

PARENTS' PERCEPTION ON PHYSICAL ACTIVITIES OF  
CHILDREN AGED 6-8 YEARS DURING COVID-19

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A thesis submitted to Brac Institute of Educational Development in partial fulfillment of  
the requirements for the degree of  
Master of Science in Early Childhood Development

Brac Institute of Educational Development  
Brac University  
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## **Declaration**

It is hereby declared that

1. The thesis submitted is my/our own original work while completing degree at Brac University.
2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I have acknowledged all main sources of help.

**Student's Full Name & Signature:**

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## Approval

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## **Ethics Statement**

Title of Thesis Topic: Parents' Perception on Physical Activities of Children Aged 6-8 Years during Covid-19

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1. Source of population: Educated parents who had at least one child aged 6-8 years
2. Does the study involve (yes, or no)
  - a) Physical risk to the subjects (No)
  - b) Social risk (No)
  - c) Psychological risk to subjects (No)
  - d) discomfort to subjects (No)
  - e) Invasion of privacy (No)
3. Will subjects be clearly informed about (yes or no)
  - a) Nature and purpose of the study (Yes)
  - b) Procedures to be followed (Yes)
  - c) Physical risk (N/A)
  - d) Sensitive questions (Yes)
  - e) Benefits to be derived (Yes)
  - f) Right to refuse to participate or to withdraw from the study (Yes)
  - g) Confidential handling of data (Yes)
  - h) Compensation and/or treatment where there are risks or privacy is involved (Yes)
4. Will Signed verbal consent for be required (yes or no)
  - a) from study participants (Yes)
  - b) from parents or guardian (yes)
  - c) Will precautions be taken to protect anonymity of subjects? (Yes)
5. Check documents being submitted herewith to Committee:
  - a) Proposal (Yes)
  - b) Consent Form (Yes)
  - c) Questionnaire or interview schedule (Yes)

### **Ethical Review Committee:**

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## **Abstract**

The COVID-19 epidemic ushered in a new age, impacting all members of the global population, especially children, who were among the most susceptible. These developments impacted not just access to education and physical and psychological safety, but also social and physical activity (Kourti, et al., 2021). Lockdown reduced playing time, causing children's body weight to rise. Behavior issues in children have become a severe concern owing to a lack in physical activity during school closures. Prolonged lockdown can interfere with physical activity, cause a change in food, cause weight gain, and alter their lifestyle and sleeping patterns. (Kabir, Hasan, & Bhuya, 2021).

This research attempted to explore the parents' perception about physical activities of children aged 6-8 years old during Covid-19 pandemic. Data were collected through in-depth interviews and group discussion. This study discovered that parents understand the importance of physical activities but there have been gaps in their practices where parents tried to involve their children with different activities or children got themselves involve in other activities e.g., watching TV for long time but those are not related to physical activities always and all these resulted in different consequences e.g., weight gain. However, it was found that if parents get the knowledge on how to involve children in different physical activities during challenging times, it will help them to reinforce their knowledge about children's physical development that helps them practice physical activities related to child's physical development.

**Keywords:** Parents' perception; Parenting practice; Covid-19; Physical development; Physical activities.

## **Dedication**

This thesis is dedicated to my beloved mother and my darling daughters for their constant support and encouragement throughout this Master's program.

## **Acknowledgement**

All praises go to Almighty Allah, the most gracious and the most merciful, for blessing me with good health and all the opportunities to complete this Masters.

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I cannot begin to express my deepest appreciation to my family members for their unwavering support, without their assistance the completion of my dissertation would not have been possible. I am extremely grateful to my mother for the love, care and the sacrifices she has made throughout my life for my education and future. She is the reason for which I have come this far. I would like to thank my beloved husband, Rizwan Rahman, for being patient and taking care of our children in my absence and looking out for the small things when I was busy with my studies. I am grateful for my daughters, Maryam and Arayah for understanding my situation and being good children. I am also grateful to my mother-in-law for supporting and encouraging me throughout my thesis. Their continuous support and sacrifices have helped me to accomplish the things I have today.

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## **List of Acronyms**

BRAC            Bangladesh Rural Advancement Committee

Covid-19       Corona Virus Disease of 2019

WHO            World Health Organization

ECD            Early Childhood Development

# **Chapter I**

## **Introduction & Background**

### **Introduction**

In 2019, the novel Coronavirus first broke out in China. This new disease, known as Covid-19, has turned the globe upside down, disrupting main determinants of health and putting the global economy at a standstill (CCSA, 2020). After WHO (World Health Organization) declared it a pandemic in March 2020, it has been escalating and threatening the existence of human beings globally. To reduce the spread of Covid-19, almost all countries have introduced the practice of “social distancing”, for which schools have been closed down and classes are shifted to homebased distance-learning models. Children are the first stakeholders of this drastic effect as they are forced to stay home because of school closure. Due to this lockdown children are not being able to go outside for physical activities or exploration and interact with their peers or teachers. In a whole all these measures have adversely affected children’s mental health and welfare, leading to a number of problems, such as, inadequate nutrition with a risk of both overweight and underweight, addiction to screens, lack of schooling, social isolation, risk of child abuse, declining vaccination rates and health care (Zemrani, et al., 2021). The erratic nature of the new coronavirus disease (COVID-19) has forced the Government of Bangladesh to close all educational establishments since 18 March 2020 (Ela, et al., 2021). Countries around the world have sought an alternative teaching method – the online class – to minimize academia losses in the unavoidably pandemic COVID-19 and reduce the intensity of psychological problems among the youth (Besser, et al., 2020). Therefore, psychological disturbances like anxiety, depression, stress, fear and sleep disturbance have been growing unprecedentedly in students

(Islam, et al., 2020). Comparing other students, Bangladesh has had higher anxiety, depression, stress, and mental well-being (Ahmed, et al., 2020), and the growing malady is attributable to homelessness and social and electronic media exposure (Hossain, et al., 2020). In a qualitative research study done by Rehana in the year 2020 on homemaker mothers of preschool aged children, it is found that their children are now experiencing problems with various signs of mental illness that includes insomnia, depression, stress, boredom, and short temper. Children are also facing problems with their daily routines and are having less physical activities. Parents are now spending 24hours with their child because of the lockdown. Research on the effects of previous pandemics and disasters clearly indicates that many children are both immediately and for the longer term at risk when the brain architecture continues to develop rapidly and is highly sensitive to environmental disadvantage (Yoshikawa, et al., 2020).

## **Operational Definition**

**Physical activity** is crucial for healthy living and it helps to reduce the risk of evolving chronic disease. Physical activities are very essential part for child development as it helps to lay the foundation of an active and healthy life. It not only helps in physical and mental development but it also helps in brain development (Mahaseth, 2017). The North Carolina Child Care Health and Safety Resource Center states that, physical activity contributes to early brain development of infants and young children. It improves the overall health of a child. Physical exercise stimulates connections between the brain and the nerves; therefore, it speeds up the brain development and the learning process of socialization, creativity, personal awareness, motor skills and problem solving (Glen Allen Pediatrics, 2018). The same neural infrastructure in the brain that

regulates learning during motor development is also engaged in learning control during cognitive development (Grissmer et al., 2010).

**Perception** is a judgment resulting from awareness or understanding (Merriam-Webster 2021). Perception is the sensory experience of the world. It involves both recognizing environmental stimuli and actions in response to these stimuli (Cherry, 2020).

## **Statement of the Problem**

According to the World Economic Forum, 1.5 billion children have been out of school, this is especially visible in underdeveloped countries where schools are closed and online school is not efficient. Bangladesh has also closed down all its educational institutions to stop the virus transmission, resulting in 3.7 million students staying at home (Ahmed, 2020). School closures restricted children's exposure to physical activity. Not only that, Covid-19 pandemic also restricted the movement of children outside their home. Lack of free space in home disables children may face challenge to have adequate physical activities. The lack of physical involvement led to an increase in pediatric obesity, a decrease in fitness (e.g. strong muscles, flexibility, cardiorespiratory capacity) and an increased risk of disease (Steele, et al., 2008).

Parents may now have to take extra pressure to think about their children's physical growth and development. In a study of "A covid-19 Crisis in Child Physical Fitness" (Jurak, et al., 2021) on Slovenian children, a tremendous decrease in child physical fitness is found over the past months of self-isolation measures mandated by national authorities, despite having the most physically active children globally. The country implements the largest longitudinal database of child fitness in the world called the SLOfit. Researchers were inspired by these patterns to develop a system for tracking and disseminating government choices that have a direct impact on children's physical activity, fitness, and general health (i.e., the SLOfit Barometer). Over ten years of hard-won health improvements from national public health policies and PA (physical activity) initiatives were reversed in just two months of self-isolation. Covid-19 pandemic may have made parents' role very critical as they have to protect their children from stress and help them reach their full potential, providing an appropriate home environment. Children of 6-8 years old are supposed to get better in their fine

motor skills and gross motor skills by running to kick a ball or skipping while turning a rope. They tend to enjoy testing their physical limits at this age, and they develop more complex moving skills, for example, running in a zig-zag pattern, doing cartwheels, jumping down steps or catching small balls (The Australian Parenting Website, 2020). Parents play a crucial role in establishing healthy behaviors; though schools also have a strong influence because many early years' children devote a large portion of their day in schools (Savage, Fisher & Birch, 2008). The evidence of the effect of motor skills on cognitive development and school preparation calls for a shift in curricula to incorporate fine motor skills activities such as the arts, physical education, and play (Grissmer, et al., 2010b). Parents can no longer rely on school-based physical education to offer enough physical exercise for their children (Nemours Kids Health, 2019). Parenthood and family factors are the key drivers of early healthy development and growth for children and thus are essential for determining the immediate severity and future impacts of a pandemic on young children (Yoshikawa, et al., 2020). Early on, from holding their head up; rolling over; standing, crawling, and walking; to grabbing cereal, picking up blocks, using a fork, tying shoelaces, and writing, young children's gross and fine motor abilities develop across the birth to age 8 continuum (Guernsey, 2015). According to one study, kids with poor fine motor abilities had worse math and language results (Sandler, et al., 1992). This research will help us to know about the perceptions of parents on physical activities, what they think about it, what knowledge they have about it. In addition, it will also discover the practices that parents do with their child during this crisis moment. This study is designed to get an in-depth understanding of the current situation of physical activities of children aged 6-8 years. It will also generate new ideas for further research.

## **Purpose of the study**

The main objective of this research is to get an in-depth understanding of the perception and practices of parents on physical activities of children aged 6-8 years during Covid-19 pandemic. By conducting this research, how Covid-19 has affected children's physical activities will be discovered by parents' thoughts, views, as well as their practices.

## **Significance of the study**

In an article written by Harsh Mahaseth on 4th April 2017, he wrote “A child can physically, mentally, socially and emotionally develop by taking part in physical activities.” Structured sports like, dancing, tennis, football also helps to 7 | Page develop their physical health (Kohl & Cook, 2013). Mastery of these physical skills depends on how often a child practices them. Childhood is the time when children are more willing to try new activities. Physical activity promotes healthy growth and development of a child, as it helps build a healthier body composition along with stronger muscles and bones, in addition improving cardiovascular fitness (Novak Djokovic Foundation, 2017). A child's physical development includes healthy physical growth, the development of sensory systems such as vision and hearing, and the ability to use the musculoskeletal system for gross motor skills such as large body movements as well as fine motor skills such as precision and controlled sound production for speaking (Guernsey, 2015). When a child is exposed to physical activities and has higher level in it during his/her childhood, then he/she is likely to be more active even after they grow up to an adult (Active Health, 2021). This is an important aspect for better health and well-being as it has various benefits that reach far beyond only physical development. In a study with 1468 children aged between 5 and 7 years old from Kiel, northwest Germany, it was found that less physical activity and unhealthy eating habits



were associated with a higher dominance of overweight, which is why primary prevention initiative was suggested enhancing healthy eating practices and physical activity. 23% of the children had increased body mass index falling under the category obese because of low levels of physical activity. (Muller, et al., 1999) Children get more exposure to physical activities in schools which help to improve their confidence, self-esteem, and develop healthier social, cognitive and emotional skills. This also helps a child to build strength, self-confidence, concentration, and coordination from an early age (Novak Djokovic Foundation, 2017). Physical activity recommendations for school-age children indicate that they engage in 1 hour or more of moderate to vigorous physical exercise every day (Nemours KidsHealth, 2019).

If the multisectoral approaches in which governments in low and medium-income countries receive international support in order to intensify essential interventions do not support them, there is a much higher percentage of children who are at risk for devastating physical, socioeconomic and cognitive consequences throughout their lives (Yoshikawa, et al., 2020). Likewise, this study of parents' perception on physical activities of children aged 6-8 years in Bangladesh during Covid-19 crisis, will also help to guide and promote the importance of physical activities during Covid-19 outbreak and recovery period. It will also help policy makers to make policies or strategies to mitigate potential harm during future pandemics.

## **Research Topic & Research Questions**

### **Research Topic:**

Parents' perception on physical activities of children aged 6-8 years old children during Covid-19

### **Research Questions:**

- i) What is the parents' knowledge about physical activities of children during Covid-19 pandemic?
  
- ii) What are the beliefs and practices of parents on physical activities of children during Covid19 pandemic?

## **Chapter II**

### **Literature Review**

#### *Benefits of physical activities*

Physical activities encourage healthy lifestyles for all ages (Leavitt 2008). There are several advantages to physical activity, including enhanced bodily and emotional wellbeing (Zecevic, et al., 2010). Physical activity has also been found to be a proximal driver of obesity (WHO 2000). Early childhood development lays the groundwork of a person's future health and well-being; hence, the advantages of healthy living are most effective when established early in life (Black and Hurley 2007; Keon 2009). One of the important elements influencing child growth and maturation into healthy, resilient adults is parental impression of children's levels of physical exercise. Public health approaches to reinforce this notion is increasing parents' understanding of the connection between their kids' physical activity, leisure time, overweight and obesity rates (Dordevic, Z., Kujundzic, E., & Bajic, B. 2020).

American Academy of Pediatrics, American Medical Association and U.S Department of Health and Human Services together listed 10 benefits of physical activity for children are: strengthens the heart, helps keep arteries and veins clear, strengthens the lungs, reduces blood sugar levels, control weights, strengthens bones, helps prevent cancer, regulates blood sugar, improves energy levels, and enhances emotional well-being. In a study published in the journal of Proceedings of the National Academy of Sciences, it is found that serotonin (a mood-regulating chemical) increases during physical activity and it boost the energy and strength of children's nerve cell, which can help defend against neurological disorders like Parkinson's disease. Increased level of

serotonin is also associated with heightening of appetite, feelings of well-being, and lessening of mental depression.

Physical activity has been shown to enhance asthma symptoms, lung function, and quality of life, as well as lower airway inflammation and bronchial reactivity. As a result of the COVID-19 epidemic, the World Health Organization's suggested minimum amount of PA—60 minutes per day of moderate-to-high intensity—is difficult to accomplish for many children, particularly those living in cities (Ferrante, 2021).

Physical activity in children is associated with protection against internalizing (e.g., depression, anxiety) and externalizing (e.g., impulse control, aggressiveness) symptoms and can improve psychosocial functioning, according to current evidence. The COVID-19 epidemic has highlighted the significance of research into the mental health benefits of physical activity. Two Chinese researches revealed that children who participated in greater physical exercise during the epidemic had better behavioral and mental health. Experts believe that increased active promotion of physical activity should be a crucial suggestion to enhance population health during and after the COVID-19 pandemic (Pooja, 2021).

### ***Research about impact on physical activities of children during Covid-19***

In a research done by Štveráková, et al. with 98 Czech Children, it is found that COVID-19 lockdown has resulted in significant reduction of physical activity that had negative impact on children's health. They discovered number of negative consequences like increasing obesity, feeling of loneliness, anxiety, depression, pain, sleep disturbance—all these are related to physical activity levels. A sharp decline in physical activity

affected all the other factors. They added, *“This problem is quite complex however, due to the multifactorial nature of various changes in PA during COVID such as: social status and family income, city dwelling versus villages or suburbs, parental education levels, pre-pandemic sports habits, the level of national restrictions, and age among others.”* Strategies to promote adequate physical activity of children during this pandemic were suggested.

Physical exercise impacts many elements of children's daily life and it adds to the acquisition or improvement of healthy behaviors, therefore to physical and emotional development (Founaud, 2020). Obesity and other health issues have been linked to a lack of physical activity in a study done 837 Spanish children aged 0-12 years old. The WHO acknowledged this, and echoed it when they lauded the value of physical activity in preventing juvenile sedentarism as a result of lockdown (Guen, et al., 2020). According to data from the pre-COVID-19 period, only around a fifth of preschoolers and fewer than ten percent of school-aged children satisfied all of the physical activity and mobility standards. According to other investigations, low percentages of physical activity have been detected in preschool-aged children. Chinese preschool kids did not do much physical activity (Ji, et al., 2020). Despite the fact that that children under the age of 12 engaged in a limited amount of physical activity with friends in sports schools during lockdowns, activities at home increased. (Zalagaz, et al., 2021)

According to another study on Spanish children, it was found that, 40.1 percent practiced some kind of physical activity at home almost every day, including dancing and sports, 22.2 percent practiced it at various times throughout the day, and 37 percent never practiced any kind of physical activity or did so only a few times per week. During the lockdown measures, children's free play (those under the age of 12) was inversely related with the quantity of television and videogame devices at home, as well

as the amount of time spent per day on cellphones, tablets, or videogame devices . Children in Spain spent 80.38 minutes per day watching television, 18.78 minutes per day playing video games, 14.58 minutes per day using smart phones, and 28.47 minutes per day using tablets (Kourti, et al., 2021). Furthermore, it was found that, the decline in time spent on both outdoor and indoor physical exercise (walking and biking), as well as both indoor and outdoor play among children, was inversely related to parental age. As a result, children with older parents spent less time playing (Moore, 2020). This drop was also connected with parental encouragement for physical exercise, parental support and engagement, home style (detached or not)—with the exception of indoor play—and the presence of at least one adult who was not working. Physical activity was positively connected with having more than one child in the family and negatively connected with parents working from home (Pombo, 2020).

Among European research, one in Italy investigated the potential that variables related to weight increase in children and adolescents with overweight and obesity were amplified during lockdown. It was discovered that time spent participating in sports reduced by 2.30 4.60 h/week ( $p = 0.003$ ), but screen time rose by 4.85 2.40 h/day ( $p = 0.001$ ). Furthermore, an inverse association was detected between changes in athletic activities and changes in screen time, albeit at a borderline significant level (Pietrobelli, 2020).

An online survey conducted in Brazil to assess the behavior of children under the age of 13 during confinement due to the COVID-19 pandemic found a significant decrease in total physical activity time (percentage of reported hours: 19.56 percent in children aged 3–5 years; 10.99 percent in children aged 6–9 years) and an increase in total sedentary time (percentage of reported hours: 80.44 percent in children aged 3–5 years; 89.01 percent in children aged 6–9 years). 46.1 percent of parents said that their children

were getting considerably less physical activity, and 37 percent said it was less frequent than during the school day; 38 percent said screen time was greater than during regular school hours, and 36.9 percent said it was lot more (Sa, 2021).

In a study of the effects of Covid-19 pandemic on physical activity of 211 US children, done by Genevieve F. Dunton, Bridgette Do and Shirlene D. Wang, it is found that short term changes in physical activities can become permanently rooted, leading to diabetics, increased risk of obesity, and cardiovascular diseases. According to recent estimates, almost three-quarters of U.S. children and teens aged 6 to 15 years fail to achieve the 2018 Physical Activity Guidelines for Americans requirement of at least 60 minutes of moderate-to-vigorous physical activity (MVPA) per day (Dunton, 2020). Another study on Canadian children found immediate collateral consequences of the COVID-19 pandemic, indicating an adverse impact on the movement and play behavior.

In a research study with 2159 children from Portugal, it was found that percentage of physical activity done by children does not differ by any gender on any age group of children. Children, who had outdoor space and also had siblings, were significantly more active than other children. Moreover, children whose parents were working from home showed lower levels of physical activity (Pombo, et al., 2020)

In a study with Bangladeshi children by Riaz Uddin, Md. Hasan, K M Saifur Rahman and Sandra Mandic, it was found that the frequency of inadequate physical activity ranged from 20% to 67 percent among children and adolescents. Females engaged in less physical activity than males. In Bangladesh, there has been limited interest in physical activity and sedentary behavior research. It was suggested that critical knowledge gaps revealed in the analysis should be considered when developing new

research and programs in Bangladesh with similar socioeconomic and cultural environments.



## **Chapter III**

### **Methodology**

#### **Research Approach**

A qualitative research approach is adopted in order to obtain an in-depth understanding about the perceptions of parents, their thoughts, concerns, views on physical activities of children aged 6-8 years during pandemic. The concept behind it is that the best approach to comprehend any phenomenon is to look at it in context. Qualitative research is exploratory and open-ended in nature. This type of research allows the research questions to emerge on their own. The researcher is also free to change the questions if they believe they need to ask a new one to fully comprehend the phenomenon. Multiple perspectives are valued in qualitative research rather than a single perspective. This approach allows collecting, analyzing and interpreting comprehensive narrative data, in order to gain rich descriptions of this study. (Gay, et al., 2012).

#### **Research Site**

All the parents participating in this research had children who are studying in an English medium school of Dhaka city. The in-depth interviews were carried out face to face with 5 participants, as the Covid-19 situation is under control now, and respondents were willing to meet in person. One of the IDI was taken virtually as there was time constraint for data collection and that it was difficult to match time. Moreover, since the FGD involved 6 participants to sit together, so virtual meeting using Google meet was set up to conduct the research, as it was easier to match time with all the participants and also, they felt comfortable that way. All the IDIs and the FGD was taken in the respondents' desirable time.

## **Research Participants**

Parents of Children aged 6-8 years of English medium schools participated in this study. How the Covid-19 pandemic has affected their children's physical activities and how it was before the pandemic has been discovered. Research respondents participated voluntarily after the purpose of this study being explained to them.

## **Sampling Procedure**

12 parents were selected who have children aged 6-8 years studying in any English medium school in Dhaka. In-depth interviews and focused group discussion was carried out with those parents. This has helped to get homogenous participants in terms of same socio-economic background. The schools were chosen for the convenience of the researcher, so the sampling population was purposive.

## **Data Collection Methods**

6 IDI and 1 FGD is conducted to collect the data. The focused group discussion was carried out with 6 parents using unstructured questionnaires. Before starting the FGD, the study objectives and its purpose was explained to the participants. All of them were greeted and the researcher had a little informal conversation with the participants in order to make them feel free to share their thoughts, then they were introduced with the selected questions to continue the discussion. If anyone did not want to answer any specific question then that was honored. After finishing all the questions, the session was wrapped up by thanking each and every respondent and by greeting good-bye. In addition to this, 6 parents sat for an in-depth interview session that was conducted using prepared IDI guidelines. The same procedure of greeting, sharing the objective and

purpose and wrap up session was followed with individual interviews as well. The IDIs and FGDs was recorded using an audio recorder taking participant's permission. Before taking any IDI or FGD, an email was sent to all the participants asking for their consent to sit for the interview. Only after getting their electronic signature on the return email, the data was collected.

## **Data Analysis**

According to the National Institute of Children's Health Policy 2021, "Qualitative data is the descriptive and conceptual findings collected through questionnaires, interviews, or observation. Analyzing qualitative data allows us to explore ideas and further explain quantitative results." The interviews were thoroughly listened and read over and over to find the answers of the research topic. The answer of the research questions was found out by combining data from separate interviews and FGDs and by connecting themes. As L.P. Wong (2008) asserts, "Analyzing qualitative data entails reading a large number of transcripts looking for similarities or differences, and subsequently finding themes and developing categories. Traditionally, researchers 'cut and paste' and use colored pens to categorize data." The most popular technique, i.e., Content analysis was used to analyze the qualitative data. This is the process of categorizing verbal or behavioral data in order to classify, summarize, and tabulate the information. The following steps was followed here: i) at first, the face-to-face interviews and virtual FGD was transcribed and compiled together in order to organize the data. Copy of the transcripts was stored in a separate folder to avoid any loss of data, ii) the data were then reviewed thoroughly and repeatedly in order to highlight the data that corresponded directly with the research questions, iii) next the data were categorized into different themes and sub themes related to the research questions, iv) while reviewing or interpreting the data and identifying the different themes, any

thoughts related to the perceptions that came up was written in a different sheet, v) lastly, the qualitative data is presented by summarizing the main points in each theme with some direct citations. (ECD529 Lecture Day 7, 2021)

## **Ethical Issues**

Ethical principles have been strictly followed in this study. The important ethical concerns that were taken into account are: a) Voluntary Participation- No parents in this study were forced to participate. They participated only out of free will, b) Informed Consent- The purpose and importance of the study was clearly stated out to the respondents, and they were well informed before commencing their participation, c) Confidentiality- All the twelve respondents were assured confidentiality and anonymity of their responses. They were guaranteed that none of their answers will be shared outside this study and they can trust the research to provide valid information. If any participant felt uncomfortable to answer any question it was skipped. If a participant was unwilling or unable to finish the FGD or IDI then their wishes were given priority. Lastly, BRAC University's Plagiarism Policy have been followed while carrying out this research. Whenever any facts, experiment results, anyone's idea, opinion, theory, or any information that is not generated by the researcher, the original source is cited as accurately as possible and given full credit. At the end reference of the source is also given.

## **Validity & Reliability**

Validity in research is deals with the accurateness and truthfulness of scientific findings (Le Comple and Goetz 1982: 32). A valid study should exhibit what actually exists and a valid tool or measure should in fact measure what it is thought to measure (Brink, 1993). Whereas, the consistency, stability, and repetition of the informant's reports, as

well as the investigators' ability to gather and record information properly, are all factors in reliability (Selltiz, et al., 1976:182).

This study is a qualitative study, so in-depth interviews and focused group discussions were taken as a measure to collect in-depth and extensive detailed information about the perceptions of parents. For validity, two methods were taken into account; one is IDI and second is FGD. The power of qualitative research is in gathering data in many ways. Data triangulation using two different methods for collecting data allowed an extensive understanding of the research objectives. It was done by ensuring credibility, transferability, dependability and conformability. Before collecting all the data, a pilot testing with one participant was done in order to understand whether any change in the questionnaire is necessary or not. This ensured that the questionnaire is aligned with the real scenario and compatible with the research questions. The reliability of the questionnaire has been established by reviewing it by a panel of experts.

### **Limitations of the Study**

The parents from only one socio economic background has been interviewed, which states that different perspectives of parents of different socio economic background are not taken into consideration here. Also, respondents got bored or unwilling to answer properly at the end because of the long time it requires to carry on the interview. As this research includes open ended questions, so to categorize the desired answers into different category involved a great amount of labor. Moreover, due to this pandemic situation, face to face focused group discussions or even observations of children's actual change of state in physical activities could not be carried out, leaving some fall out for this research. A deep face-to-face FGD would have made the perception of respondents clearer.

## **Chapter IV**

### **Results & Discussion**

#### **Demographic Information**

Six parents, three fathers and three mothers, took part in the in-depth interview (IDI). They are all in their thirties, ranging from 32-39 years old and they are all highly educated, holding postgraduate degrees. Only one of them is a stay-at-home mother, while the rest are professionals, with two university lecturers, two businessmen, and one private service holder among them. Altogether the respondents have three male children whose age is 6, 7 and 8 and three female children two of them are 7 years old and one 6 years old.

The focused group discussion (FGD) was held among six mothers who have children between the ages 6-7. The mothers have 3 male children and 3 female children altogether. Three of the responders are housewives, one is a banker, another is a director in a reputable hospital, and the other is a freelancer by profession. All the mothers are well educated having graduate and post graduate degrees.

#### **Results**

##### **Theme one: Parents understanding of physical activities of children**

All the participants during in-depth interviews shared their views on physical development of children, where four on them clearly mentioned that being healthy is the key, and not being overweight or fat. For example, one father said *“it is basically being healthy, it doesn't mean if she is fat or slim, does she have the perfect BMI ratio or not”*. He even added, *“Whether my daughter is active or not, how is her stamina, her reaction, and when she is playing whether she is sitting in a corner or running*

*around*". Similarly, another mother said that sometimes people misunderstand that child who weighs more is healthier. She believes that whether a child is active according to his age, whether he weighs according his age or not, whether he is reaching the required height weight growth graph and maintaining it. While another mother said the same about being active is the key to a child's physical development. She believes physical development involves how a child is attentively doing the activities he is supposed to do. For example, whether he is waking up on time, doing his homework on time, tidying up his toys after play, when playing outside with other kids, whether they are playing in a corner or getting inspired by other kids or not. *"If a child is physically fit then he cleans up happily after playing happily"*, she concluded. Lastly, another mother said, physical development is being healthy, not being fat or overweight. A child will play and eat well if he is healthy; this is how they will develop mentally as well. Likewise, another father talked about mental development when asked about physical development. According to him, how a child is growing mentally, or how she is thinking mentally is what he understands by physical development. On the other hand, one father talked about developmental delays. *"A proper development is necessary with age"*, says he. For him, physical development is whether a child is developing to his required level without any delays.

During focused group discussion, all the parents talked about children's height and weight when asked about physical development of children. One of the mothers said, *"Every child is unique"*. For her, physical development means how a child is growing with time, how he is learning new things in every phase by doing it from the beginning. While another mother says, she checks whether her son is doing his daily physical activities properly, for example, whether he is eating well, what is he doing after finishing eating, whether he is sitting or running around, or whether his enthusiasm

level is decreasing or not or even his behavior is proper or diminishing. Couple of the participants talked about milestones, one said physical development means whether a child is reaching every milestone with time, for example children would sit by 6 months age, walk at the age of one, and so on, whereas another one said “*development is subjective*”, as her daughter started walking at the age of 14 months. One of the mothers shared in details by mentioning gross motor skills and fine motor skills. According to her, “*physical development means how a child control her body*”, whether she can hold a finger, see from her eyes, whether her finger and hands are developing properly or not. In a whole, she adds, “*whether my child has age-appropriate gross and fine motor development or not*”. Another mother described that development starts from birth; also, growth and development are two different things. She adds, development includes everything in a body, such as muscle development and bone development.

***Sub theme: Activities that promote physical development of children***

All participants emphasized on play in one way or the other that promotes physical development of children. All of them talked about different sports and play that involves lot of movement, and emphasized on outdoor play. One father said, “*We should take and children to different places to enhance their knowledge*”. While another father said, “*if we cannot take our kids to any sports activity center then we should take them to dancing, yoga or even palates form an early age, so that they can get the idea of ideal lifestyle for future*”. Furthermore, another father said that outdoor play is very important for physical development; a child should not only play with clay by sitting in one place, but also play those games that involves movements and involves some cardio exercise as well. On the other hand, all the mothers not only mentioned about outdoor play but they also gave emphasis to household chores as well. For example, one mother shared, “*I ask my son to open the mosquito net as it requires him*



*to climb up, not only that I even encourage him to hold heavy bags that is appropriate for him while grocery shopping*". Similarly, another mother said that a child should do his everyday activities properly, like whether he is waking up early or not, taking his breakfast on time or not, and even if he is taking long to finish it or not, and during outdoor play whether he is playing well or not. All these are important for physical development according to her. Another mother talked about how well her daughter is playing outdoor activities and how she is carrying out her household activities like, folding her clothes, tidying up her room, etc. All these mothers also talked about, cycling, badminton, basketball, swimming being the activities that promotes physical development of children.

In the FGD one mother mentioned, *"For me, healthy eating and outside playing are the two basic things that promote physical development of children"*. She added children should get sun exposure to get Vitamin-D as it increases their immunity which further creates problem to have physical activities. Similarly, another mother said the same about outside exposure, sun and fresh air. Children should be closer to the fresh atmosphere. While the other four mothers mentioned about a number of activities. For example, one talked about, jumping, running, balancing, cycling, and yoga. Even she mentioned about Vitamin-D from sunlight is very important. On the other hand, one mother thinks that children should be given the freedom to explore their surroundings, whether inside the home or outside in a playground. She believes that a house should be designed in such a way that gives enough free space for a child to explore and play, to jump and run. Not only that, she also feels like there should be enough playground in each area or colony for children to do physical activities and mingle with other kids as well. Another mother said that anything that keeps her son active, be it cycling, or playing with ball, or chess or even swimming. One mother shared about dancing,

exercise, and even playing will ball that requires full body movement promotes physical development.

***Sub theme: Importance of physical activities for a child's development and growth***

All the mothers shared those physical activities is very important for a child's development and growth. Couple of the parents shared their children usually tend to stay busy with gadgets like phone, tab or even TV, so parents to keep an eye on this. One father said, "*we should encourage children to play more, it is very important*". While another mother said, "*Children will grow not only physically but also mentally if they play*". She even said that if a child play enough then he will be tired, eventually he will be hungry and will eat properly and sleep on time as well. Similarly, another mother shared, "*How properly a child grows depends on how much he is involved in physical activities*". More involvement in physical activities will keep the child to do all his work timely, such as eat and sleep on time. She believes, "*physical development is inter-related with mental development*". One of the mothers thinks that parents should make their child self-dependent, by asking them to do the small activities appropriate for his age. For example, encouraging the child to pour his own water and drink, fold his own clothes, do his own bed. This will eventually grow confidence in a child, and he will not be lazy, not physically nor mentally. She believes, "*the more parents do all the work for their child, the more they make their child mentally handicapped*". While one of the fathers thinks that, physical activities will help children to grow properly, and all other things will fall in place. This will increase her

knowledge, and she will better understand her surroundings. He encourages parents to take their children to different places to take part in physical activities. On the other hand, only one of the participants gave emphasis on the diet parents are providing to the kids. He believes in balanced diet which includes not only carbohydrates but also enough fruits and vegetables too. According to him, *“Physical development leads to other psychological issues”*. *“If a child is not physically fit then she will not be confident in the future to do something, for example, under development will decrease children’s’ motivation for any work, while overfeeding will decrease confidence”*, he adds. He concludes by saying that when a child becomes overweight, they feel less confident, which is not correct but they feel it subconsciously.

All the mothers during FGD agreed that physical activities are very important for children’s growth and development. One of the parents said, *“Physical activities are very important for muscle, bones, heart and lungs development”*. Walking, jumping or playing hula-hoops should be done regularly, she adds. This will help children to stay fit. Another mother mentioned, *“Physical activity helps to keep blood circulation normal and weight under control”*. Physical activity is important for optimum growth of children, also, children stay happy if they do enough physical activity, she adds. Children feel uncomfortable if they do not perform enough physical activity after eating. Likewise, another mother said, *“physical activities are very important because my child’s hands and legs will shrink if he does not do enough physical activities, which will eventually lessen his abilities to move”*. She believes if children do not play football, basketball or even does not do cycling then they will not dare to explore everything, and eventually he will not have enough courage development. Therefore, he will not have optimum physical development, which implies that he will grow in age only but stay small in real. She adds, lack of physical activities decreases the energy

level of a child. Similarly, another mother shared that lack or decrease in physical activity makes a child physically unfit. Listening to this, another mother mentioned that her daughter's willingness to run, jump, or even go outside had decreased a lot due to less involvement in physical activities and that she is becoming lazy day by day. Another mother joined in by saying, *"My daughter has become lazy and stubborn due to less involvement in physical activities"*. She adds, *"Physical activities are important for physical development, and physical development is related to overall development, mentally, socially"*.

## **Theme 2- Effects of Covid-19 on physical activities of children**

### ***Sub theme: Impact of Covid-19 on the physical activities of your children:***

Almost all the parents said that Covid-19 had a negative impact on children's life during in depth interviews. The most important part that affected the most is that schools were closed and children were locked inside their home. Most of the parents said, their children's socialization with their friends got hampered because of school closure. They are not being able to play, talk or share things with their friends. One of them even added that children used to be fit when they were going to schools. Children's fitness is decreasing day by day as they are staying at home and not having enough physical movement or activities. One father said, *"As parents we feel helpless, as we cannot take our child outside for any physical extra-curricular activities as everything is shut down due to Covid-19"*. One of the participants even emphasized that Covid-19 affected children more than adults as adults are busy with their daily chores or office works but children does not have any work to do at home. One of them even highlighted that bonding between parents and children increased during this Covid-19 crisis as they are spending more time with each other now. Couple participants mentioned about how

their children got used to this new normal of doing classes online. Before Covid-19, their children used to go to schools but now they are having classes sitting at home, doing class works and home works by them, even if it was hard for them at first as one of the participants shared, but later they got used to it, and can perform all the activities by themselves. One of the mothers thinks that children are not having adequate growth not only physically but also mentally.

During focused group discussion all 6 parents described how Covid-19 affected their children's physical activity individually. School is a big part of child's life to have physical activity. The important thing that children are missing out is their school, all the mothers agreed. They all feel that this is the time that children are supposed to make friends, play and gossip with them, which they are unable to do now because of Covid-19. One mother said, *"This is the time when a child shares his/her feelings with his/her friend"*. While another mother added, *"Childhood is the time when children are supposed to explore and create games by themselves"*. *"Playing at home and playing in school is a lot different"*, said one mother, *"children take part in different type of physical activities in school which is a big deal for them"*. Not only children are missing out this play but also, they are missing out the interaction they would have had during any play in school. Few informed that they are unable to take their child to any extra-curricular activities, be it swimming, tennis or even riding a cycle. Although, some classes have opened but still they feel afraid to take their children there, as one of the mothers shared. She added, *"It's very unfortunate that we cannot avail these to my kid"*. On the other hand, another mother shared that because of Covid-19 classes are taken online, for which parents need to sit with their children for 3-4 hours during the class, which takes up a lot of time. This is why they cannot give any more time to their child to have any physical activities, as parents have other works to do as well. Moreover,

she informed that her son is now facing difficulties to mix with other kids, which would not have been the case if children did not have to stay at home for such a long time. She said, *“Recently, I went to a program where I found 4/5 kids playing in a place individually, no one is talking or interacting with anyone, they are just playing by themselves”*. While another mother mentioned that every child is playing with cars, dolls, or blocks, but they are playing alone just sitting in one place. This is quite different than playing in a seesaw with their friends or even waiting for their turn to swing in a playground. Children’s growing together by playing with each other is a part of reaching a milestone too, emphasized one mother. One of the mothers shared that after almost 1.5 years she took her daughter to one of her friend’s houses, and after seeing her friend, she almost cried.

***Sub theme: Changes in child’s physical health due to the change in physical involvement during this crisis:***

One of the fathers said that he did not see any physical change of his daughter because of having fewer physical activities during the crisis, while another father said that his son lost his physical fitness during this crisis. He added, when his child went to school, he used to participate in many physical activity competitions such as running competition, and his son used to stand second or third among all the participants. He believes that, if his son participates in any competition now, he will stand sixth or seventh. According to him, weight gain for children is important but just by sitting idle at home. He added, *“It is a great disadvantage for my child”*. Very few mentioned that their child gained a little weight, where one of the parents added, *“it is not bad to gain a little weight, and physical health will not matter till she is 8 or 9 as it can be drastically changed, though it is good to stay under control”*. Some of the parents talked about

mood swings of their children. They explained that their children are getting upset or angry very easily. One mother said, *“She starts crying even if the lead of her pencil breaks down”*. Children are getting cranky, also getting addicted to phone, which is affecting not only their physical health but also mental health, one of the mothers pointed out. While another mother said that children are losing their interest very easily, sometimes they are even spoiling things. As children are sitting idle every day at home, they are becoming lazy day by day, one mother added.

Most of the parents, during FGD, emphasized that their children are gaining weight due to less physical involvement. One mother quoted, *“My daughter is watching Netflix by sitting idle all day at home and eating unhealthy foods randomly”*. While another mother added, *“As a mother I feel like my son is hungry every now and then, and that’s why I feed him frequently.”* She even feels that children are getting weaker day by day, for example if her son gets hurt a little, he makes a big deal out of it, which might not have been the scenario if his son could live a normal life. She further added, *“Children are supposed to run, jump while getting hurt, that is how they grow up, this is normal, that is how they become strong”*. One of the mothers explained that her child is not getting any stronger the way he was supposed to be, she quotes, *“Even if my son sneeze for 2 times only, he brings the medicine and asks me to feed him that”*. She adds that children are not getting enough activity, so whatever parents are feeding to their child, the calories stay in their body as children are not being able to burn it out. Along with this, some of the respondents discussed about changes in mental health of children due to the change in physical health. One mother quoted, *“My daughter is in a mental dilemma, she is not being able to process this Covid-19 thing nor she is being able to accept it”*. She added that although they did not go outside at all during this crisis period, but even if they wanted to go to any of their relatives’ or friends’ house, her

daughter did not want to go there, rather she asked them to take her to someplace with open sky. According to them children are getting upset very easily. One of the mothers said her son has become stubborn, if he wants something right at this moment, then it needs to be given to him right away. Another thing that came up during the discussion is that, children do not have a routine life now like they used to have when they were going to schools. Lack of proper routine is hampering their daily activities as well as sleeping pattern, which is not a good sign in the eyes of some of the mothers. One of the mothers thinks that her daughters' resistance power might go down in long run because adequate sleep during this Covid-19 pandemic. She feels as her daughter is not having enough physical activities as she used to during normal school days, so she is less tired now for which she is sleeping less than before. One of the mothers said that her son has made a new habit of ordering foods online, if he does not like anything that is cooked at home, then he asks his mother "*Ma order some food through foodpanda or pathao*". This habit got established during Covid-19 lockdown when his parents used to order food online every now and then. Similar information is shared by another mother, that her son is too establishing a habit of eating junk food by ordering it online, which was not the case before Covid-19.

***Sub theme: Challenges children are facing during Covid-19 to have physical activities:***

All the parents during in depth interviews mentioned that the most prominent challenge children are facing is that they cannot go outside. Not only they are restricted to go to schools but also, they cannot to outside to any park or playground which restricts them to have more physical activities. Children cannot walk or run around outside or play in a seesaw, one mother explained. One father said that he is not being able to admit his



daughter to any sports or physical activity classes like basketball or swimming. Another mother said that, children are more introduced to gadgets like phone and laptop because of online classes. She added that children are getting addicted to play games in their gadgets and most importantly she thinks, parents are not regulating what their child is seeing online, whether it is child friendly or not. She believes that parents should regulate what their children are watching online. Another mother gave similar answer that as children are not being able to go outside, they are spending more time watching television and videos on phone as they are restricted to indoor activities only. She believes that if children could go outside, they would feel happy and be able to concentrate more during any task. While another mother emphasized that children now have to wear mask whenever they are going outside, which is troublesome for them. According to her, even adults feel difficulties while walking wearing mask all the time, so she wonders how much a child can walk by wearing a mask. Only one of the parents talked about socialization of her child. She believes that children are facing problems not only physically but in others area too. Children are not being able to socialize like before, they cannot attend any wedding or any parties like before, and even they cannot go for shopping as well. For this, his child is now having difficulties to mix with other children after such a long break. Even if, his child is getting used to this day by day just like before, but he complained if there were no covid-19 crisis then he would have not faced these problems with his child.

The main challenge that all the parents mentioned during FGD about their child to have physical activities during Covid-19 lockdown, was going outside. Children were not being able to go outside and explore everything. Staying home, limits children's' access to have physical activities. One of the mothers said *"how many times a child can jump around by staying home?"* She explained that she is not being able to take her child to

any form of extracurricular activities, which she would have if there was no pandemic. Another mother pointed out that even children are not being able to play with other kids in their neighborhood. She added that sometimes parents do not want to send their kids to neighborhood playground because of safety issues and sometimes parents cannot send their kids even if they want to because of lockdown issues. Children are facing social isolation because of this crisis. Everyone agreed that this is the biggest challenge they are facing as everything is related with going outside.

***Sub theme: Activeness of Children***

Most of the parents think their child is very activities, and always busy with something. One father said, his daughter is always busy with something, be it riding a cycle, or running with her sister or even playing with the maid. Some of them even mentioned that their child does many household chores like, tidying up their room, for example, one mother said, *“My son gets so tired by doing all these tasks by himself that at times she asks me to give me a foot massage”*. Another mother shared that every day she tries to take her children to the playground near their house, not only that she always keeps her children busy with one thing or other, such as riding the scooter, or learning something watching YouTube, or drawing something, or even studying. She believes these are the things that keep her children fit. One of the fathers mentioned that his son learned so many things going to his school, such as his son knows how to tie a shoe lace whereas his father himself couldn't do it at his age, but as now schools are closed, he is losing this track. Otherwise, he feels that his son is physically active and does any physical activity if his parents ask him to do anything. Only one of the fathers said that he believes his daughter is 50% active of what he would expect, and the rest 50% requires going outside.

### **Theme 3: Physical activities of children during Covid-19**

#### ***Sub theme: Activities during Covid-19 (Enough or not)***

Most of the parents during in-depth interviews shared that the number of physical activities their children did during Covid-19 lockdown was not enough for them. The reason behind this is that, children were unable to go outside to perform enough physical activities. Most of the children could ride bicycle be it inside the house or in the lawn downstairs or even in terrace. Other activities that children did is they played scooter or danced or cooked watching YouTube, or did some gardening or went to the terrace for an hour to play, while majority of the children used to do some household chores, like tidying their room or even cleaning up their toys, etc. Couple of the children have siblings and they used to play hide and seek with their siblings, also they run and jump together in the house. Here, one of the parents even mentioned that he tried to take his son to different relative's house during weekends where there are other kids with whom his children can play. Couple of the parents think that although children are doing some physical activities but it is not enough to burn their calories and to be physically fit. One father said, "*Children need to do vigorous physical activity in order to sweat and be physically fit*". While one mother thinks that whatever her son did was enough for him as her son used to do cycling every day for at least half an hour, he even walked with his grandmother everyday as his grandmother has diabetic and she needs to walk, if his grandmother walks 7 times around the park, then he used to do the same. He even used to play cricket inside the house with his parents. As he used to be very tired at the end of the day, and felt asleep very easily, she thinks whatever physical activity her son did, it was enough for him. She exclaimed, "*I treat him like a man, and not a child*".

Almost all the mothers shared in FGD that they did their best for their child maintaining all social distancing protocols. They said that staying inside the house was their biggest limitation for their child to have any physical activities. Therefore, they did all the things they could by staying inside home. One of them mentioned that, she is still afraid of taking her child outside to any place she could play. Although some parents are taking their child to playgrounds but she is still does not have the courage to do that, *“Alhamdulillah it is good enough for my child whatever I Could offer her, there is nothing more this to offer”*, she mentioned. Staying inside the house, she asked her daughter to jump, run, skip, play with bouncing ball, do yoga and dance watching YouTube, etc., just to make sure that her hands, legs and muscle are working well. She even asks her daughter to sit in the balcony after shower to get some Vit-D. Whereas, another mother mentioned that even during strict lockdown, she took her son downstairs every day at night to ride cycle in the road as during night time the place around her house is almost empty. She even took her son to swimming, and gave him different types of games such as, blocks, chess, etc., *“By God’s grace, this is the most we could do and it was enough”*, she sighed. Furthermore, she added in today’s world we cannot send our children alone to play outside like we used to do in our childhood. Even if a playground or schools are close to our house but still, we couldn’t do it. She tries to play learning videos on YouTube, from which she says her son has learnt so many new things, which he tries to teach her as well. She used to do all these things as staying at home idle only gives the option to watch TV all day long. While another mother said, *“there is no end of perfection”*, she did her best although she was busy with her Master’s classes and assignments. She allows are child to jump off the bed and around the house, takes her children in the rooftop every day in the morning for one hour, so that they can get Vitamin-D as well as run and do many physical activities. She

decorates her house in a way so that her children get more free space to explore and play. She feels that there should be a small play space in every neighborhood, where children of that neighborhood can come together and play. She thinks this is very necessary; she doesn't have any play area near her house. She exclaimed, "*although at the end of each day, I think myself that I could have done better today*". One of the mothers shared that, nowadays parents are giving more effort for the normal things, for example, going to schools, going to relative's house, meeting friends and family. She says that these things would have been more spontaneous if things were normal. Children are stuck inside the house and do not get any exposure to sunlight or outside air; therefore, she tries to take her to the terrace to do some planting so that her daughter can get fresh air. She takes her to her grandmother's house frequently as there is lawn and she can do planting over there and stay connected to the atmosphere. Whereas another mother plays exercise and dance videos on YouTube for her son to follow that, as these things requires full body movement. Also, he goes outside with his father every day for half an hour, to play with balls. As children are not going to schools, they are having less movement and want to watch TV all day long. His mother thinks that, children has already developed the way they could by staying at home, now parents cannot do anything, for the development to be continuous, children need to go outside, to playgrounds and schools, to meet their friends and grow by playing with them. Likewise, another parent thinks that children need to outside in big open spaces to have physical activities, as staying home restricts children's' physical activities which is not enough for them.

***Sub theme: Parents' involvement in children's physical activities***

Half of the parents shared that they do not spend time with their child to have physical activities everyday as they are busy with their own work, but sometimes they do try to

play with their child, depending on the situation or mood but it is not more than half an hour. One of the fathers said that even if he doesn't do any physical activity with his child but he spends enough time with his son and has good bonding with him, they watch movies together; even he sometimes takes his son to his office. While half of the participants said that they spend some time together for their child to have physical activity. For example, two of them said, that they take their child to nearby park every day for 45 minutes to one hour, where one of them mentioned that if she gets late from office then takes her son to downstairs to ride cycle or scoter. While another mother said that she spends 15-30 minutes with her daughter to ride cycle, or do exercise or even sometimes they run together.

During FDG half of the mothers said that they do not spend any time with their child for them to be more physically involved in activities, where one of them mentioned that her husband takes of it as she is stays busy with her office. She takes care of his education. As the father of the child does home office, so he has lots of opportunities to play with him. For example, they have a long corridor in their house where he plays football with his son by creating two courts in two ends for each of them. She said that her son starts sweating as he becomes tired by playing. They even play chess for one hour every day. The latter half mentioned that they try to do exercise or dance with their child every day for them to be physically active using YouTube. One mother said that sometimes she tries to walk for 40 minutes with her child inside the house, and sometimes her father does that with her. Her child wants her to play together but as she stays busy with her household chores so she at least tries to do some exercise with her. Her daughter shows much interest to do exercise with her; she wears proper dress for exercise and plays the music while doing it. They do this for at least 40 minutes every

day. While another mother shared that both of her child loves to do exercise with her, even they do it for 40 minutes too. Not only that, she even runs and jumps around with her kids, throughout the day as she loves her child to be physically active. She takes her children to the terrace as well and every Friday she tries to take her child to an open space as things are turning normal nowadays. Another mother shared that she tries to do lot of activities with her child every day, such as she asks her son to throw ball in a basket (placed a little far from him). Even if the ball falls outside the basket she asks him to pick it and then throw again. When she takes her child for a walk outside, he wants to jump and run around, but as she cannot do that with him so he gets bored. She follows the dance class he has in his online school and tries to learn it. Later on, she does the same dance with her son for at least 3 to 4 days a week for half an hour. If she plays the music or YouTube her son does not get interest in it, but if she does the same with her son then he gets more interested and does it for a long time.

***Sub theme: Special initiatives by parents for physical activities of children during Covid-19 lockdown***

Half of the parents during in-depth interviews said that they did not buy instruments or toy for their child for them to be physically active, where one of them mentioned that her son already had a cycle before Covid-19 attack. Here, one of the parents shared that after hearing this specific question, he feels like he should have bought something for his son. Though, they tried to do so many things to keep him busy but they did not do anything thinking about their son's physical development. For example, he taught him how to play chess and his son grasped it so well that he can now play better than his father. The rest half of the parents said they have bought something for their child. For

example, one of the mothers mentioned that, *“they break toys every now and then, but still, me and my husband has a rule that we buy a new toy for them every 2/3 weeks”*.

While another father shared that they have bought so many things, such as, basketball, football, hula-hoops and skipping ropes which involves running and jumping around. He stated, *“Even if my daughter is not ready but we want her to be familiar with these things so that when the opportunity comes, she can be ready”*. One parent even bought scooter for her child and battery driven toys. She asks her child to perform a race with the battery driven toys and see who runs faster. She also asks her daughter to run with the scoter in the lawn they have in their house, even sometimes she takes her to the terrace to run with the scooter.

During Focused group discussion, all the mothers emphasized about cycle, three of the children already had a cycle, while only two of them bought it for their child during Covid-19 lockdown. One of them had a long corridor in their house, where her son used to ride bicycle. Whereas another mother shared that although she bought her daughter a cycle during lockdown but it was hardly used. One mother mentioned that not only she these for her child but she used to take her son in the terrace every morning for physical activities, there her child used to jump and run as much as possible. Couple of mothers even emphasized on skipping rope, one already had it before and one bought it during lockdown. One of the mothers shared that she wanted to buy a hula-hoop for her daughter but couldn't buy it. Another parent said that she bought one bouncing castle thinking about the physical development of her daughter, which she used it for two days only. Likewise, one mother mentioned that she has bought a piano for her son but after playing with it for 2/3 days he lost his interest on it. According to her, children will start having interest on these toys or instruments once everything gets normal, and



they start going outside and spend time with their peers. As they are unable to do that now, that is why they are not happy now and loose interest on everything very easily.

***Sub theme: Creating more scope for children/ Further Opportunities of physical activities for children by parents***

Half of the participants talked about giving more time to their child and taking them for any extra-curricular activities such as, swimming, basketball or even badminton. Here one father said that her daughter used to go to dance classes before Covid-19 but now he is unable to do that too. Couple of them emphasized on school that if the school opens their children would be able to do lot of physical activities, children can spend more time with their friends in the playground after school ends for the day. Here one father shared that for now on he only focuses on where he can take his son for play, as the area he lives in is not safe for kids to go outside and play even if there was no Covid-19. He exclaimed, *“My hands are tied before his school opens”*. One of the mothers said that if they could take their child to the playground, it would have been lot better as she said, *“Playing cricket inside home is lot different than playing it in the playground”*. While another mother thinks that if the sun would set a little late than now, then her children could spend more time in the playground, as it gets dark by 5:30pm.

Majority of the participants explained that spending more time with their child would be beneficial for their development. One mother explained that if she could take her daughter to swimming classes or karate classes or even in a playground, her daughter could have got more scope to play and have more physical activities. Likewise, another

mother said that, children cannot perform any physical activities if parents do not take them outside to proper places, for example, she said, *“there is a swimming pool in my daughter’s grandfathers’ house, and so if I would have taken her there regularly then by this time my daughter could have learnt swimming”*. Therefore, she believes if parents spend more time and make their child do physical activities then it would be good for them. Similarly, one participant shared that she feels the same and that if she could take her son to swimming classes or art classes or even music classes, it would have been a lot better. She added, *“Actually we are so busy with ourselves that we cannot spare any more time on them”*. *“Children gets happy with very little attention”*, she breathed. Listening to her thoughts, another participant shared that even she feels that spending time with a child is the best thing a parent can do, but as parents or specially mother is busy all day with household chores, they don’t have the energy to give any more effort to their child. So, she thinks all mother should involve their child to do the household chores with them, as she quoted, *“children gets interest on those things that their mother are doing such as, cooking”*. She believes that inviting a child to clean up the room or help or even tidying up the bed allows a child many physical activities and be active by staying at home. Another mother said that she feels like if there were more children in her neighborhood, then she could have taken her child in the neighborhood area to play with other kid’s maintaining all safety protocols. One of the mothers said, *“Someone should write a thesis paper on effects of Covid-19 on mother’s mental health”*, *“even we mothers are having mental depression by staying home all the time, be it working mother or stay at home mother”*. She added that she does not stay happy all the time that she will be happy and play and dance with her child. Furthermore, *“I have to stay happy to make my child happy, when I will be happy, she will be happy too”*, she added. She suggests that, mothers should make themselves

understand that this is a usual time of Covid-19, and that it will pass away, things will get normal, but for the time being mothers need to stay strong by themselves and give more time to their child. She pointed, *“working mothers should forget themselves after coming back home, and stay at home mother should forget about their alone time and give it to their child”*. According to her, *“mothers need to be proactive”*.

#### **Theme 4- Parents childhood physical activities and transferring that to their children**

When all the parents were asked about their childhood activities, every one of them talked about varieties of physical activities. All of them used to play outside near their houses or in a playground at least for an hour or so every day. All the fathers shared that they used to play badminton, cricket, and basketball, where one of the fathers loved playing basketball, and another loved playing cricket with his friends from his neighborhood. Not only he played it in the field but also in the terrace whenever he had any free time. He even shared that he used to do cycling every day with his cousins and friends; together they roamed around the whole area where they used to live. All these fathers shared that their child does not play all these, where one of them said it is because due to Covid-19, all courts are closed so he cannot admit his daughter to any such classes, whereas another father shared that, *“Today’s children does not want to play cricket, not only that they do not want to understand the game also, all they want to play is with slime by sitting in one place”*. Although he believes that playing with slime is good too but it is not like playing cricket in a field, which requires lot of physical activity. He added, *“In our times, all the kids from a colony or neighborhood would come together and play, whereas nowadays children does not even talk to other*

*kids who live in the same building*". Although his son does cycle but not the way he used to do it in his childhood.

All the mothers shared that they used to play hide and seek, skipping rope, "borof pani", and many more which involves running and jumping around. One of the mothers were raised in rural area where she used to play so many games in the courtyard with other kids from her neighborhood, such as, catching the grasshopper, etc. Another mother shared that in her childhood she used to play "Do you see what I see" with her mother, and now her mother plays the same game with her daughter too. Even simple games like guessing how many marbles a player has in a closed fist, is something she and her son both played and plays. While another participant shared that her son can play in a swing and a slide just like her, though rarely, but at least he can. The common game that nowadays children play just like their mothers is 'hide and seek'.

During focused group discussion, all the participants shared that they were very active in their childhood and used to play many games that all requires a lot of physical movement. Four of them used to play in their neighborhood with their neighborhood kids. This was their daily routine to go downstairs after the nap time in the afternoon. One of the mothers shared that, it was different in their childhood as at that time there was no difference between boys and girls just like nowadays, *"It was different before, we had all the fun we could have, nowadays children have mobile phones in their hands, we did not have such things, we used to play badminton by making court in front of our house and put big lights over there"*, she added. She grieved saying, *"Even if there was no Covid-19, my daughter could not have enjoyed doing all these as we do not have a safe environment now"*. Similarly, another mother added, *"We are at fault, as we could not provide a decent culture to our kids for them to play freely outside"*.

Furthermore, she said that her parents could be at peace by sending her downstairs, but now she cannot do the same with her son, she cannot provide the same enjoyment to her child that she had in her childhood, as nowadays children get spoiled if parents let them stay on their own. In their generation they used to obey their parents but now most of the children do not obey their parents. One of them even said, *“I feel scared to send my child alone to downstairs to play, although I used to play outside in my childhood and my mother used to stay inside the house”*. Couple of the participants shared that; school was their main place for having physical activities. According to them school was the best place, they were very active in participating in all sports, be it handball or badminton. One of them shared that even during tiffin break she used to play with her friends rather than having tiffin. Also, she played with her sisters too. Their children are not being able to do all these because of school closures, before their children could even make some friends and play, the school got closed after 6 months of their admission. Another mother said that she loved to play cricket with her brother in her childhood so much that she got admitted in cricket academy too. Physical activities were her favorite from her childhood. She tries to continue it with her children too but then again, she does not have much option for them because of Covid-19 and because of lack of playground near her house.

## **Discussion**

### **Theme 1: Parents understanding of physical activities of children**

Almost all the parents have a good understanding of physical development of children where they shared that being healthy is the key, not being overweight or underweight. Maintaining a perfect height weight ratio of the children according to their age is what parents should monitor all the time. Some parents even have the knowledge of BMI

ratio. Parents believe that physical development includes a child's level of stamina, how actively and attentively a child does his/her daily physical activities, whether they are playing enthusiastically or sitting in a corner alone, waking up on time, eating properly or not, etc. Most of the parents talked about different milestones that children need to reach one after the other, for example, sitting by the age of 6 months, walking by the age of 12 months, and so on. Although they also believed that every child is unique and that development is subjective. Very few of the parents even defined physical development by gross and fine motor skills. How a child can control his/her body is what they understand by physical development of children, whether he/she has age-appropriate development of his/her body parts, such as, fingers, hands, leg. Very few parents mentioned about healthy eating in relation to physical development of children. They defined healthy eating with inclusion of required number of fruits and vegetables in their diet.

Parents emphasized on different types of sports and activities that promote physical development of children. Almost all of them gave importance on outdoor play. This is the most important thing for any child to be physically fit. Children should be able to introduce to sports like cycling, badminton, swimming, basketball, cricket, etc. Children should do such activities that require a lot of physical movement (running, jumping and balancing) involving whole body movement for them to have a proper physical growth. Outdoor play not only improves their physical health but also increases their knowledge as well, as believed by few of them. Children should also be familiarized to exercise like dancing, yoga or Pilates. In this way, they can be introduced to ideal lifestyle from childhood. Surprisingly, all the mothers shared that all children should be encouraged to do household chores irrespective of their gender. They should be able to do small household activities that are appropriate to their age, for example, folding small clothes,

cleaning up their toys, cleaning up the table after a meal, or opening the mosquito net in the morning, holding a light grocery bag while shopping, flowering the plants, etc. One of the important things that came out in the interviews and discussion is that, parents are aware about Vitamin-D that children should get from sun exposure. Parents thought this is vital for physical development as well.

Physical activities are very important for a child's growth and development that all the parents believed. Play is the single most important activity that children should be involved in to have proper growth and development. This will help them with their physical as well as mental development. Unexpectedly, some of the parents mentioned that physical activities are important for healthy blood circulation and proper development of heart, lungs, muscle and bones. It helps to control body weight as well. If the body parts are not used properly by having enough physical activities, then the parts will shrink and eventually the child will become lazy. A child will be confident if he/she is involved in physical activities. Physical activities help a child to have proper overall growth, be it physical, mental, social emotional or language. Small activities like, pouring their own water in the glass, folding their own clothes, making their own bed, will eventually make children self-dependent and will grow confidence in themselves. A physically fit child will be more confident and happier and have high energy level. This is necessary for a healthy mental development as well. Therefore, parents should monitor whether their child is having enough physical activities or not. An active child will eat and sleep on time. Children should be encouraged to explore more as it will develop their courage.

## **Theme 2- Effects of Covid-19 on physical activities of children**

School is a big part of children's life. All the schools got closed for Covid-19, for which children are not being able to go to schools. School is the main place where children used to do many physical activities, for example, taking part in all the physical activities that school offers (Physical exercise class, dance, sports, etc.), playing with other kids in the field by running and jumping around. Covid-19 had a negative impact on all the children's life. They are now forced to stay at home, and missing out their school, their friends and teachers. They are not being able to perform adequate physical activities because of Covid-19 pandemic. Parents believe that childhood is the time when children are supposed to enjoy their school with friends. These particular age groups' children are supposed to make new friends at school with whom they will share their little secrets and form a special bonding. They are supposed to explore and invent new games with their friends at this age. Children are missing out not only the fun but also the interaction with their friends. In addition, parents are not being able to take their children outside for any extracurricular activities, like basketball, dancing, etc. Some parents could not admit their child in these physical activity classes and some couldn't continue their classes due to Covid-19 lockdown. Overall, children's fitness level is decreasing day by day due to staying home for a long period of time. Classes are now taken online, as this is new to the children so parents had to sit with their child to help them with this new technology. This takes up a lot of time of the parents which was not the case before the online class. This is one of the reasons that parents cannot give extra time or effort to their children to perform adequate physical activities.

Majority of the children gained a little weight during this crisis period. A number of reasons came out in the interviews and discussions, for example, children are forced to



sit idle at home, and they cannot perform enough physical activities, whatever calories they are eating they cannot burn them. Gaining weight is important for children but by staying under control. Their fitness level has decreased from before. Moreover, children are becoming cranky and stubborn due to these circumstances. Majority of the children do not have a proper routine, for which their sleeping pattern and eating pattern is hampering. Some of them are even getting addicted to outside foods or junk foods that can be ordered online delivery system, which they actually picked up from their parents. Parents think that this is the time when children are supposed to get stronger by running, jumping, falling and by getting hurt but the scenario is otherwise. Not only children's physical health got affected but also, they are mentally affected. They have adopted some behavioral changes during this lockdown. Children are having mood swings frequently and losing their interests very easily. They are being impatient to have a normal life just like before.

The most difficult challenges that children faced to have any form of physical activities during Covid-19 is they cannot go outside, be it to school, or a playground, any shopping places, or friends or relatives house, or anywhere at all. They were just confined in their home. This has limited their opportunities to have physical activities. Parents cannot take their child to any extra-curricular activity classes as everything is closed. Children would have been happy and delighted if they could go outside to play, and it would make them more motivated and cheerful to do their daily life activities. But now children are getting addicted to gadgets like smartphone, tablet or television. They are spending more and more time on these things (sometimes parents even don't monitor what children are watching as they themselves are busy). Children are unable to go downstairs or to the road in front of their house. Even if they go, they have to

wear mask all the time as a safety measure. Some children face difficulties to walk around wearing a mask. Children are facing social isolation due to this Covid-19 crisis.

Although children are stuck at home, parents believe their child is active enough inside the house. They are always busy with something, be it cycling inside the house, riding a scooter, or learning something watching YouTube, or drawing something, playing with their own siblings, etc. This is the most a child could do by staying at home; if he/she needs to be more active then he/she needs to go outside to perform many more physical activities.

### **Theme 3: Physical activities of children during Covid-19**

As children are confined in their home, they are having less physical movement and they want to watch TV or YouTube all day long. For this reason, every parent tried to engage their children in different activities during that difficult time. Majority of the children used to ride a bicycle inside their home or in the terrace or in front of their house where there were no people around. Some played with scooter, while some did exercise or dance with their parents. Some of the mothers tried to engage their children in daily household chores, like, cleaning up their toys after they are done playing, tidying up their rooms, filling the water jug when it is empty, bringing clothes from the balcony or terrace and folding them. Some parents used to take their children outside near their house for a walk or to ride a cycle during night time, as the area they live in was restricted for outside people at night and no one used to get out of their home at that time. Therefore, they felt safe to take their kids outside. Some of the fathers used to play with balls with their child every day, be it football or cricket. While some of the mother used to take their child in the terrace at morning or in the balcony after shower to get some Vitamin-D. Some children did so much activity the whole day that they

used to sweat and get tired. Those children who have siblings, they used to roam and jump around and play hide and seek together. Some of the mothers even encouraged their children to skip and play with bouncing balls in order to check whether their child's bones and muscles are functioning well or not.

Nevertheless, parents believe that this is the best they could do with their children maintaining all the safety protocols. Even though they feel that these are not enough for their child and that they were supposed to do a lot more physical activity.

Majority of the parents do not spend any time with their child for them to be physically active. Even though parents spend time with their child by gossiping or watching movies together, etc., but they do not do any physical activities together or ask their child to do any physical activity while spending time with them. While some parents are much concerned about their children's physical activities and that is why they do certain activities with their children. They spend at least 30-45 minutes every day for this activity. For example, they walk inside the home with their children or do dancing and exercise together with the help of YouTube. Some parents even take their kids to the terrace or to the road nearby their house regularly so that children can walk, run and jump around freely in an open space. They do these early in the morning or late at night when there is no one nearby. Few parents do these occasionally, like playing with balls with their child or taking them somewhere safe outside.

Some parents bought one or two things for their child during lockdown for them to stay physically active. For example, some of the parents bought cycle for their kids, some bought scooter, some bought skipping ropes, some bought bouncing castle, and some bought basketball and football. Although some parents bought some toys or instrument

for their children but they did not buy it thinking that by using these toys or instruments their child would be more physically active. For example, some bought chess, some bought piano, some bought battery driven moving toys, etc.

The most beneficial thing that a parent can do to create more scope for their child is giving more time to them. Children stay more focused and happier when parents are equally involved with their children. Parents can take their children to extra-curricular activity classes like dance, basketball, swimming, etc., or even to nearby playground. If school opens, it would be the best for children as that's the place where they have lots of opportunities for physical activities, be it playing for half an hour before school starts or ends with their friends in the playground, or playing during tiffin break, or attending physical exercise classes in schools. For the time being, parents can involve them in all the household chores that they are doing. As parents are busy themselves, and cannot spare any extra time to their children, therefore inviting children to help them, will make them feel interested and responsible. In this way they can have little bit more physical activities.

#### **Theme 4- Parents childhood physical activities and transferring that to their children**

All the parents had very active childhood. Everyone was involved in lots of different activities. Common form of play was, playing in the neighborhood with neighborhood kids and their siblings. Their parents did not accompany them and they used to go there by themselves. Everyone spent at least two hours outside for play on a regular basis. The fathers used to play badminton, basketball, cricket whereas mothers used to play hide and seek, "borof pani", skipping, etc. They all had a wonderful childhood; they

could outside and room around in the terrace or in the lawn in front of their house with their neighbor kids. All the parents could perform varieties of physical activities in their childhood, but they are unable to provide the same opportunities to their child. Some says that even if there was no Coronavirus, they still would not be able to provide these opportunities to their children. The culture that we live in, and the environment around us, is lot different than before. In today's world, it is not safe to leave a child alone without any supervision, which was not the case before. Back then, parents would send their kids to the lawn or to neighborhood by themselves and they did not have to worry about them. Some parents say that nowadays children are happier to play games on phone, computer or tablets. They like to play with slime and play dough. They do not like to play cricket or any other games that requires lot more physical movement. Children these days do not have any interaction with other children living in the same building, whereas back then children used to mingle with all other kids in their colony or neighborhood.

## **Conclusion**

Physical activity is essential for children's health, happiness, and development. It has numerous health benefits like, controlling body weight, strengthening bones, muscles, heart and lungs, improves children's coordination, balance and flexibility. It not only boosts children's wellbeing but also it helps them to be confident, stay relaxed, sleep well, concentrate more, etc. Physical activity is an essential component of both play and learning. It is something they enjoy to do.

Play activities are an important component of a child's daily life since they provide physical, mental, and psychological advantages. It is essential to maintain a play routine, but the new reality imposed by the ongoing COVID-19 epidemic has

interrupted it. Children are not immune to this pandemic, and they are also the most vulnerable to its devastating effects, as they are forced to stay home for prolonged periods due to lockdown and school closure, resulting in negligible interaction with peers and fewer opportunities for exploration and physical activities (Jiao et al., 2020).

In this particular study, parents are well-educated, and all of them had appropriate knowledge of physical development of children, they know its' importance and could specify the activities that enhance physical development like, running, jumping, balancing, etc. Parental knowledge helps shape parents' practices toward their children (Vale-Dias & Nobre-Lima, 2018). As Covid-19 restricted their opportunities, majority of the parents were unable to practice their knowledge appropriately. They did their best to keep their children engaged in activities, whether by doing activities together like, dancing, exercising, cleaning the house, etc., or by simply playing games with them that includes body movement or even by buying instruments for them like cycle, scooter, skipping rope, etc.

During this pandemic, majority parents did not allow their children to play outside with other children, they could not take their children out because of maintaining social distance, but they know these are important to develop children's physical, social, and interaction skills. Despite of the disadvantages of COVID-19, some parents thought it is a blessing because parents got the opportunity to spend more time with their children.

There is a need for early physical activity interventions in young children, beginning with their parents, who must develop sustainable ways to assist their children in engaging them toward an active lifestyle in the event of a future pandemic lockdown. The report's findings have far-reaching implications for policymakers. To begin, policymakers and educators must educate and engage parents and caregivers in physical

activity in order to raise overall physical activity levels and ensure regular movement at baseline.

Second, if schools must close again, legislators must make online physical exercise lessons mandatory in order to build physical activity routines and thereby sustain physical activity levels during lockdowns. Schools may include health-conscious initiatives into their curricula by encouraging excellent personal cleanliness, physical activity, an optimal diet, and healthy sleeping habits.

Programs on digital platforms can be made to encourage parents as well as children to engage in different types of physical activity which will be sustainable and they can be followed regularly. Specific ideas for reducing sedentary behavior and screen time and controlling body weight are critical, especially during a lockdown period, when moderate-vigorous physical activity might be difficult to do. Promoting home-based activities that improve mobility can help to break the cycle of sedentary behavior and screen time and boost levels of physical activity, hence improving health and well-being.

It would be beneficial to give opportunities for outdoor exercise without the usage of shared equipment for children who attend online school (Guan, 2020). Measures to encourage and sustain regular physical in children, on the other hand, cannot be primarily based on school activities. Parents and caregivers should include physical activity into their children's everyday household activities (including the use of electronic methods to encourage involvement), but the media and governments should also deliver consistent messages supporting physical activity and healthy movement habits.

## **Recommendations**

The aim of this research is to study parents' understanding and practice on physical activities of children aged 6-8 years old during Covid-19. Based on the findings of this study, here are some recommendations that would help to increase the importance of physical activities of children during emergency situations like Covid-19 between parents, schools, society and the government:

- This study was done among the people of high socio-economic background who live in an urban setting. Same study can be conducted among parents of medium and/or low socio-economic status in urban setting. The variables could also be changed, that is from urban to rural like studying the parents in different regions of Bangladesh in order to know about the perceptions of parents living in those districts. Changing the variables of the study might give different answers to that of our findings.
- If this pandemic lasts or if this kind of pandemic will happen in the future, further research can be done to know how parents would contribute to their children's physical activities during this kind of pandemic, since this research shows that some parents are able to give more time to their children during the COVID-19 pandemic and few parents cannot; therefore, everyone thinks that they can contribute if they know how to contribute in the development of their children.
- Although this is an in-depth study on parent's perceptions, the sample size of study is very small. To have a more accurate finding and richer outcome, a study among larger sample size is needed to reflect the perception of physical activities of children among parents.



- Programs could be designed and launched to create awareness and promote the importance of physical activities and encourage parents to practice more activities that enhance their children's physical development, especially in difficult situations. The problem needs to be addressed at the policy level to set a national guideline that will emphasize enhancing parents' knowledge on physical activities through parenting classes, workshops, training, and home visit service.
- Our findings show that as children are becoming physically less active, they are increasingly getting more involved with gadgets. Many of them are getting addicted as gadgets are providing them the entertainment they need; therefore, their screen time is increasing, day by day. However, many studies emphasize on the importance of physical activities of children and pointed out the harmful effects of gadgets on them. As part of social responsibility, gadget companies and social media can play a big role in promoting the knowledge on physical activities of children and the time spent on screen by children as a social responsibility. They could aware parents about the facts and could also develop apps and settings to restrict children screen time affectively.
- One of the findings of this study is, there is not enough space or specifically there are not enough playgrounds for children to play or to perform enough physical activities in their neighborhood due to urbanization. Therefore, government or policy makers should take initiative on how many playgrounds should be made for a definite number of populations.
- During unforeseeable circumstances when the schools are closed, educational institutions should also focus on physical activities and could come up with innovative idea on how to increase physical activities of children. This could

be through dance class, indoor sports or any competition that required physical activities.

- One strategy would be to incorporate physical literacy into pre-school and school education agendas, and to make physical exercise a major priority in children's education as one component of a healthy lifestyle.

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## Appendix A.

### IDI Guideline

#### Demographic info

Serial	Respondent's Sex	Age	Profession	Educational Qualification	Age of Child	Sex of child
1.	M	37	Lecturer	MBA	7	F
2.	M	33	Business	ACCA	6	F
3.	M	33	Business	BBA	6	M
4.	F	35	Lecturer	Biotechnology	6	M
5.	F	33	Jobholder	MBA	7	F
6.	F	39	Housewife	Ms. In English	8	M

1. What do you understand by physical development of a child?
2. According to you, what kind of activities we could do to promote physical development of children?
3. In your opinion, what are the things e.g., age-appropriate play, running, jumping, taking part in small motor development activities e.g., art, playing puzzle that are important for a child's physical development?
4. What is the importance of physical activities for a child's development and growth? (Give examples if needed)
5. What is the impact of Covid-19 on the physical activities of your children?
6. Do you see any changes in your child's physical health due to the change of physical involvement during this crisis? If yes, please elaborate.



7. According to you, what are the challenges children are facing during Covid-19 to have physical activities?
8. What physical activities you used to do in your childhood?
9. How physically active is your child? (If needed then give options)
  - a) Very active/Hyper active b) moderately active c) not active at all
10. What are the opportunities your child has at home or outside to engage in physical activities? Kindly mention.
11. Does your child play any of the games that you have shared you played in your childhood?
12. What kind of physical activities your child does during Covid -19? Do you think that's enough? If yes, then why? If not, then why not?
13. Did you buy any instrument/toy or tool for your child during lockdown for him/her to be physically active?
14. If yes, what is it?
15. Do you spend some time with your child particularly for him/her to be physically active?
16. If yes, how and how much time do you spend per day with your child for physical activity?
17. How could you create more scope for your child for him/her to be more physically involved?

## FGD Guideline

### Demographic Info:

Serial	Respondent's Sex	Age	Profession	Educational Qualification	Age of Child	Sex of child
1.	F	44	Housewife	MBA	7	F
2.	F	32	Director	BBA	6	F
3.	F	32	Housewife	MBA	6	F
4.	F	34	Housewife	Master's	7	M
5.	F	35	Banker	MBA	6	M
6.	F	30	Freelancer	MBA	6	M

1. What do you understand by physical development of a child?
2. According to you, what kind of activities (e.g., age-appropriate play, running, jumping, taking part in small motor development activities art, playing puzzle) we could do to promote physical development?
3. What is the importance of physical activities for a child's development and growth? (Give examples if needed)
4. What is the impact of Covid-19 on the physical activities of your children?

5. Do you see any changes in your child's physical health due to the change of physical involvement during this crisis? If yes, please elaborate.
6. According to you, what are the challenges children are facing during Covid-19 to have physical activities?
7. What are the opportunities your child has at home or outside to engage in physical activities? Kindly mention.
8. What kind of physical activities your child does during Covid -19? Do you think that's enough? If yes, then why? If not, then why not?
9. Did you buy any instrument/toy or tool for your child during lockdown for him/her to be physically active?
10. If yes, what is it?
11. Do you spend some time with your child particularly for him/her to be physically active?
12. If yes, how and how much time do you spend per day with your child for physical activity?
13. How could you create more scope for your child for him/her to be more physically involved?

## **Appendix B.**

### **Voluntary Consent Form for Parents**

BRAC Institute of Educational Development, BRAC UNIVERSITY

**Title of the Research Protocol:** Parents' Perception on Physical Activities of Children Aged 6-8 years old During Covid-19

**Principal Investigator:** Shakila Rahman Rally

#### **Introduction:**

Physical activities are very essential part for child development as it helps to lay the foundation of an active and healthy life. It helps in physical, mental and brain development (Mahaseth, 2017). Covid-19 pandemic also restricted the movement of children outside their home. The lack of physical involvement led to an increase in pediatric obesity, a decrease in fitness (e.g., strong muscles, flexibility, cardiorespiratory capacity) and an increased risk of disease (Steele, et al., 2008).

#### **Purpose of the research:**

I am from the BRAC Institute of Educational Development- BRAC UNIVERSITY conducting research to explore parents' perception on physical activities of children aged 6-8 years old during Covid-19

#### **Why selected:**

I have selected the parents (father and mother) as they are the primary caregiver.

#### **Expectation from the respondent:**

If you agree to participate you will be expected to share your knowledge and practices of physical activities of children during Covid-19. The respondents may give electronic signature or they can send consent in an email.

**Risks and benefits:**

There is no risk for you to participate in this study. Moreover, the child directly or indirectly may be benefited in future if the findings are taken into account by the policy makers and educators.

**Privacy, anonymity and confidentiality:**

All information collected from you will remain strictly confidential. I would be happy to answer your questions about the study and you are welcome to contact me; (cell # 01881450101), (Email # [rally.shakilarahman@gmail.com](mailto:rally.shakilarahman@gmail.com)) or anytime required.

**Future use of information:**

Some of the information collected from this study may be kept for future use however in such cases information and data supplied to other researchers, will not conflict with or violate the maintenance of privacy, anonymity and confidentiality of information identifying participants in any way.

**Right not to participate and withdraw:**

Your participation in the study is voluntary, and you are the sole authority to decide for and against your participation in this study. Refusal to take part in the study will involve no penalty. If you agree to my proposal of enrolling yourself in my study, please indicate that by putting your signature or your left thumb impression at the specified space below.

Thank you very much for your cooperation.

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Signature of Investigator

Date:

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Signature of Participant

Date: