A Study on Community Play Space in the Eyes of Children under the Concept of Child Friendly City: A Case Study of Liupanshui City

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Abstract: Taking the "Children Friendly City" community as the background and the "Children's Perspective" as an auxiliary tool, through the investigation and research of community game spaces in Liupanshui City, we have learned about the stereotyped adult infrastructure in the community and the reality of the lack of children's space. We have found that the layout of community game spaces is unreasonable, the community game spaces do not take into account the needs of children, the facilities are single, and lack of interest the lack of openness in community children's play space and the lack of children's safe play needs in community play space. It also puts forward feasible suggestions on reasonable layout, creating diverse play styles for children, promoting their physical and mental health development, providing children with interesting community play space, and paying attention to safety issues.

Keywords: children friendly city, community game space, children's perspective

1. Introduction

In 1996, the United Nations Children's Fund and the Human Settlements Programme jointly proposed the concept of a "child friendly city", which aims to advocate for providing children around the world with a city that is more suitable for their growth and provides greater protection for their rights. That is, regardless of whether in large, medium-sized or small cities, or in communities, children should be placed in an important position and placed in the policy formulation system. Community is the spatial unit that constitutes a city [1]. Under this concept, studying community game space from the perspective of children is an inevitable demand for building a "child friendly" city.

Firstly, during our investigation, we found that in most communities in Liupanshui City, the majority of community participants are young children, but the construction content of these communities is rarely to meet the interests and needs of young children. Adult communities are the norm, with prominent contradictions. Studying the community game space in children's eyes can help resolve this contradiction. Secondly, community residents have a high awareness of caring for the growth of young children, and the diversity of interest demands and children's educational values has greatly challenged urban community management. Faced with such contradictions and challenges, establishing a child friendly community has become a strong demand in real life. "Protecting and respecting children's rights" has always been a hot word, and the construction of a child friendly city has also been a focus of attention in community construction in China in recent years [2]. Community conflicts need to be mitigated and resolved urgently, so this study is being conducted.

2. Basic situation of community game space

2.1 Defining the concept of community game space

In order to facilitate the review of relevant academic research, according to the division of semantic phrases, community game space can be divided into community space and game space to a certain extent, which are compatible and overlap to a certain extent.

Community space refers to the layout of blocks based on the functional division of a community,
which includes both substantive and conceptual components, such as community hospitals, schools, farmers' markets, etc., and the latter, such as agreed gathering places and song centers. Game space has the basic attributes of educational space [3]. According to the characteristics of a child friendly community, it focuses on outdoor game spaces and is divided into formal and informal categories. The formal game space is specially designed for children and is an activity place prepared for them; On the contrary, informal game spaces are not specifically designed for children, and have a certain degree of randomness, such as a corner of an open space or a piece of grass. The important place for children's growth is the game space, which is a special educational space aimed at promoting children's physical and mental development, developing children's social communication ability and autonomy. It includes families, communities, kindergartens, children's parks, and other social public places, such as urban green spaces, shopping malls, children's playgrounds, roads, etc. These are all important spaces for children's growth. Children's play space is not only a material category in space research, but also a category of social relations and psychological culture closely related to children's play possibilities formed by relying on specific physical spaces.

Based on the above, the community game space not only has a concrete space but also an abstract space, including not only formal space but also informal space. In short, it provides a stage for children to play, is a major place in their growth and life, and is also an important place for children to establish their own social and cultural cognition.

2.2 The reality of community game space services and activity needs

In 1996, the United Nations first proposed the concept of a child friendly city, pointing out the importance of children's well-being and incorporating the concept of a child friendly city into urban planning. Since its introduction in 1996, nearly 50 countries around the world have responded positively. In China, children's work has also received widespread attention from all walks of life. On October 5, 2021, the "Guiding Opinions on Promoting the Construction of Children Friendly Cities" was officially released, emphasizing the relevant concepts of building a child friendly city, creating a better environment and conditions for children's growth and development, and promoting this concept, action, responsibility, and cause to the entire society, in this way, a new generation of outstanding talents can be trained to take on the role of national revitalization [4].

2.2.1 Space service reality

With the acceleration of China's urbanization process, cities are gradually becoming the main external environment in which more children will develop in the future. The vast majority of children's growth environment has experienced a lack of movement, and the external environment can't be satisfied [5]. Taking Liupanshui City as an example, we found that although community infrastructure in Liupanshui City is everywhere, it is just infrastructure. The stereotyped adult infrastructure does not adapt to the development of children. Many children play in such infrastructure, but they cannot meet their playing needs, this will hinder their growth and development. In the face of the lack of urban planning space and the unsatisfactory development environment for children, urban planning should learn to allocate and integrate resources. More public service spaces should not only meet the needs of adults, but also have the needs of children's service facilities and activity space.

2.2.2 Realistic situation of activity demand

With the increasing improvement of the living standards of our people, more urban children's activity space lies in the community[6]. A good community space service will bring more comfort to people, and more families are willing to provide better services and public activity space for children, making the environment for children's growth and development safer and happier. Faced with the reality of the lack of children's space in Liupanshui City, supply is in short supply. Our only solution must be to meet the needs of children. To make our city happier, we must first make our children feel happy. We must make our children have a happier and more intimate life. Children's parks and public and green spaces that are friendly to children can not only provide children with satisfaction, but also provide them with various development opportunities. They can provide children with various communication opportunities, establish a close relationship between children, caregivers, and the urban environment, and allow children to grow up in a friendly, intimate, and free space. We urgently need to build a friendly urban community, with the main task of providing more and better infrastructure for children's development. Not only in Liupanshui City, but also in many places, the development needs of community game space services are the general trend. We need to base ourselves on the actual needs of children's development, improve various public service guarantee systems, create a safe, convenient,
close to nature, good and harmonious external environment, and give children a comprehensive and happy development.

3. Problems in community game space

3.1 Unreasonable layout of community game space

Currently, most communities in Liupanshui City are often densely populated with dwellings, leaving little outdoor space for children to play, and even some communities have settings that are not suitable for children to play. Through investigation, it is found that most communities in Liupanshui have limited activity space, and outdoor activity space is basically arranged from the perspective of adults. Therefore, there has emerged a situation where children often use adult leisure and fitness facilities as their game space; Even if there are some communities with sufficient space for children to play, the utilization rate of community game space is not high due to unreasonable spatial location selection, inconsistent scale design, and the impact of the surrounding green environment.

"I want to build a big house with my best friend." "I'm riding a bike and greeting snails, small flowers, and jellyfish." "As mentioned in the children's description of the picture in their painting" The Community Game to Want ", it can be seen that they want to play with their playmates in a wide place.". Cold fitness facilities - Playing in such an activity space is not what children expect. On the contrary, children are more likely to seek pleasure in spaces that adults do not allow, prefer to be exposed to nature, and prefer to have slides, large blocks, and large grass.

3.2 The community game space does not consider the needs of children, the facilities are single, and lacks interest

Games are children's games, so ultimately, the most important factor in the game space is the child himself. The current experience of game spaces for children is the current situation: "They are 'small people' living in a world composed of giants and giants, and very few things are made according to their size." Currently, outdoor activity spaces in many communities are mostly equipped with various fitness equipment made according to the adult's physique standards, most of them are simply placed with a large combined device or several simple devices, that is, they are mostly occupied by fitness equipment such as waist and back extension stands, parallel bars, and leg pedals [7]. There is basically no dedicated game space for children in the activity venue, which fails to truly consider the physical and psychological needs of children, and does not pay attention to the fun of children's games. There is almost no room for children to interact and engage in spontaneous activities, and there are no game facilities such as bunkers, accessible green spaces, and slide seesaws that children enjoy.

In the survey, it was found that many parents also experienced risk anxiety in the name of protection, which led to children withdrawing from public space activities. For questions about "where do you go to play?" "Who do you go with?" "When will you play?", the answers they heard were more like "Grandma won't let me go there." "Dad is here, let me follow him." "Wait a moment, will you take the little ant home?!" "Mom and Dad will call me.,. "It's really boring to always play here, but Mom doesn't take me anywhere else!. It can be seen that "where to play, how long to play, and who to play with" are all under the supervision of adults, and are basically determined by them. Children also lose the fun experience of autonomous and happy play activities. It can be seen that the community cannot provide children with an interesting "game space" and cannot stimulate their interest in "playing".

3.3 Inadequate openness of children's game space in the community

The central green space in a residential area is mostly divided into internal and external areas by fences and railings, which ensure the safety of the green space, but the fences and fences greatly reduce the spatial continuity, making the corresponding green space, road space in the residential area.

The playing area is separated, and children will be interfered with when playing. Access controlled communities divide communities into isolated and enclosed spaces, and the high walled gates cause many of the landscapes visible to children to be blocked and become invisible, which also hinders children's social interaction. At the same time, there are many activity venues that restrict children's exploration of game activities, such as iron gates or fences. Children need free activity venues, and when their needs are not met, they will say, "It's not fun here, I want to go out." Interpersonal conflicts in the use of space can also affect children's emotions about public spaces. When adults block children
from entering the door, they will say, "I feel bored being here all the time". Children's dissatisfaction with barriers and resistance to control can be deeply felt in their actions, language, and emotions.

The painting of "Community Game Space in My Heart" by young children depicts that they can run on a large lawn, rain or shine, and can freely tumble and play with good friends on the ground. "Running on the big lawn, they will definitely not catch up with me," which is full of their longing and longing for a broad venue. Most young children's ideal community game space is wide in venue and broad in vision, when playing chase games in the downstairs community, they will say, "Every time I 'run away,' it blocks me, causing me to lose." This shows that the open game space is loved by young children, and can meet their game needs of chasing, rolling, running, and exploring.

3.4 Lack of need for safe play for children in community game spaces

During the survey, it was found that there are certain safety hazards when children engage in play activities in community spaces [8]. Firstly, children are prone to safety accidents due to the large number of vehicles on the way from the community to the game venue; Secondly, the layout of game materials and community facilities is unreasonable, and the detailed design of some children's perspectives is ignored, and the late management of venue facilities is not in place; At the same time, the combination of colors and pavement design in the game space are relatively simple, with bricks and cement as the main materials. However, children are fond of chasing and playing, and falling down in their games is more common. Therefore, this ground design is not suitable for children to play and play. Even if children do not care about rolling and playing on the ground, their games are always interrupted by "Get up for me" at the same time; finally, when children run, play, or ride alone in a community game space, the surrounding crowds and vehicles can have a certain impact on them.

4. Analysis of factors impeding children's community play space

4.1 Subjective factors

4.1.1 Adults

As the first environment for young children, family has a certain impact on their personality, hobbies, and social interaction. Parents and adults in families may limit children's game rules and standards, which greatly interferes with children's game autonomy, limits their active participation, and ignores their practical needs. "If the space of adults can be more permeable, heterogeneous, and tolerant of others, then children who are known in society for their physical and spiritual spontaneity, creativity, richness, and fluidity may have the opportunity to create their own space in the adult world. After research, it has been found that children in the Liupanshui community are prone to interference from parents when playing, and parents will always limit children's game behavior," and even require children to prohibit playing risky game items, which results in adults dominating games and children lacking game autonomy". At the same time, adult interference can greatly reduce children's fun in games and reduce their chances of contacting nature. Secondly, some parents do not attach importance to children's community games and do not understand the importance of children's community games; Play is a child's nature and right. In community games, young children can not only strengthen their physical fitness, but also enhance their social interaction skills, while stimulating their creativity and imagination.

4.1.2 Companions

Peer relationships affect children's values, emotions, and social interaction abilities. The establishment of good peer relationships among young children can set an example and allow them to reap happiness from it. Children's playing peers in community games play an important role. Playing games that imitate playmates is a typical behavior of children in community game spaces. Children's own characteristics determine that they like to imitate and are good at imitating. The environment and sociocultural atmosphere also affect children's imitation behavior. When children are in a free state, imitation occurs everywhere. According to the survey, children in Liupanshui community prefer group games, communicate and interact with peers during games, without adult interference. Children are more able to have their own ideas and plans to communicate with peers. Children are more likely to be influenced by their peers when playing, they may have the same game habits and game thinking, or they may be easily influenced by their peers' game habits and thinking, which may lead to children being influenced by bad peers when playing, leading to safety incidents or high-risk behaviors during
play. Children's game partners play a leading role in community games. If children in this area all enjoy playing together and like the same type of games, but the community does not improve or set up relevant game measures, it will reduce the enthusiasm of children and their peers in community games.

### 4.1.3 Community

Communities are the first place for children to socialize, the basic unit of social governance, and the "last mile" of the implementation of policies and services. Through the survey, it was found that the facilities for games in the community were relatively simple and did not truly take into account the physical and psychological needs of children. Through relevant surveys, it was found that most communities do not have child-specific gaming facilities. One reason is that such game measures may have safety hazards, and children are prone to accidents when playing; Second, because most children or their parents do not have such needs, parents are more concerned about the safety of children; The third is that the development and design of the community did not include such game facilities, based on the living habits of local residents in Liupanshui. The community or residential area where children live does not have a good community game atmosphere, or there is a lack of consideration of the location of children's games around the community, resulting in no supporting community game measures.

### 4.2 Objective factors

#### 4.2.1 Playground

As a space for children's play activities, the playing field is an indispensable condition for carrying out play activities. The size of the venue, dry and wet conditions, structure, and spatial density all have an impact on children's play. According to the 2018 National Statistical Yearbook, the number of people aged 0-14 years in China has exceeded 220 million, accounting for about 16.5% of the total population in China, accounting for a large proportion. However, due to the rapid urbanization construction in China, land resources are increasingly scarce, and urban children's play space is continuously decreasing, making urban parks the most important public space for children to contact nature and engage in outdoor recreational activities in high-density urban environments. Through investigation and research, it is found that few of the communities in Liupanshui surveyed have well-equipped community games for young children. Lack of a fixed community game venue can lead to poor or even impossible development of community games for young children. Through research, it is found that most of the game venues in Liupanshui community are relatively single, unable to meet the needs and service scope of children of different ages. The location of game venues is also particularly important. The location of game venues in Liupanshui community is mostly in open areas, but due to the single game facilities, there is no reasonable use of space.

#### 4.2.2 Game materials

The supply of toy materials is closely related to children's game behavior. If children are provided with a variety of game materials, they will exhibit more divergent thinking and behavioral characteristics when solving problems in games; the introduction of outdoor game materials is conducive to the cultivation of mixed age children's autonomy, practical ability, and assistance. Through investigation and research, it was found that in the communities surveyed in Liupanshui, there were basically no game materials with fixed playing methods provided for children in community game venues, which enabled children to create their own playing methods; Completely unfamiliar and relatively complex game materials are prone to arouse curiosity among young children, while only moderately familiar and complex materials are more likely to lead to symbolic and practical game behaviors among young children. Secondly, the community lacks children's recreational facilities, mostly adult fitness equipment, which is not suitable for children's age needs. Without adult guidance, safety accidents can easily occur.

### 5. Feasibility suggestions for the construction of child-friendly community game space

#### 5.1 Reasonable layout

The children's community game space should have a certain openness, so that it is convenient for the guardian to monitor the children's eyes, avoid blind spots, and try to maintain a certain distance from the roadway; Different from adult leisure and fitness facilities, it is more important to fully integrate community characteristics and create community themed game venues to make more
reasonable use of limited space; It is also important to pay attention to the difficulty of game equipment and try to set up games that meet the needs of young children at different ages.

5.2 Create diverse play styles for children to promote their physical and mental health development

Exploring children's play space in urban public living spaces depends on whether the public space attracts children, whether children can play and make sense. By attracting children's attention and curiosity, it triggers their body's tactile system and exploration desire. As the important characteristics of children's games, playfulness and pleasure are reflected in all aspects of space activities, creating a relaxed, dynamic and dynamic place, promoting the intersection of children's words and actions with others, thereby achieving playfulness and fun in space.

5.3 Provide fun community play space for children

Many forms of play, such as climbing, jumping, running, or balancing, play an important role in children's development. According to the psychological characteristics of children of different ages in games, outdoor activity spaces in children friendly communities should try to integrate landscapes, set up different types of games that are rich in experience, discovery, adventure, or creativity, further stimulate children's interest in games, meet their curiosity and exploration desire, and promote their physical and mental health development.

5.4 Focus on safety issues

Whether parents allow children to use community game spaces depends on whether the venue and travel routes are safe. Children's activities are characterized by randomness and egocentrism, which can make them vulnerable and have a far lower perception of danger than adults. Therefore, it is necessary to maintain the permeability of the venue as much as possible, and avoid selecting empty spaces that are inaccessible or inaccessible to adults' eyes in the venue selection; Try to avoid sharp edges and corners in the selection of facilities to prevent children from being injured during play; In terms of plant selection, it is also necessary to avoid toxic and easily allergic plants.

6. Conclusion

In the context of the "children friendly city" community, with the "children's perspective" as the main research subject, using observation and interview methods, through the investigation and research of the game space in Liupanshui community, we learned about the stereotyped adult infrastructure in the community and the reality of the lack of children's space, indicating that there is still much room for progress in the development of community game space at present. At the same time, it is found that the layout of community game space is unreasonable, the community game space does not consider the needs of children, the facilities are single, and lack of interest, the community children's game space is not open enough, and the community game space lacks the internal problems of children's safe game needs. Through investigation and analysis, it is concluded that the factors influencing the possibility of community game space are subjective factors of adults, peers, and the community, as well as objective factors of game venues and game materials. Finally, feasible suggestions were put forward for the community to make a reasonable layout, create diverse play styles for children, promote their physical and mental health development, provide children with interesting community play space, and focus on safety issues.

Community play space plays an important role in children's development and healthy growth. Having a good community play environment can not only promote children's physical and mental development, but also allow children to explore the world during play.

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