physical activity and increased brain games. What is important is the lack of a specific pattern for planned development in the field of developing city spaces with a play and sports approach, and the lack of suitable sports spaces in the city for children to play and exercise. On the other hand, the existence of child-centered urban space development programs with an emphasis on playing and sports by the authorities can also be an additional reason so that a child-friendly city is formed based on sports and games, and every day we witness an increase in physical activity of this important segment of society that is the future builder of the country (Kharazmi et al., 2017).

In general, although children desperately need a space for play, learning, exercise, and leisure,

which is very important for the development and training of cognitive, emotional, and psychomotor skills, and in addition, the spaces available for children's play are considered a lifeline not only for city residents but also for the physical and mental development of children, in our country, parks, playgrounds, and other public spaces are being destroyed in a worrying way for various reasons, including political and economic power, or simply due to the incompetence and corruption of city officials. On the other hand, because in developed countries and from the point of view of researchers, creating a child-friendly city where the importance of play for the cognitive, social, physical, and emotional development of children is known, is essential, but in Iran, attention to children's recreational play and sports does not have a proper place and is not seen in urban development programs, and there is no appropriate guide for creating and developing a child-friendly city based on play and sports. Therefore, this research seeks to answer the question of what is the development model of child-friendly urban spaces based on play and sports. And what infrastructure is necessary for the development of child-friendly urban spaces based on play and sports, or what contexts and platforms can facilitate the development of child-friendly urban spaces based on play and sports? Also, what strategies can ensure the sustainable development of child-friendly urban spaces based on play and sports? And what are the expected outcomes of the development of child-friendly urban spaces based on play and sports?

Materials and Methods

This research will be applied from the perspective of the objective, qualitative from the perspective of the nature of the data, and exploratory from the perspective of the implementation (exploratory) and the interview tool will be used. Finally, this research was cross-sectional from a time perspective. In fact, in this plan, first, based on qualitative studies of

the grounded theory method of the Strauss and Corbin approach, the structures or components in question were described and analyzed. In this way, the framework and factors of those structures and components are extracted and indicators are developed for it.

The grounded theory strategy is used to carry out the research. In grounded theory, the purposive sampling method is used, which is also referred to as theoretical sampling. In this method, samples are selected according to specific criteria and initial findings by the researcher. Initial data analyses identify topics that require further explanation; hence, the sampling process proceeds according to the model (theory) development procedure. In fact, the process of collecting and analyzing data is carried out simultaneously. The process of developing a model and identifying variables is part of the data collection process. The statistical population of the research includes all professors, experts, specialists, and expert professors active in the field of sports management and children's sports specialists, as well as professors in the field of urban planning and development in Iran. In other words, in the present study, academic and organizational experts will be selected as the statistical population based on defined indicators and a survey will be conducted on them using the semi-structured interview method along with an open questionnaire. The criteria or indicators for entering individuals for interviews are executive work experience or having a master's degree in sports management and at least executive work experience in sports clubs and organizations, having a book, article, or idea and being an expert in the field of the research topic, having a doctorate in sports management, declaring readiness and informed consent to participate in the survey and semi-structured interviews.

In selecting samples for interviews, attention should be paid to the issue of reaching key and important people in the form of theoretical

logic. Therefore, the sampling method is also purposeful (judgmental). The following table presents the demographic characteristics of the sample members.

Table 1. Demographic information of the people in the sample

row	gender	history	education	side	age
1	the man	15	Specialized Ph.D	Member of scientific team	48
2	the man	17	Specialized Ph.D	Member of scientific team	45
3	the man	15	Specialized Ph.D	Member of scientific team	47
4	woman	24	Specialized Ph.D	Member of scientific team	52
5	the man	20	Specialized Ph.D	Member of scientific team	46
6	the man	18	Specialized Ph.D	Member of scientific team	43
7	the man	25	Specialized Ph.D	Member of scientific team	55
8	the man	15	Specialized Ph.D	Member of scientific team	42
9	the man	15	Specialized Ph.D	Member of scientific team	44
10	woman	16	Specialized Ph.D	Member of scientific team	46
11	woman	15	Specialized Ph.D	Member of scientific team	43
12	the man	18	Specialized Ph.D	Member of scientific team	45
13	the man	20	Specialized Ph.D	Member of scientific team	48
14	the man	22	Specialized Ph.D	Member of scientific team	47
15	the man	25	Specialized Ph.D	Member of scientific team	52

The data collection method in this study is library and field. In the library method, information related to theoretical foundations is collected from research systems, related sites, research conducted, and related books. Also, in the field method, data related to the research is collected using semi-structured interviews. In this study, data is collected using interviews, and a conceptual research model is developed using the grounded data analysis method. In order to analyze the qualitative data in this study, the grounded theory data analysis method of Strauss and Corbin will be used. Also, MAXQDA software version 2020 will be used to perform the aforementioned analyses.

Results

In the present study, which is a qualitative method and uses interviews, a model for the development of child-friendly urban spaces has been presented, with an emphasis on play and sports. For this purpose, open coding was first performed using the information obtained, and then the open codes were converted into related concepts. In the next stage, axial coding was performed and its strategies and consequences were examined, and then selective coding was performed and its results were analyzed. After understanding the initial state of the study methods, identifying and determining the status of the factors affecting the development of child-friendly urban spaces, selective

interviews were conducted to answer the research question, and the data that was coded from the semi-structured interviews were analyzed. After the coding was done, by comparing them, several codes that refer to a common aspect of the phenomenon under study are taken as a concept, then several concepts and one or more categories are reached in the form of a theory.

Selective coding

After finding the commonalities between these subcategories, we arrive at 5 main categories, which are the main components of the present research model. By establishing a connection and semantic proximity between the axial codes listed in Table 1 and their overlap, the researcher arrived at the central categories of the research, which are the selected codes.

Select code	Axial code	open source
Causal factors	Economic factors	swelling
		Lack of financial resources
		The high price of providing sports services
		Unfavorable economic conditions
	Social factors	Respect for children's rights
		Greater awareness of parents and community members about children's rights
		Finding awareness of society's norms
		Improving the spirit of friendship in children
		Acquaintance of the child with the outside environment
	Political and managerial factors	Lack of attention of city managers and planners to children's needs
		Multiplicity in decision making
		Continuous supervision of the authorities on the children's places and play space
		Employing caring and expert managers in the field of children's sports and games
		The thinking and philosophy of planners regarding a child-friendly city
		The level of sports literacy of managers
		Wrong policy
		Inadequacy of subordinate institutions
	Individual and family factors	Parents' demand for children's rights
		Sports literacy and movement in the family
		Parents' desire for children's well-being
		One-child system
		Working parents and not having time for the child

	health factor	Increased growth hormone in children
		Increase in the mobility of children
		Increasing the child's physical strength
		Possessing a suitable physique
		Inactivity of children in the era of Corona
		Children's interest in computer games and inactivity
Background conditions	Infrastructure factors	Attention to spaces related to children
		Providing the necessary infrastructure for parental supervision in the created spaces
		Changing the construction pattern and increasing apartment living
		Establishment of sports and game equipment in different urban areas
		Creating a green space for children to play
		Modifications of existing spaces
		Access to the transportation system
		Creating child-friendly spaces near residential areas
		Providing creative and stimulating spaces for activity
		Attention to the needs of disabled children
	Supporting factors	Branding about the child-friendly city
		The amount of donations from local donors and supporters to create these spaces
		The level of cooperation of the Ministry of Education and Culture with non-governmental organizations and charities in this field
Intervening factors	Urban management	Compilation of new urban maps according to demographic changes
		Requiring the municipality to consider these spaces
		Considering the climatic conditions
		Consider the culture of the region
	Media activities	The attention of the media to the topic of the child-friendly city
		Creating programs to motivate children to be active
		Providing examples through the media
	Legislation	Amending laws related to children's rights
		There are no special rules in this regard
		Compilation of urban development document

		Compilation of urban development document suitable for new urban spaces
		Talking about drafting new laws in this regard
		Compilation of high-handed rules
Strategies	Sports facilities and equipment	Creating parks and playgrounds
		Create a stimulating environment
		Development of play spaces in kindergartens and preschools
		Pedestrian and bicycle access
		Development of motor literacy promotion park
		Creating creative and adventurous playgrounds
		Create play houses
		Creation of children's clubs
	Immunization	Dealing with the safety and security of these spaces
		Creating a safe and healthy environment for playing
		Securing child-friendly spaces
		Establishment of health stations
		Development of safe and healthy play places
	Manpower	Employing quality and expert trainers
		Employing qualified coaches and teachers
		Lack of expert trainers
		Using physical education graduates and famous people in this field
		Increasing the number of skilled trainers in urban development
	Cultivation	Child participation in decision-making related to child-friendly spaces
		Cultivation regarding children's play
		Promoting the culture of the impact of play on children
		Encouraging children to be active in schools
	Notification	Informing families
		Holding conferences and training sessions
		Conducting pathology courses in this field
		Lack of media advertising to spread the culture of a child-friendly city
		Informing the community

		Holding awareness courses in this field
	Financial and welfare	Access to welfare services
		The cost of sports equipment and supplies
		Providing health, welfare and treatment facilities and medical emergencies
		Financing related urban projects
		Easy access to facilities and services
		Investment and allocation of sufficient financial resources
	organizational	Revision of government policies and education
		Lack of cooperation between implementing agencies to expand these spaces
		A practical and executive attachment for a child-friendly urban space
Consequences	physical and mental	Creating spiritual vitality in the family
		Energy depletion in children
		Increasing the motor literacy of the child
		Discovering children's sports talents
		Keeping children away from depression
		Providing suitable spaces for the development of the child's cognitive and motor skills
	educational	Improving the quality of parenting
		Willingness to raise children
		Confinement of children at home
		Inappropriate behavior with children in the family
		Improving the quality of parenting
	social	Creating interactive spaces to meet the social needs of children
		Providing suitable spaces for the development of the child's cognitive and motor skills
	environmental	Beautifying the environment such as sidewalks and...
		Securing child-friendly spaces
		Creating creative and adventurous playgrounds
		Failure to improve the city in connection with the creation of child-friendly spaces
		Environmental attractiveness and coloring of child-friendly spaces

Causal categories

Causal categories cause the creation and development of a central phenomenon. Based on the findings from the interviews conducted with the participants, five categories of economic, social, political and managerial, health, and individual and family were identified as causal categories.

Regarding causal factors, the interviewees believe that inflation, lack of income, and difficult economic conditions in the household, and the involvement of parents in work, there will not be enough time and source of income for parents and children to be present in play areas, and this has caused the presence of children in the community and play spaces to diminish and the authorities do not pay enough attention to this issue. And this can lead to insufficient supervision by the authorities and inattention to issues related to children. Other factors affecting the development of a child-friendly city include the right policies, the adequacy of institutions related to this issue, and respect for children's rights by institutions and families, and the pursuit of matters related to the creation of child-friendly spaces. Attention to children's health, such as increasing physical strength and reducing children's inactivity, is another causal factor that can lead to investment in a child-friendly city so that in the future they will have a healthier and more active generation in society.

Central phenomenon

This is the label considered in the research. A child-friendly city is a city or community that listens to children's opinions and takes their priorities and needs into account in the local decision-making process that can affect children's lives. In this city, children's rights are respected and the relevant institutions make every effort to provide the necessary facilities for children. Therefore, after collecting and analyzing data in the open coding stage and examining the presented indicators, the category of child-friendly city development was selected as the central phenomenon or category based on the emphases of the interviewees and the theoretical foundations of the research.

Strategic categories

Strategies represent interactions and activities that are adopted in response to the central phenomenon and under the influence of intervening factors and based on contextual factors. Among the basic strategies considered in this research based on its subject, are the creation of sports facilities and equipment and play spaces, securing the space and paying attention to the safety of healthy and disabled children, and building places that all children can use. Also, hiring and employing specialized and skilled human resources who have the ability to recognize the needs of children, as well as creating culture and information in the field of paying attention to children and their special spaces can be effective strategies.

Contextual categories (context)

The specific conditions that affect strategies are called context. These conditions constitute a set of contextual variables and categories, so the realization of strategies requires the precise and complete implementation of contexts and background conditions so that phenomena can occur and emerge. In this study, two categories of infrastructural and supportive factors were identified as background factors. In fact, it can be said that until the appropriate infrastructure is built to create child-friendly spaces in the city, and safe and child-friendly spaces are not improved and created, and the ideas of developing a child-friendly city are not supported, no achievement or strategy can be effective.

Intervening factors

Intervening categories are considered general conditions that, along with the background categories, affect strategies. In this study, three categories of urban management, media

activities, and legislation were identified as intervening factors. In fact, it can be said that urban management, in order to consider the climatic conditions of the regions and the level of culture of each region and to develop appropriate maps for these regions, can be considered an important intervening factor in creating a child-friendly city. Also, by addressing this issue, creating programs to familiarize people with child-friendly spaces and showing their importance, the media can attract the attention of investors, donors, and child advocates. On the other hand, many existing laws in this field have shortcomings that can be solved by compiling an urban development document and enacting new and comprehensive laws in this field.

Outcomes

Some categories are the consequences and results of implementing strategies. In fact, outcomes are the essence of the efforts that are made and as a result of their implementation,

we will wait to obtain the fruit. Outcomes are directly affected by strategies and background and intervention conditions, and are indirectly affected by causal conditions and the central category. In this study, based on software analyses and interview results, physical, psychological, educational, social, and environmental consequences were extracted, which shows that paying attention to spaces dedicated to play and creating movement in children can, in addition to creating mental vitality in them, increase physical mobility and reduce disorders such as obesity and skeletal deformity. In fact, by being present in society, a child becomes familiar with social norms, can interact with peers, and can move towards active and creative games, and the amount of computer games is reduced. In this case, joy also arises in the family and causes children to be less isolated at home. The following is a design of the initial model for the development of a child-friendly city using the Maxqda software:
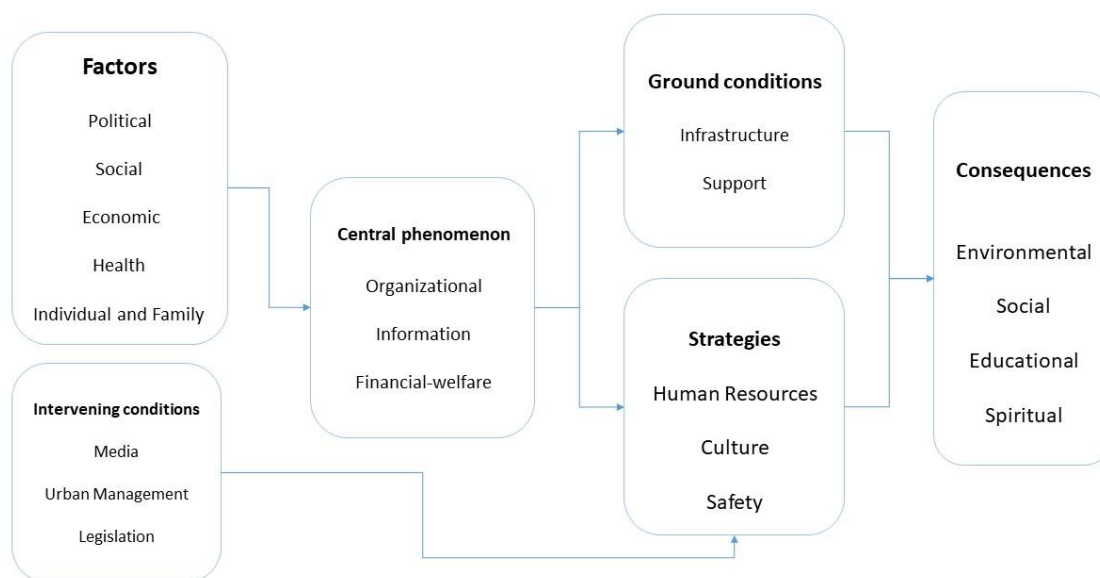
Figure 3. A paradigm model of a child-friendly city

Discussion

In today's societies, developing safe and suitable spaces for children and supporting the

ideas of child-friendly city development are among the basic priorities of urban management. This research examines the intervening factors, strategies, and

consequences related to creating child-friendly cities. In this context, urban management, media activities, and legislation have been identified as intervening factors that play an important role in achieving this goal. Children are the most sensitive and influential social group and the most important capital of the city, whose needs and interests have not been given due attention in urban planning and rapid development of the last few decades, especially in the field of sports and play space. Global and Iranian precedents and experiences show that focusing on the issue of child-friendly city (CFC), especially with the new features and approaches that were raised in the theoretical foundations and background section, is a new issue for the application and implementation of "child-friendly city"-based planning. For the first time in 2007, the city of Bendigo in Australia was introduced and recognized by UNICEF as a "child-friendly city" and the first city that had all the aspects and characteristics of a child-friendly city from the point of view of UNICEF. In this city, children's rights are considered as the main and fundamental priority in all approaches. The city of Oz in Fars Province was selected as a child-friendly city for the first time in Iran in April 2010 by the Children's Research Institute. In terms of time, about a decade has passed since the term child-friendly city was developed. Therefore, more research is still needed to realize a child-friendly city. Studies show that; although organizations related to the subject at the global level such as (UNICEF and at the Iranian level such as the Children's Intellectual Development Center) have had activities related to "child-friendly city" which has been a positive stimulus for expanding the goals of the child-friendly city ideas. However, in Iran, a specific action plan for the implementation and objective realization of the "child-friendly city" at the city level has not been implemented by effective municipal organizations. Therefore, it can be said that Iranian cities are taking the first steps in this area. Children have specific and diverse physical and mental needs at each stage of their development. These needs must be met in a specific space. The first environment that affects the child is the family and the environment that governs it, followed by educational spaces such as kindergartens and elementary schools, and in another type of space, public urban spaces that must be responsive to the specific needs and expectations of children. After a desirable home environment that is appropriate to the child's psychological needs and spending his or her early childhood, he or she steps into an environment beyond the home and is placed in an urban space. This space must be safe, but it must also lead to creative behavior, increase the child's level of participation, create a sense of happiness, and create a sense of belonging to the place in the child. In this space, designers and planners should try to meet these expectations, considering the identified needs and interests of the child. Urban spaces have a unique role in meeting the social and individual needs of children. However, today, the increasing development and expansion of cities and the problems arising from it have limited the child's free access to the space outside the home and the city environment, and they have become devoid of desirable urban spaces. In a way that they are not compatible with the needs of children.

Conclusion

In such cities, children, as part of society in the city space with a set of special demands and needs, have been forced to use the artificial environment of another generation. Creating a suitable environment for the growth of children as a link between generations and the transmission of culture can pave the way for ensuring intergenerational social health. A city that does not pay attention to its children has not paid attention to its past, present, and future generations. In this regard, research was conducted in the late 20th century on children and the city. As a result of this research, the

child-friendly city approach was proposed and examples of successful forms were implemented in some countries. However, in Iran, despite the introduction of this approach, a successful and desirable experience has not yet been formed. The lack of a clear framework, principles, and indicators for evaluating Iranian urban spaces and their planning and management, along with a superficial view of this concept and approach, has led to their failure. In this study, a model for the development of child-friendly urban spaces has been presented with an emphasis on play and sports.

References

[1] Abhor, Niko. Shams al-Dini, Ali. Ezra Panay, Bakhtiar. (2021). Assessing the status of child-friendly city indicators and its relationship with children's access to essential uses (case study: Jahorm city), urban planning geography research, volume 9, number 3, pp: 835-856. [In Persian].
https://jurbangeo.ut.ac.ir/article_82934_en.html.

[2] Adams, S., Savahl, S., Florence, M., & Jackson, K. (2019). Considering the natural environment in the creation of child-friendly Cities: Implications for Children's Subjective Well-Being. Child Indicators Research, 12(2), 545-567.
https://ideas.repec.org/a/spr/chinre/v12y2019i2d10.1007_s12187-018-9531-x.html.

[3] Yarcheski, A., Mahon, N. E., and Yarcheski, T. J. (2002). Anger in early adolescent boys and girls with health manifestations. Nursing research, 51(4), 229-236.
https://journals.lww.com/nursingresearchonline/abstract/2002/07000/anger_in_early_adolescent_boys_and_girls_with.3.aspx.

[4] Ali, M., & Aliah, S. E. (2020, June). Identification of Child-Friendly Integrated Public Spaces in Makassar City (Case Study: Losari Beach). In IOP Conference Series: Materials Science and Engineering (Vol. 875, No. 1, p. 012015). IOP Publishing. [In Persian].
https://iopscience.iop.org/article/10.1088/1757-899X/875/1/012015/meta.

[5] Badram, Saeed; Bardbar, Maryam. (2021). the components of the spatial improvement of the city with an emphasis on the child-friendly city (case example: Shiraz Forest Park in Koi Zahra neighborhood), International Conference on Civil Engineering, Architecture, Development and Regeneration of Urban Infrastructures in Iran, Tehran. [In Persian].
https://www.isnac.ir/XCZG-EEAGF.

[6] Baumgart, S. (2017). Public health and urban planning: challenging options for well-being: experiences from Germany. In Handbook of community well-being research (pp. 221-237). Springer, Dordrecht.
https://link.springer.com/chapter/10.1007/978-94-024-0878-2_12.

[7] Chan, P. (2021). Child-Friendly Urban Development: Smile Village Community Development Initiative in Phnom Penh. World, 2(4), 505-520.
https://www.mdpi.com/2673-4060/2/4/31.

[8] Chen, P., Witten, K., Kearns, R., & Donovan, Ph. (2020). Kids in the City: Children's Use and Experiences of Urban Neighborhoods in Auckland, New Zealand, Journal of Urban Design, 20(4), 417-436.
https://www.tandfonline.com/doi/abs/10.1080/13574809.2015.1044504.

[9] Chen-ran, W., & Tao, X. (2022). Practice and enlightenment of Child-Friendly City construction in health promotion in China. Chinese Journal of Public Health. 38(1), 1-5.
https://www.zgggws.com/en/article/doi/10.11847/zgggws1134190.

[10] Douglas, Y (2021). Modifying children's behavior, translated by Siavash Jamalfar,

Tehran: Fahim. https://www.iranketab.ir/book/112062-behaviour-problems-in-young-children.

[11] Drianda, R. P., & Kesuma, M. (2020). Is Jakarta a child-friendly city? In IOP Conference Series: Earth and Environmental Science (Vol. 592, No. 1, p. 012026). IOP Publishing. https://iopscience.iop.org/article/10.1088/1755-1315/592/1/012026/meta.

[12] Durant, William James, Durant, Ariel. (2014). History of Civilization: Rousseau and the Revolution, translated by Ziauddin Alaei Tabatabai, published by Scientific and Cultural Publishing Company, 4th edition. https://ketabnak.com/book/1779/%D8%AA%D8%A7%D8%B1%DB%8C%D8%AE-%D8%AA%D9%85%D8%AF%D9%86-%D8%B1%D9%88%D8%B3%D9%88-%D9%88-%D8%A7%D9%86%D9%82%D9%84%D8%A7%D8%A8-%D8%AC%D9%84%D8%AF-10.

[13] Emadi, Amer. Ghale Noi, Gholamreza.. (2012). Evaluation of sustainable urban development indicators with an emphasis on justice in the distribution of services (case study: Babol city). Scientific-research quarterly of research and urban planning, 6(22), 125-138.. [In Persian].

https://jupm.marvdasht.iau.ir/article_1123.html?_x_tr_sl=fa&_x_tr_tl=en&_x_tr_hl=en&_x_tr_pto=sc.

[14] Harumain, S., Adilah, Y., Matsunaga, C., Azmi, N. F., & Md Dali, M. (2023). Contextualizing Meso Space as a Safe Space for Children towards Child Friendly Cities. Contextualizing Meso Space as a Safe Space for Children towards Child Friendly Cities (December 5, 2023). [In Persian]. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4653578.

[15] Kharazmi, Omid Ali; Zarqani, Siddhadi; Johari, Leila; Kharazmi, Amir Ali. (2017). Evaluation of the potential of Mashhad city to become a child-friendly city with emphasis on play and green spaces, children's health and hygiene, the first international conference and the eighth national conference on urban planning and management, Mashhad. [In Persian].

https://civilica.com/doc/646668/.

[16] Wood, J., Bornat, D., & Bicquelet-Lock, A. (2023). Child Friendly Planning in the UK. London: Royal Town Planning Institute. https://m.zone5gardening.com/media/1568/childfriendlyplanningintheukareview2019.pdf.

[17] Mansoor, Mahmoud (2014). Genetic psychology: psychological development from birth to old age. Tehran: Ministry of Culture and Islamic Guidance, 16th edition. [In Persian].

https://samt.ac.ir/fa/book/1048/%D8%B1%D9%88%D8%A7%D9%86%D8%B4%D9%86%D8%A7%D8%B3%DB%8C-%DA%98%D9%86%D8%AA%DB%8C%DA%A9-%D8%AA%D8%AD%D9%88%D9%84-%D8%B1%D9%88%D8%A7%D9%86%DB%8C-%D8%A7%D8%B2-%D8%AA%D9%88%D9%84%D8%AF-%D8%AA%D8%A7-%D9%BE%DB%8C%D8%B1%DB%8C.

[18] Mohamed, D. A. (2024). An Investigation of Al-Ahsa City in Terms of Quality Standards and Principles of Child-Friendly Cities: A Critical Analysis. Quality-Access to Success, 25(198). [In Persian]. https://openurl.ebsco.com/openurl?sid=ebsco:plink:scholar&id=ebsco:gcd:173682192&crl=c.

[19] Moore, Clan Blake. (2011). Introductions to social policymaking, translated by Saeed Sadeghi Jagah, Ali Asghar Saeedi, Sociologists Publisher, Higher Institute of

Social Security Research, first edition. http://www.amirkabirbookshop.ir/Product/ProductDetail?Id=113433.

[20] Muaidfar, Saeeda. Safai, Forough. (2019). planning a child-friendly city in order to promote youth participation (case study: Abadeh city). Geographical Explorations of Desert Regions, 7(2), 247-278. [In Persian]. https://ensani.ir/file/download/article/1658302233-10583-1400-92.pdf.

[21] Musau, N. M., Thinguri, R., & Githui, K. (2022). The Influence of Community Partnership Benchmark on Management Outcomes in Child Friendly Schools of Makueni County, Kenya. European Journal of Education and Pedagogy, 3(2), 97-106. https://www.ej-edu.org/index.php/ejedu/article/view/275.

[22] Nam, H., & Nam, S. I. (2018). Child-friendly city policies in the Republic of Korea. Children and Youth Services Review, 94, 545-556. https://www.sciencedirect.com/science/article/abs/pii/S0190740918303402.

[23] Nan, F. (2020). Policy innovation on building child friendly cities in China: Evidence from four Chinese cities. Children and Youth Services Review, 118, 105491. https://www.sciencedirect.com/science/article/abs/pii/S0190740920309713.

[24] Skovdal, Morten. "Examining the trajectories of children providing care for adults in rural Kenya: implications for service delivery." Children and Youth Services Review 33, no. 7 (2011): 1262-1269. https://ideas.repec.org/a/eee/cysrev/v33y2011i7p1262-1269.html.

[25] Riggio, E. (2022). Child friendly cities. Good governance in the best interests of the child. Journal of Environment &Urbanization. 14(2): 45-58. https://journals.sagepub.com/doi/abs/10.11

77/095624780201400204.

[26] Zerlina, D., & Sulaiman, C. C. (2020, November). Towards the innovative planning for child-friendly neighbourhood in Jakarta. In IOP Conference Series: Earth and Environmental Science (Vol. 592, No. 1, p. 012023). IOP Publishing. https://iopscience.iop.org/article/10.1088/1755-1315/592/1/012023/meta.

[27] Shia, I. (2011). Preparing the city for children, a case example: Tehran, Cultural and Artistic Organization of Tehran Municipality: Shahr Publishing Institute, third edition. [In Persian]. https://ketabema.com/product/9789649619255.

[28] Tahmasibizadeh, F. (2018). Child-friendly urban spaces: attitudes and indicators, the fifth national conference on architecture, restoration, urban development and sustainable environment. [In Persian]. https://research.iaun.ac.ir/pd/hamid-saberi/pdfs/PaperC_9965.pdf.

[29] Tayefi Nasrabadi, M., García, E. H., & Pourzakarya, M. (2021). Let children plan neighborhoods for a sustainable future: a sustainable child-friendly city approach. Local Environment, 26(2), 198-215. [In Persian]. https://www.tandfonline.com/doi/abs/10.1080/13549839.2021.1884668.

[30] UNICEF (2007). "UNICEF is the founder of partnership for the realization of the rights of children and adolescents", Reform and Tarbiat Quarterly, vol. 71 and 72, p. 21, Tehran. https://www.noormags.ir/view/fa/articlepage/929613/%DB%8C%D9%88%D9%86%DB%8C%D8%B3%D9%81-%D9%BE%D8%A7%DB%8C%D9%87-%DA%AF%D8%B0%D8%A7%D8%B1-%D9%85%D8%B4%D8%A7%D8%B1%DA%A9%D8%AA-%D8%A8%D8%B1%D8%A7%DB%8C-%D8%A7%D8%AD%D9%82%D8%A7%

D9%82-
%D8%AD%D9%82%D9%88%D9%82-
%DA%A9%D9%88%D8%AF%DA%A9
%D8%A7%D9%86-%D9%88-
%D9%86%D9%88%D8%AC%D9%88%
D8%A7%D9%86%D8%A7%D9%86.

[31] UNICEF. (2019). Poverty and exclusion among urban children, UNICEF innocenti research centre, Florence forthcoming. Page, 24. https://www.unicef.org/innocenti/reports/view-all?page=98.

[32] Urlacher, S. S., & Kramer, K. L. (2018). Evidence for energetic tradeoffs between physical activity and childhood growth across the nutritional transition. Scientific reports, 8(1), 1-10. https://www.nature.com/articles/s41598-017-18738-4.

[33] Wilhelmsen, T., Øvreås, S., Roll-Hansen, H., Bjerknes, A. L., & Thorrud, S. (2023). Developing child-friendly cities: Young children's participation in urban planning. Journal of Childhood, Education & Society, 4(3), 274-290. https://www.j-ces.com/index.php/jces/article/view/290.

[34] Xiaojing, L., Xiao, L., Wanqi, L., & Yueyue, Z. (2023). Child-Friendly Cities: What is Possible and what is Feasible?——A Study on the Path of Child-Friendly Transformation of Urban Public Space in Jinan City. Academic Journal of Humanities & Social Sciences, 6(4), 55-60. https://francis-press.com/uploads/papers/WWz6582V3xM5IsYBbT19a8PABP3LgPOpZTcGN4mI.pdf.

[35] Zhang, L., Xu, X., & Guo, Y. (2023). The Impact of a Child-Friendly Design on Children's Activities in Urban Community Pocket Parks. Sustainability, 15(13), 10073. https://www.mdpi.com/2071-1050/15/13/10073.