Is the City Friendly to Children?

—Construction of Urban Child Friendly Degree Evaluation System and Application Based on M City

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Abstract—**The rapid of urbanization, the exploding of the urban population, and the rise of cities not only bring convenience to the survival and development of urban children but also bring them many difficulties. This paper focuses on the living environment of children in the city and briefly introduces the children-friendly city. By building the evaluation system and applying it in the form of survey and interview in M city, we measured the friendly degree of Chinese cities. The conclusion of the measurement indicates that its friendly degree is at a low level and requires further improvement to construct children-friend cities**

Keywords—child-friendly cities; urbanization

I. RESEARCH BACKGROUND AND OBJECTIVES

With the development of global urbanization, about 4 billion people now live in urban areas, and nearly one-third of them are children. It is estimated that by 2050 almost 70% of children worldwide will live in cities. The economic growth, technological innovation and richness of the city not only provide children with the possibility of living a better live, learning and development, but also may cause them to encounter huge inequalities and face many life difficulties. Although cities may provide more basic services, such as schools and hospitals, the crowding and high cost of the population may make it impossible for some poor children to access these services. How to provide children with better opportunities for survival and development in the process of urbanization of the population is now testing the wisdom and ability of global city leaders. Faced with this issue, in 1996, UNICEF launched the Child Friendly Cities Initiative (CFCI), and the second UN Habitat Congress also announced the importance of children's happiness as a measure of healthy human habitation. , a democratic society and a fundamental indicator of good governance. Now, the Child Friendly Cities have become a concept and an important practice that is widely recognized internationally. More than 400 cities including Dunlun, Munich, Seattle, and Copenhagen have been certified as "child-friendly cities" in the world, but there is no Chinese city. However, with the acceleration of China's urbanization process, the urban population will exceed 1 billion by 2030. More Chinese children will be born and raised in the urban environment, and the city's facilities and services will need to be changed. Many cities in China have noticed the importance of children's rights and interests, and proposed the concept of building a "child-friendly city" (such as Beijing, Nanjing, Chengdu, Tianjin, etc.), but the construction of child-friendly cities is still in its infancy. In response to children's rights and interests, China still faces considerable problems and challenges. Based on this background, this paper attempts to construct a set of evaluation system for urban children's friendship, which is used to measure the friendship degree of urban children in China, so as to provide a set of analytical framework and tools for exploring the current situation of urban children's friendship in China, discovering problems and determining future improvement priorities.

II. UNICEF'S DEFINITIONS AND GOALS

In its 2018 UNICEF Child Friendly Cities and Communities Handbook, UNICEF defines the child-friendly city as follows: "Child-friendly cities are such cities, towns, communities or other local governance systems that are committed to the realization of children's rights as articulated in the Convention on the Rights of the Child. In such cities or communities, children's voices, needs, priorities and rights are public policies, an integral part of projects and decisions."

In the definition of UNICEF, the most important concern is the realization of children's rights, which mainly includes the following five objectives: (1) each child is valued, respected and treated fairly by local authorities in the communities in which they live; (2) The voices, needs and priorities of each child and youth should be heard and incorporated into the public law (if possible), policies, budgets, projects and decisions that affect their interests; (3) each Children and young people are able to enjoy quality basic social services; (4) every child can live in a safe, stable and clean environment; (5) every child and youth has the opportunity to enjoy good family life, games and Leisure and entertainment. The UNICEF CFCI's action framework is based on the above five target dimensions to build output indicators, outcome indicators and performance indicators to assess whether a city meets the standards of UNICEF child-friendly cities. Of course, due to the differences in actual conditions in various countries and regions, UNICEF did not give a set of common evaluation indicators, but encouraged countries and regions to develop their own indicator evaluation system based on the above dimensions, and whether they can The minimum criteria given for a child-friendly city are: (1) at least to prove that the rights of the child are indeed guaranteed in certain

aspects; (2) to have the child's own participation in the construction of a child-friendly city; (3) To be able to prove that discrimination against children has been eliminated in government policies and actions, that is, rights, participation and fairness are three aspects that the UNICEF CFC attaches to the evaluation and certification of child-friendly cities.

III. CONSTRUCTION OF URBAN CHILD FRIENDLY DEGREE EVALUATION SYSTEM

In order to measure the child-friendliness of the city, we will construct a set of evaluation indicators system for urban child-friendliness in this section. We regard the five core children's rights pointed out in the Convention on the Rights of the Child as the first-level indicators of the evaluation system, including: non-discrimination rights, right to be heard, public service rights, living environment rights and living and entertainment rights. Further, we break down the primary indicator into 16 secondary indicators according to the Interpretation Clauses of the relevant rights in the Convention on the Rights of the Child, as shown in Table I. We have split some of the secondary indicators and used the secondary indicators that were not broken down as the final measurement. All indicators will be assessed through a questionnaire survey of children. Based on this, in the third-level indicators, we excluded the infant survival index at the non-individual evaluation level. Secondly, since our respondents chose young people around the age of 12, they have already left the stage of maternal and child health care, so the indicator of maternal and child health is not measured. Thirdly, the spiritual development in the three-level indicators, the measures that can affect children's physical and mental development from the perspective of urban governance are also reflected in other indicators, and therefore are not measured separately. Finally, under the two secondary indicators, the indicator "nutrition promotion" is counted only once. In the end, a total of 28 measurement indicators including secondary indicators and

tertiary indicators were formed. Due to the length of the issue, we did not attach a specific measurement questionnaire, but in Table I presented the measurement design of some indicators and the perspective of problem design. For indicators that are difficult to measure with personal experience, social evaluation is adopted. The way to make measurements.

In the design of the answer to the question answer, considering the judging ability and the degree of cooperation of the teenager, we set the response level of most questions to level 3. Too many grades, the characteristics of the scale are slowed down, but the investigation time is too long, and the respondents are prone to fatigue, resulting in a decrease in the response rate. If the number of grades exceeds the resolution of the survey object, the survey results may cause a large error (Wu Yongze, Wang Wenjuan, 2010). In addition, for some sensitive issues, we only have similar and no response options. In coding the response options, our basic principle is to encode the option for urban child-friendly options to 2, the unfriendly child experience or observation code to 0, and the intermediate option code to 1.

In the treatment of index weights, we refer to the research conclusions of Maria (2009) that the indicators related to safety, urban and environmental quality and basic services should be given higher weights. Maria (2009)'s research is based on Horelli's (2007) child-friendly environment's 10 classification dimensions. Corresponding to the indicator system constructed in this paper, it is mainly public service rights, living environment rights and life entertainment rights. The second and third level indicators under the first level indicator. At the same time, the author also conducted a "sentence interview" on "What do you think is a child-friendly city" for five experts and 10 children of 12 years old? According to the coding and analysis results of the interviews, the weight of the indicators was given.

TABLE I.   URBAN CHILD FRIENDLY DEGREE EVALUATION INDEX SYSTEM

Primary indicator	Secondary indicators	Three-level indicator	Design ideas	Design angle and weight
The right of Non-discrimination	Right to identity	Gender equality		Personal experience (3%)
		Class equality	Not discriminated against because of family socioeconomic conditions	Social evaluation (3%)
	Living and development of disabled children		Whether children with disabilities are discriminated against	Social evaluation (3%)
	Minority cultural identity and degree of protection		Whether ethnic minorities are discriminated against	Social evaluation (3%)
Right to be heard	Right to know		Test with a policy related to children's rights, such as school district policy	Personal experience (3%)
	Freedom of speech			Personal experience (3%)
	Right to freedom of belief			Personal experience (3%)
	Participation in politics		Take the participation of school student affairs as an example	Personal experience (3%)
Public service right	Right to life	*Infant survival rate*		
		Maternal and child health care		
	Right to health	Nutrition promotion	Take breakfast as an example	Personal experience (3%)

Cont. to TABLE I

		Basic medical treatment	Taking the satisfaction of disease treatment as an example	Personal experience (4%)
	Right to development	Social development	Peer activity (can be safe to play independently with other companions around the residence)	Personal experience (4%)
		Physical development		Personal experience (4%)
		Spiritual development		
	Basic rights to food, clothing and housing	*Nutrition promotion*		
		Spacious residence		Personal experience (4%)
	Right to education	Free compulsory education	Is there an extracurricular remedial course to be paid extra?	Personal experience (4%)
		Admission to school	Do you need a parent transfer?	Personal experience (3%)
		Humanization of school rules and regulations	Have you ever suffered corporal punishment?	Personal experience (4%)
Right to living environment	Personal safety	Free from sexual assault		Personal experience (4%)
		Combating trafficking	Need a parent transfer or not	Personal experience (4%)
		Free of violence	Taking campus violence as an example	Personal experience (4%)
		Traffic safety	Need a parent transfer or not	Personal experience (4%)
		Facility security	For example, the crowding degree of the campus stairs above is taken as an example.	Personal experience (4%)
		Food safety	Taking the food hygiene around the campus as an example	Personal experience (4%)
	Residential cleaning	Water clean	Taking drinking water as an example	Personal experience (4%)
		Keep away from pollution and waste	Whether there is pollution around the school, what kind of pollution, such as noise, building dust, garbage dumps, chemical plants, etc.	Personal experience (4%)
Right to life and entertainment	Family life	Intimacy with parents		Personal experience (3%)
	Leisure and entertainment	Enough rest	Enough sleep	Personal experience (3%)
		Rich cultural entertainment life	Recreational facilities (mainly non-paying for public interest)	Personal experience (4%)
			Cultural activity	Personal experience (4%)

IV. EVALUATION AND ANALYSIS OF URBAN CHILDREN'S FRIENDSHIP IN M CITY

After assigning 281 valid questionnaires, we found that in this survey, the urban children's friendly scores of M cities were divided into 62, and the overall level was at the passing level. The highest score of the sample is 87, and the lowest score is 29, which is quite different. The standard deviation of the sample is 0.24, the degree of dispersion is small, and the score is relatively concentrated. As far as the overall arrangement of scores is concerned, the distribution of children's urban satisfaction in M city is olive-type, with low distributions and high-level distributions, and a large number of intermediate levels. Among them, the satisfaction rate is below 60 points, and the total number of people who fail in the M-city is not 115, accounting for 41% of the total number. Nearly half of the children think that M City does not pay attention to children's rights, in daily life. Children's care in M

city is not felt in life and study. However, it is worth mentioning that in this group, the number of satisfaction scores is 50-60, which is 84 people, far exceeding the number of people with very low scores. If M City can slightly strengthen related work, it will be easy to The satisfaction of some groups has increased, which has increased the overall child-friendly satisfaction of the city. Among the people with higher satisfaction than the pass line, the maximum score is 60 to 70, a total of 105 people, accounting for 63% of the passing population, that is, among the children who passed the pass, most of them considered the child-friendliness of M city. In order to reluctantly pass the level, only 4 people have scored 80 or more points in M City, and the overall satisfaction is not high.

The average scores of each level of indicators are non-discrimination index 74, listening index 52, public service indicator 63, living environment indicator 42 and life

entertainment indicator 47. The highest and lowest scores are non-discrimination indicators and living environment indicators.

On the issue of the relatively high scores of non-discrimination indicators, the answers to several questions are strikingly consistent. It can be seen that the concept of equality has basically formed in most children's subconscious minds in M city. However, the reason why non-discrimination indicators do not receive a high score of 80 or more is that in the process of observing the situation of children with disabilities around them, the answers are more scattered, and the percentage of answers that are discriminated against, respected but not helped and helped is 17% respectively. 22% and 36%. In the city of M, when children are given non-discriminatory education, the care of children with disabilities is neglected. Children are not guided to pay attention to, respect and care for children with disabilities. The rights of vulnerable children to be respected and valued should be more s concern.

The public service indicator ranks second in the score ranking of each level of indicators, but the score is not high. During the measurement of children's right to health in the case of breakfast, it was found that most of the children maintained good eating habits, and 85.41% of the respondents would eat breakfast every day. However, the breakfast-rich people accounted for only 27.47%, and the children with good breakfast quality accounted for 58.24%. The nutritional supplements in the process of children's healthy growth should not be underestimated, and the quality of the three meals should be taken seriously. In the measurement of the right to education, the answer to the corporal punishment question is striking: 60% of the respondents indicated that they had suffered corporal punishment in the school, and the number of people who were often corporal punishment actually accounted for 17.44% of the total number. Today, when the quality of education is steadily improving and the concept of quality education is becoming mainstream, corporal punishment is still a label that can't be torn down in children in M city. How to change the concept of school education and standardize the way teachers teach, thus reducing the proportion of children who are being punished, is child-friendly. The problem of urban construction needs to be solved urgently.

The score of the listened indicator is 52, and the overall level is at a failing level. Among them, the most concentrated answer to the measurement of the right to freedom of speech: 65.12% of the questions about whether they can freely express their opinions, "depending on the situation", only 25.27% of the children chose "very free to express their opinions" . In schools, families and society, it is an important goal of children-friendly cities to let more people hear and value children's voices on the basis of children's daring and active voice. If children are not encouraged to speak better and are not easy to listen to, it will be difficult to improve the friendship of children in urban areas.

The living environment indicator scored 42 points, ranking the lowest of all indicators. The answer is thought-provoking: (1) In the answer to the question of exemption from sexual assault, 29.89% of the respondents indicated that they had experienced uncomfortable feelings due to excessive physical contact. In today's society where the old and the new are alternating and developing at a high speed, people's minds are gradually opening up, and the lack of children's sex education has caused children's lack of self-protection awareness when marginal behavior occurs. Dare to open up sexual education for children and help children establish correct sexual attitudes is an urgent problem for the society to improve children's friendship. (2) Answers to questions about school violence, 38.08% said they had experienced language violence, 17.79% of respondents were even subjected to more serious physical violence, and 24.56% were excluded and alienated from school. Cold violence, only 56.23% of people said they have never suffered from school violence. Students who have never experienced violence actually only account for more than half of them, and the number of people who suffer from serious violence accounts for a certain proportion. The "6+1" family model (a model in which children, parents and grandparents form a family) is the main feature of the current social family. The children raised by this special family model attract all the family's focus, while enjoying the preferential treatment in the small family. Increased the difficulty of integration into society. From the time when the individual is valued to the group's attention, the child's psychological gap is difficult to control. If you do not intervene, it will inevitably cause problems and incite conflicts in the process of getting along with your peers. This is also the current problem of campus violence. One of the important reasons. How to correctly guide contemporary children to adapt to group society is a difficult point and a pain point. (3) In designing the issue of whether the water resources in the residential area are clean or not, we have chosen whether to use mineral water/pure water as the entry point to examine the degree of children's trust in water resources in the living environment. As a result, 85.05% of the people chose to drink mineral water/pure water as much as possible. On the one hand, they showed that parents pay attention to children's attention to water quality education. On the other hand, they also reveal the current situation of children's living environment. The lack of cleanliness trust is extremely lacking. Environmental pollution threatens children's living conditions and allows them to make reservations when they choose. Therefore, the treatment of pollution is also the focus of child-friendly city construction.

In the measurement of the indicator of life and entertainment, within the standard of 47 low scores, we also found an important breakthrough point: the current problem of children's sleep quality is worrying. 21.35% of the respondents indicated that they had enough sleep, and the remaining 78.65% of the respondents thought that they did not sleep well or sleep well. Adequate rest is also an essential part of children's growth, but children who can maintain adequate sleep only account for 20%, obviously unable to meet the special needs of the growth stage. In the questionnaire, there are even many children who have written the words "seriously lacking, need to pay attention" next to the option. It can be seen that regardless of the subjective and objective aspects, children's lack of sleep should be given more attention and properly resolved as soon as possible.

V. Conclusion

Children are the flowers of the motherland and need to be cared for. The quality level of a generation of children influences and even determines the future development of the country and even humanity. Children need to be listened to, respected, and need better social support services as they grow up. This is not only a topic for China, but also a topic for the world and humanity.

From the sample survey analysis of M City, we can see that the current level of child-friendliness in China's cities is low overall and at a passing level, which can only meet the basic needs of children. In the future, the importance and protection of children's rights will provide children in the city with better growth and living environment, and sustained efforts will be required.

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