



Southeast University Journal of Architecture

Journal homepage: www.seu.edu.bd/seuja

Child-Friendly Open Space: Enduring Insufficiency and its Impact on Children in Dhaka City, Bangladesh

Sinthia Tanjin Mahmud **

"M.Arch student, Department of Architecture, University of Hertfordshire, United Kingdom. archsinthia.uap.bd@gmail.com

ARTICLE INFORMATION

Received: October 24, 2022 Revised: January 18, 2023 Accepted: February 02, 2023 Published online: May 16, 2023

Keywords: Urban Setting Sustainability Child-friendly Children's open Space Planning

ABSTRACT

A healthy city can be determined by the degree to which children are able to roam independently and the extent to which they interact with their natural surroundings. In order to create open spaces in an urban setting that are child-friendly, one must consider a number of factors, including health and well-being, safety, resilience, and sustainability. The United Nations Convention on the Rights of the Child defines children as those between 0 and 17; by 2030, sixty percent of urban inhabitants will be under 18. A child-friendly city employs a research-based approach to developing such areas to ensure that all children may go there not just for amusement but also to gain knowledge and shape their prospects. Moreover, these places go much beyond the typical definition of the playground. Yet, the city of Dhaka is alarmingly losing its parks and playgrounds, with the majority losing their status as play areas or outdoor leisure places. Also, anoticeable number of street children living in this city cannot access these play areas. Girl children are the ones who are mainly deprived of outdoor activities. As a result, In Dhaka, the lack of adequate Planning and norms for children's open spaces hinders their healthy upbringing. This paper will try to explain the reason behind the insufficiency of child-friendly spaces in Dhaka city and find some solutions in light of this distress.

1. Introduction

Play is supposed to be a fundamental need for children to shape their cognitive and physical development as well as their overall well-being (Ginsburg, 2007);it is also the first step toward active lives, instilling early healthy behavior patterns. Regarding the benefits of Play, Lester and Russel (2008) explained that play gives children the authority to form bonds with adults and other people, strengthens family relationships, fosters independent learning and development of self-confidence and independence, and promotes togetherness and closeness within families and friends. A child's upbringing in an unhealthy environment has substantial consequences on their family, community, and nation as a whole. Despite this fact, Dhaka, a metropolis of 10 million people, is struggling to provide its youngsters with safe and enjoyable places to spend their leisure time. While most urban cities are growing and developing, focusing on child development, Dhaka, the capital of Bangladesh, where children still do not possess their comfort zone for playing outside.

Children whose needs are more pressing are the ones who are primarily neglected in terms of their rights. They need special consideration not merely to protect their entitlements but also to ensure that everyone's rights are realized. Furthermore, more and more people are choosing to live and raise their families in urban areas, and in 2012, in a survey, Unicef figured out that almost half of the World's children live in metropolitan cities. This evidence proves that cities can be ideal memory makers for every child; hence, city planners should emphasize making urban cities child-friendly.

According to a survey, over 80% of children between the ages of 11 and 17 are not physically active, and 38 million children under the age of 5 are typically at risk for becoming overweight (Hecke, et al., 2018). In 1989, "The Convention on the Rights of the Child" (CRC) recognized children's play rights, and they not only emphasized Children's Play but they also stressed the importance of an

ideal play environment (Bartlett, et al., 1999). Furthermore, the United Nations Convention on the Rights of the Child demands that individuals under the age of 18 must give their consent to matters involving them (UNICEF, 2005). In addition, UN-Habitat asserts that children must be included in the design process for a sustainable, livable city or an ideal neighborhood.

Dhaka lacks an adequate number of parks. Accept Ramna and ChandrimaUddyan, there are no significant parks in this city, and the existing neighborhood parks have been taken unlawfully by employees of Dhaka city corporation, land grabbers, and some destitute rootless people. This is one of the significantreasons why Dhaka city's green spaces are rapidly disappearing. Dhaka city's green spaces are rapidly disappearing(Tabassum & Suchana, 2011). Tabassum and Suchana (2011) added that, for a livable city, there should be 25% of parks of total land use, whereas, in Dhaka, it is only 10%, and this number is also decreasing.

WBB trust (2015) differentiates between parks in Dhaka city and divides them into 1. city park 2. neighborhood park. People living in any part of Dhaka city can visit these parks using a range of modes of transportation, and city parks are often larger than other kinds of parks. They also typically offer well-organized outdoor recreational activities. Neighborhood parks, on the other hand, tend to be on the smaller side compared to city parks, and in most cases, these are mainly designed to serve the local community (WBB, 2015).

Onthe map, city parks, such as Ramna Park and Osmani Uddyan, neighborhoodparks, such as Shahabuddin park, Fajle rabbi Park, Dhanmondi lake park, Uttara Sector 6 and sector seven parks, Mirpur DOHS park, Shyamoli park, Hazaribagh Park, Shikkhatuly park, Bahadur shah Park, Rosulbagh park, Victoria Park from the old and new part of Dhaka city. These maps are prepared by Autocad software and Adobe illustrator.

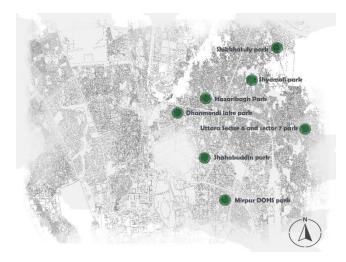


Figure 1: City parks and neighborhoods park in Dhaka city, image source: prepared by Author, drawing prepared by Auto cad, Diagram by Adobe Illustrator

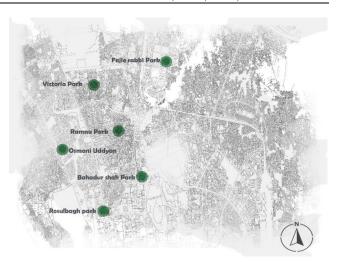


Figure 2: City parks and neighborhoods park in Dhaka city, image source: prepared by Author, drawing prepared by Auto cad, Diagram by Adobe Illustrator

In BNBC (Bangladesh National Building Code), it is mentioned about play areas for children, "If the land size is 1300 square meters or above residential plot which will be apartment project, need to have 10% space for play area which can be 50% open and 50% shaded but should not be surrounded with walls" (Bangladesh Gadget, P.2077).In Private Residential Land Development Project Rules, 2004, it is mentioned that the standard for the playground is 4 acres per 50,000 population (.08 acre/1000 population) (NHP, 2016).In DMDP (1995) and DAP (2010), for Dhaka City playground standard for 2500 people is 4 acres of land. However, 2010) also mentioned that, for the Dhaka city neighborhood area, there should be 1 acre of playground per 12500 people, which is equivalent to 2 playgrounds per 1000 population(SENES, 2007), (RAJUK, 2016), (DSP, 2016).

Existing play areas in Dhaka city encroached by several private organizations and sometimes authorities from the government level is the biggest threat to this extinction of play areas in Dhaka city. Nilufar (2011) explained that Tikatuli Park, Uttara Sector One Park, Shahid Park, and Azimpur Park are such parks taken by government officials, and these parks are now used for their purpose rather than used as parks. Other parks, for example, Nawabganj Park, Jatrabari Crossing Park, and Lalmatia New Colony Park, have been taken over by Dhaka City Corporation facilities like community centers and commissioners' offices (DCC). Islam (2011) added that the government planned to convert Osmani Uddayan Park, one of the largest playgrounds in Dhaka city, into an international conference center in 1989 and 1999, but after significant protests from the public, the proposal was prevented from execution. Nilufar (2011) reported that despite listing as neighborhood parks, Uttara Sector 1, Mirpur Sectors 2 and 6, and Gulshan Circle 2 had been sold for private construction. This year, a piece of news comes with the headline,"When defending a playground

becomes a 'crime."50-year-old playground Tetultola (14400 square feet) was ringed by barbed wire on March 18, 2022, when the Dhaka deputy commissioner's office transferred the playground's land for the construction of Kalabagan Police Station. This is another illustration of how city inhabitants continue to be deprived of playgrounds and parks.Local Police put a woman and her son, who was 17, in jail for 13 hours because they were protecting a playground; after this incident,the prime minister noticedthat senior government officials and media journalists intervened and spared the playground from encroachment (Star, 2022).

accidental Unnatural ordeaths are among Bangladesh's leading causes of child mortality. According to reports from 2003 in the Daily Star and Bangladesh Observer, "five youngsters died after they fell into a water tank while playing," and the playgroundwas located next to a building site. Another news this year was that "a sixyear-old girl and a four-year-old child drowned in a canal and a sewer in Mohakhali and Mirpur"(Halder, 2017). Halder (2017) added that when these children came outside to play, most of them fell into the deadly trap. Apparently, the locations where they played were not generally classified as parks or playgrounds.

Current legislation may mandate equal rights for all countries, yet discrimination based on gender persists at all levels of society and the economy (Bank, 2001). According to a briefing by the Asian Development Bank, females are less likely to get a quality education than boys, have worse nutrition, and have a greater risk of death. In addition, mt girls experience anxiety at a very young age due to this inclination, which mainly hinders their ability to engage in outdoor play with other children (Bank, 2001). In light of this, no initiatives have been taken in Bangladesh to ensure that children have access to safe, supervised play with areas age-appropriate equipment(Gagen, 2000).

Research has shown a significant knowledge gap about safe open areas for children to play in Dhaka. Whereas 40-50% of urban open Space is recommended by Rabbani and Sharif (2005), Dhaka city only has 15%. Less than one acre of parkland is available for every 12,000 residents; however, many of these spaces have fallen into disrepair and become hotspots for criminal activity (Prothom Alo, 2007). Where this colossal deficiency comes from? Is encroachment made this situation worsen?

The activities that children engage in and the patterns in which they use these open spaces are not clearly defined in any Bangladesh policy, which must be handled appropriately. Also, no further studies have been conducted on the variances in experience between genders and ages while spending leisure time in these play areas (Ahmed & Khan, 2008). Lack of security prevents children of all ages in Dhaka city from using playgrounds and other recreational facilities. Girls, in particular, are discouraged from using these locations due to safety concerns (Ahmed & Khan, 2008). Why are these open spaces not under supervision?

According to research by UNICEF, of over 83 children in Bangladesh, approximately 40 pass away due to drowning (Linnan, 2007). Road accidents are also an essential issue for Dhaka city, as this is common to have such headlines in the news "Reckless driving: Another student killed"(Star, 2022). In addition, parents' concerns regarding safety on roads and parks areas can limit children's freedom to access those parks. Are these accidents the reasons for not allowing children to access the open Space?

WHO identified that health outcomes in later life are strongly influenced by our early years. Nurturing care from parents, family members, and the neighboring environment plays a conclusive factor in healthy child development (Goldfield, et al., 2019). Are the parents of Dhaka city realize the importance of outdoor play? Are policymakers aware of these associated facts?

Who(2010), in support of a healthy childhood, says that spending time outside with other children effectively promotes after-school physical exercise in groups. Are all schools have their own playground?

The key aim of the research is-

"To understand why this insufficiency of child-friendly open space in Dhaka city."

The key objectives of this research are-

- Understand the reason for the insufficiency of child-friendly open spaces in Dhaka city, Bangladesh.
- Find out the consequences of staying more in an indoor environment.
- Understand what could be an ideal environment for play.
- Find out the necessity of gendered-based play areas.
- ➤ Identify how outdoor activity can keep children proactive.
- ➤ Identify that all parks are accessible to children from all socioeconomic backgrounds.

2. Methods

Methods of qualitative and quantitative research will accomplish the whole task. The essential information will be gathered via interviews, the primary data collection method for qualitative research. The interview session will include urban planners from Dhaka, Bangladesh. The interview with the urban planner will try to understand the existing policy for child-friendly open Spaces, as well as playground safety standards, access provisions for street children to parks and playgrounds, the reason for the inadequacy, and the current state of parks and other open spaces in Dhaka. In addition, it will attempt to conclude with further prospective regulations and strategies relating to child-friendly open spaces, as well as a debate on including children in the design process of the city plan and how this would be practical in the context of Dhaka.

The Quantitative research methods emphasize the

questionnaires, and in this stage, it will do by parents, and it will work as a primary data collection. The questionnaire set will cover several types of question range related to the socio-demographic data, socioeconomic data, their children's need to go outdoor play areas, children's dependency on their parents to access these play areas, average play hours of their children, safety condition of these playgrounds, mental and physical growth of their children, parents involvement in designing play areas in their areas, the preferable play zone, how children want to utilize the nearby open spaces, how they react to varied types of open spaces for leisure

activities, how they behave with different aged children, how playing outdoor environments impacts their children mentally and physically.

The BNBC (Bangladesh National Building Code), Dhaka Structure Plan, RAJUK Plan, and Detail Area Plan (DAP), Bangladesh National Housing Plan (2004), and Scholarly journals from google scholar will be the secondary data source for understanding the standard of open Space for a child and the rules and safety standards for open spaces for children.

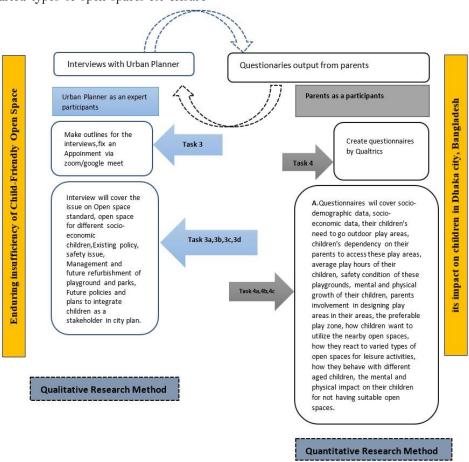


Figure 3: Flow Chart of Research Design

2.1. Research Design

As the mixed methodology will do the project for conducting the current study. Therefore, the methodologies to collect the data from the targeted participants will be completed through survey and interview instruments.

I. Survey Instrument

The first technique is a survey by which some questionnaires will be developed and uploaded on Qualtrics. After this, the link will be shared with

applicable participants over social media to receive responses (Ngozwana, 2018). The technique is effective as it allows to reach participants from any part of the World.

II. Interview Instrument

The research project will cover the data from interviews to gather information. The technique is helpful as it allows the researcher to gather the data directly from the participants (Cope, 2015). Furthermore, it allows a researcher to detail the targeted questions with the participants.

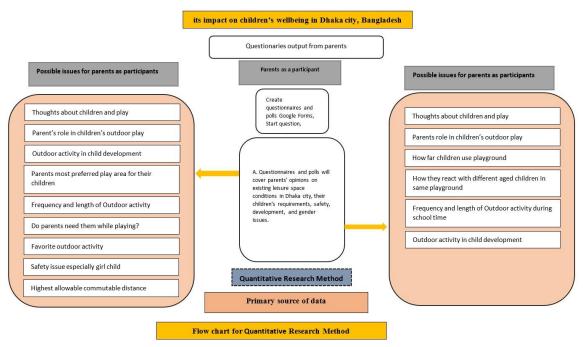


Figure 4: Flow Chart of Quantitive Research Method

2.2. Sample size and sampling techniques:

The sample selection is essential for conducting the survey. For the considered study, the survey will be conducted on 100 respondents who will be in the parent group over 18 years old and will try to identify their thoughts on child-friendly open spaces through different

sets of questionnaires. The mixed method involves both quantitative and qualitative data (Gibson, 2017) received through Qualtrics questionnaires survey and zoom interviews. This methodology has been used to carry out more efficiently so that the insufficiency of child-friendly open spaces in Dhaka could be evaluated and analyzed in more detail.

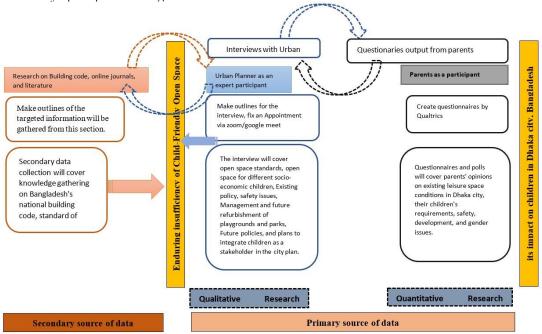


Figure 5: Flow Chart of Primary and Secondary data collection

2.3. Ethical Implication:

It will be ensured that the survey and data collection obeysthe research aims and objectives. The data will be kept confidential, along with the anonymity of respondents. Participants will not be physically or psychologically forced to participate in the study. It will ensure that the participation process for gathering data will be confidential and transparent, and in case of data loss, google drive will be utilized properly.

3. Data Collection and Result

For data collection, interview and survey methodology are used, both processes are conducted online, and all the participants in both methods were over 18 years old. Two practicing urban planners from Dhaka, Bangladesh, were selected for the interview, which involved qualitative analysis. First, planners were contacted by email, and after getting consent from them, a zoom link was sent with the participant statement. All the response from the planners was recorded in word format. For the online survey, participants were parents from different parts of Dhaka city, and in addition to this, it made it inevitable that the information was gathered from the appropriate participants. Data collection from parents was conducted through online questionnaires, which link uploaded on Facebook and Whatsappwith social media adverts and participants' statements, and parents filled out the questions based on their understanding of the situation. From the online questionnaire survey totals, 50 sets of feedback were received from different participants and reached a conclusion based on the existing policy context, relevant books and journals, interviews, and the online questionnaire survey.

i. Survey research findings:

a. Parents' perception of the need for children to play outside and the Presence of a courtyard/rooftop/balcony/private garden for children to play in

Most parents agree that it is essential for their children to play outside park areas to develop their physical and mental well-being. Around 60.87% of the participants strongly agree with the need for children to go outside to play, while 32.61% agree with it. On the other hand, 2.17% of the participants disagree, and 4.35% strongly disagree with this idea. Though most parents agree (60.87%) on outside activities for their children, about 68.89% of parents mentioned that they have their own private courtyard/rooftop and indoor playing space for their children.

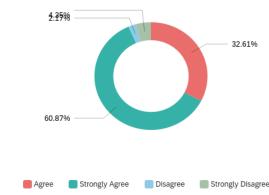


Figure 6: Is it essential for children to go outside toplay?

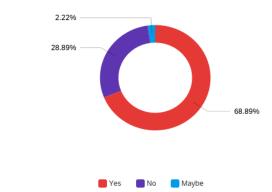


Figure 7: Presence of a courtyard/ rooftop/balcony/private garden for children to play in

b. The frequency at which the children visit the play areas:

Response to the frequency at which the children visit the playgrounds found as 36.36% of children visit the playgrounds once a week, and the parents with children who visit the playground twice, thrice, 18.18% each, more than four times a week were found to be the minor group of participants (9.09%). Most children only go to the play spaces once a week, which indicates that they do not have the time to visit the play areas more frequently.

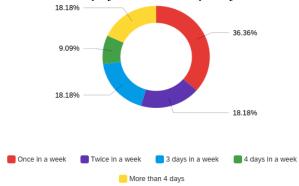


Figure 8: Frequency at which children go to play areas

c. Average time spent in the playground and their safety during playtime:

Most children (52.38%) spent 1-2 hours at the play areas, whereas 38.10% spent less than an hour at the playground, as shown in Figure.

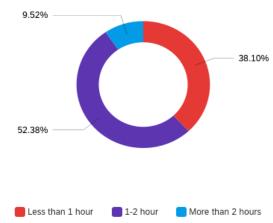


Figure 9: Time usually spent by children in the play areas

The safety of the children is also an essential factor that needs to be considered for the play areas. About 39.53% of parents convey that the parks and play spaces their children access for playing are safe from danger from strangers. However, a substantial portion of the parents is also not convinced about their children's safety during playtime. Hence, safety concerns have been raised by a few parents, which may be a point of reference.

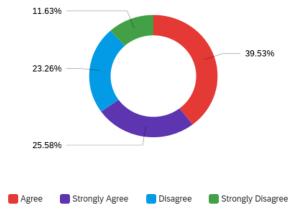


Figure 10: Safety from stranger danger in play space

d. Response for any consultation process that parents got involved with planners regarding the community children's play space and any reflection of their feedback for those play spaces:

There was a question in the survey related to community involvement in designing urban spaces in Dhaka city. In the survey, it was highlighted that most of the parents, 82.22%, were never involved in any

consultation process regarding designing any parks in their areas. Only 11.11% of people said they had been engaged in consultations with planners regarding the community play spaces, and 6.67% of others could not tell if they had been involved in any such conversation.

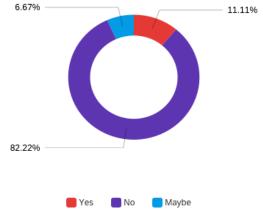


Figure 11: Response to a consultation process with planners regarding the community children's play space

60% of respondents stated there was no proof that their opinion was included in the design of their community parks. On the other hand, around 24% of the participants thought the community groups in the play areas had considered their comments. The parents who were not consulted during the playground design process may raise further complaints and increase dissatisfaction regarding safety issues and amenities in the grasslands.

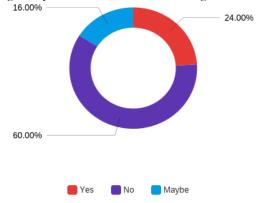


Figure 12: Evidence of reflecting feedback for those play spaces

e. Response regarding any comments to make about children's play spaces in the neighborhood:

There was an open-ended question on children's play space in the participants' neighborhoods. Some parents responded that cognitive development should have a separate play area. Some replies indicated a deficiency of nearby playgrounds within walking distance for frequent use and that these play spaces should be free of noise and air pollution. Some reactions included cleanliness, raising safety concerns, and additional amenities such as a drinking water zone. One participant said that their neighborhood park, Anowara park, has been encroached

upon by the metro railway construction authority, and the other (T&T playground) is limited due to private ownership (club); therefore, their children do not have access to a playground. A third remark emphasizes the necessity for a children's park: "I completely agree to prepare children's play areas in every neighborhood."

f. Findings from an interview with planners:

During the zoom interview with planners, the current policy requirements, the reason for the inadequacy of play areas, and their involvement in city planning and the design of parks and recreational areas in Dhaka city were discussed. Among the 18 questions discussed in the interview, few are highlighted in this chapter; the rest are attached in the appendix.

ii. Interview research findings:

a. Are there any policies for Child-friendly open spaces?

Response from planners: Both planners responded with the same answer there are no formal policies for child-friendly open spaces, although planners are working with the existing masterplan of Dhaka city. There has been a proposal for the revisions in policies for play areas and open spaces in Dhaka city in the new Detail Area Plan (DAP)concerning the playground. Several non-governmental organizations (NGOs) also started some projects for children. The "Playlab" project by BRAC is one of them.

b. Why an insufficiency of play areas in Dhaka city?

Response from planners: The first planner explained that the primary reason for this deficiency is the lack of a comprehensive plan for children or a separate planning process dedicated to children beginning with the master plan phase. Dhaka has several parks that qualify as city parks, and visitors of all ages are welcome to enjoy them. One of the main reasons children do not have easy access to these play spaces is that there are not enough neighborhood parks and no hierarchy in establishing the neighborhood park. Our country's open lands are considered a valuable resource for constructing residences and commercials rather than designing amenities for children or other aged people. The second planner added that the open space category for children was never planned in our master plan from the beginning in Bangladesh. This is the core reason for the insufficiency of child-friendly open spaces. Other reasons, such as population and dense urban constructions, are the reason for this insufficiency.

c. What are the factors to rethink about these play areas?

Response from planners: One of the planners

answered that city parks could not be accessed easily from any part of the corner of the city. Small-scale parks are not adequate for their recreation. Also, the current lifestyle of children and some associated crimes are the factors to consider about outdoor recreational spaces. The second planner also mentioned that Parents always feel safe permitting their children to access nearby play areas, which are neighborhood parks. The lack of open Space and the consequence of insufficiency makes governments and planners consider these child-friendly open spaces.

d. Is there any political discourse during the planning process?

Response from planners: According to both planners, this is the case in every development sector in Bangladesh. One planner mentioned the incident of the "Tetultola playground Protest" against the Police and higher authority with the local people. Sometimes, authoritative local dwellers also become obstacles to any proposed public urban space near their house, possibly hampering their privacy. Even if new plans are presented for open urban areas or playgrounds, a higher authority will use its position to convert the land into commercial development.

e. During the planning process, have you thought about street children?

Response from planners: The first planner said that In our socioeconomic setting, all children, particularly street children, cannot spend their leisure time in the same parks. These urban parks are designated for a particular class of people in society. Street children have their own community space to pass their leisure hours; however, they often play in the roadside areas. The second planner argued that there should be no separate play spaces for street children; all children should be treated equally and allowed to play in the same settings as other children.

4. Discussion

Since this research project is related to children, it is compulsory to give weight to the input of those who work closely with kids instead of inviting everyone interested in the topic. Therefore, parents were chosen as participants for the online questionnaire survey and needed to be over 18 years old. The site context is Dhaka city, Bangladesh, and the whole research and survey are conducted for this project in London, United Kingdom. This is why, initially, it aimed to include 100 participants' opinions in the research through the online survey; the online survey ended up with 50 complete data sets due to reaching out to more parents.

The data analysis found that there is an acute shortage of open spaces for children in Dhaka to play. This raises the need to develop such areas that could be termed childfriendly. Though the majority of parents have rooftops and courtyards for their children to play on, they opined that they must send their children outside. Parents are also aware of the impact of playing outdoors on their children's well-being, though safety issues, distance from their house to the playground, and environmental pollution such as noise and air pollution are the main barriers to access. Few parents also show concern regarding the need for facilities like drinking water, changing room, and washrooms in the parks so that the children can be comfortable in these playing spaces.

In addition, another issue, according to parents, is that an ideal play space for all aged children is a demand found in the questionnaire survey. Most participants do not know about their nearby playgrounds because they never access these play areas. From the survey, the encroachment and discrimination in the playgrounds; therefore, the entry restriction comes. There were comments on the encroachment of the parks for the construction of other buildings. Some parks are only designated for government officials, which is not ideal in urban Planning in Dhaka city. Most participants contend that they never asked during any design process, or their comments were never executed in any urban projects.

It has been found from the interview that the absence of planning standards from the very beginning of the master plan process is supposed to be the main reason for not having a planned child-friendly open space in Dhaka city. The lack of hierarchy in distributing the playground is another big reason. According to urban planners, existing political discourse in making policy provisions and during urban space development is marked as a severe issue in executing specific urban projects in Dhaka.

There are still no age-based or gendered-based play areas in Dhaka city, though, in the upcoming years, a new planning policy will make revisions for children's play zone. In the interview, planners mentioned the existing social and economic barriers to accessing playgrounds, especially for street children; these playgrounds are entry-restricted. Finally, planners noted a lack of collaboration, which is necessary for the success of any urban design project for city residents. Despite this, several worldwide organizations have stepped up to take creative measures to support children's growth and development and have begun some projects in many parts of Bangladesh.

Overall, a reasonable number of issues have come from the online question survey and interview with planners, which depicts the insufficiency of Open Space and the reason behind the decreased number of children in the playground.

5. Conclusion

After gathering all information from primary and secondary data sources, several issues have been found. Policymakers and the government should focus on several critical discoveries. Rapid population increase makes it inevitable that developing and maintaining new open parks might be challenging. International Policymakers have previously acknowledged that a healthy urban environment may promote a healthy childhood, which

directly impacts the long-term health outcomes of urban populations.

First, authorities should prioritize the preservation of existing parks, and this article provides a case study to help comprehend and address such requirements for the repair of parks. Renovation of parks for regular usage has been identified as one of the government's most pressing missions. During remodeling, sustainable practices and detailed infrastructure should be prioritized. Furthermore, taking step toward encroachment and political discourseis vital to lessen Dhaka's insufficient child-friendly Space.

As it is evident that, due to traffic issues, most parents cannot regularly take their children to parks and open spaces for recreation, it is necessary to focus on new interventions for small-scale parks in community areas. Government should prioritize safe transportation, which is a sign of a healthy city (the example of Finland has previously been used) (Kytta, 2004). Bringing hierarchy to neighborhood parks may effectively solve a community problem and significantly impact children's outdoor activities. As the majority of participants in this research were employed, if most parks are within walking distance and provide safe paths for children, they will be able to visit them often. With a safe route and crossing provisions, a mixed-used neighborhood that encourages active travel may reduce parents' concern for their children to access parks and other suitable open spaces. Designing cities following the 8-80-cities-theme may be helpful in the setting of Dhaka; in 8-80-cities-related initiatives, a youngster and an older adult can walk and move on the street together securely (ARUP, 2017).

Though several international foundations have raised some initiatives for street children in Dhaka, marked in the second case study in this paper is highly commendable, whereas other city officials are more inclined to their own beneficial tasks. However, equality in accessing city infrastructure can never be ideal for a city. Therefore, park management should handle these issues and make proper arrangements for unconditional access to children of all socioeconomic backgrounds.

Child friendly urban Planning is an emerging idea, and understanding what works for children is still emerging. Therefore, policymakers should play strategic roles in improving urban conditions by looking through different lenses for city development. In addition, bringing a right-based approach to policy-making respecting children's rightsmay lessen the insufficiency of child-friendly open spaces in Dhaka; for example, before initiating a play area, it may be high time to ask a child, "how do you want to play outside"?

References

- 1. Ahmed, A. & Khan, M. S., 2008. Municipal Engineer. *Child's play and recreation in Dhaka City, Bangladesh*, 161(4), pp. 263-270.
- 2. ARUP, 2017. Cities Alive: Designing for Urban

Childhoods. [Online] Available at: https://www.arup.com/perspectives/publications/research/section/cities-alive-designing-for-urban-childhoods [Accessed 16 1 2022].

- 3. Bank, A. D., 2001. Women in Bangladesh, Bangladesh: Country Briefing Paper programs Department (West).
- 4. Bartlett, S. et al., 1999 . Cities for Children. 1 ed. London: Routledge.
- Cook, P., Cohen, N. B.-. & Hart, S., 2004. Child as partner: Child Participation promoting social change, Victoria: International Institute for Child rights and development.
- Cope, D. G., 2015. Case Study Research Methodology in Nursing Research. 42(6), pp. 681-2.
- 7. DOE, 2006. Addressing climate change in Bangladesh: national efforts, Dhaka: Department of Environment, Ministry of Environment, Government of the Peoples Republic of Bangladesh.
- 8. DSP, 2016. *Dhaka Structure Plan (2016-2035)*, Dhaka: DSp.
- 9. Gagen, E. A., 2000. An Example to all of us; Child Development and Identity construction n early 20th century playgrounds. *Environment and Planning*, 32(4), pp. 599-616.
- 10. Gibson, C. B., 2017. Elaboration, Generalization, Triangulation, and Interpretation: On Enhancing the Value of Mixed Method Research. Organizational Research Method, 20(2).
- 11. Ginsburg, K. R., 2007. The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *American Academy of Pediatrics Committee on Communications*, 119(1), pp. 182-191.
- 12. Goldfield, S. et al., 2019. Creating community indicators for early childhood development: challenges and innovations from the kids in communities study. *Child friendly cities*, 3(1-2).
- 13. Halder, N., 2017. The Financial Express. [Online] Available at: https://thefinancialexpress.com.bd/views/how-much-child-friendly-dhaka-city-is-1508426645
 [Accessed 18 08 2022].
- 14. Hecke, L. V. et al., 2018. Public open space characteristics influencing adolescents' use and physical activity: A systematic literature review of qualitative and quantitative studies. Public open space characteristics influencing adolescents' use and physical activity: A systematic literature review of qualitative and quantitative studies, Volume 51, pp. 158-173.
- 15. Islam, M. S., 2011. Reduction of open Space in Urban planning: a case study of Osmani Udyan, Dhaka: BRAC.
- 16. Kytta, M., 2004. The extent of children's independent mobility and the number of actualized affordances as criteria for child-friendly environments. *Journal of Environmental Psychology*, 24(2), pp. 179-198.
- 17. Lester, S. & Russell, W., 2008. Play for a change.

- Cheltenham: National Children's Bureau.
- 18. Ngozwana, N., 2018. Ethical Dilemmas in Qualitative Research Methodology: Researcher's Reflections. International Journal of Educational Methodology, 4(1), pp. 19-28.
- 19. NHP, 2016. National Housing Policy, Dhaka: NHP.
- 20. NHS, 2014. Health Survey for England 2019 [NS]. [Online]
 Available at: https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2019

[Accessed 02 09 2022].

- 21. Nilufar, F., 2011. *Urban life and use of Public Space in Dhaka*, Dhaka: Asiatic Society of Bangladesh.
- 22. Rabbani, G. & Sharif, M. I., 2005. *Dhaka City State Of Environment (SOE)* 2005. 1 ed. Dhaka: UNEP in collaboration with BCAS & DOE.
- 23. RAJUK, 2016. Rajdhani Unnayan Kortipokkho(RAJUK). [Online]
 Available at: http://www.rajuk.gov.bd/site/page/68c8d4af-f493-43de-a54c-b0dc83d56bff/
 [Accessed 21 08 2022].
- 24. Senes, 2007. Dhaka Metropolitan Development Plan Strategic Environmental Assessment, Dhaka: Senes.
- 25. Star, T. D., 2022. The Daily Star. [Online] Available at: https://www.thedailystar.net/news/bangladesh/news/the-death-playground-2985596 [Accessed 06 08 2022].
- 26. Tabassum, S. & Suchana, S. B., 2011. Contextual Inquisition of Green Space in Dense Urban Environment: DCC Parks as Exemplar. *Jahangirnagar Planning Review*, *Department of urban and regional planning*, Volume 9, pp. 77-86.
- 27. UNICEF, 2002. Poverty and Exclusion among Urban Children, Florence, Italy: Innocenti research Center.
- 28. UNICEF, 2005. Convention on the Rights of the Child. [Online] Available at: https://www.unicef.org/child-rights-convention [Accessed 16 1 2022].
- 29. Unicef, 2012. The state of the World's children, s.l.: Unicef.
- 30. WBB, 2015. Parks and playgrounds in Dhaka:taking stock and moving forward, Dhaka: WB Trust.