PARENTAL PERCEPTIONS ON THE EFFECT OF PROLONGED SCREEN TIME ON FAMILY INTERACTIONS IN DHAKA CITY

By

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

Brac Institute of Educational Development
Brac University
December, 2020

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/We have acknowledged all main sources of help.

Student's Full Name & Signature:

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Approval

The thesis titled “Parental perceptions on the effect of prolonged screen time on family interaction in Dhaka City” submitted by Puja Rani Shil, ID: 19355005 of Fall, 2020 has been accepted as satisfactory in partial fulfillment of the requirement for the degree of Master`s of Science in Early Childhood Development on 15th December, 2020.

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Ethics Statement

Title of Thesis Topic: Parental perceptions on the effect of prolonged screen time on family interaction in Dhaka City

Student name: Puja Rani Shil

1. Source of population: Mothers having children of 3-8 years living in Dhaka City

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 (Yes)
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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Executive Summary

The widespread use of digital applications such as smartphones, computer, TV have increased in developing countries such as Bangladesh. Literature reviews and study findings indicated that children who are addicted to the screens are physically inactive and there are some negative consequences if these applications are not properly used. Meanwhile, in many developed nations, appropriate and efficient prevention strategies are already in place but Bangladesh is still far behind of making strides in implementing guidelines for screen time and promoting interactions.Taking into consideration the disadvantages of prolonged screen time on interactions and the need for exploration on this issue in the context of Bangladesh, the current study was undertaken to examine parental perceptions on how children's prolonged screen time effect interactions among the 3 to 8 years children in urban Dhaka city. For this study, data was collected by qualitative method and one instrument which was a semi structured interview questionnaire for mother`s in-depth interview has used. The study followed by purposive sampling where eight mothers, four are from middle income and four mothers are from lower socio economic background of Dhaka have interviewed over phone to collect data. In this respect, the results of the study indicated that mothers coming from the both socio economic group have a narrow perception about the true notion of screen time as well as interactions. From the data it also emerged that mothers think screen has detrimental effect on interaction and they are struggling to interact with their child when children are on the screen. Children tend to forget their surrounding and become non responsive, reluctant to communicate, play during the screen time. Findings also highlighted that mothers who have understanding regarding effect of prolonged screen time, do not have the practices of the knowledge. Besides, knowledge gap also recorded by the lower income group mothers.

Key Notes: Parental Perception, Prolong Screen Time, Family Interaction

Dedication:

I would like to dedicate this thesis to my fiancé Kingshuk Nag, who introduced me with my hidden interest of early childhood education. Also to my mother Shilpy Rani Shil who always love me unconditionally.

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The dream of my making a dissertation paper becomes reality with the support and help of many individuals. Foremost, my deep gratitude goes to BRAC IED, BRAC University for letting me to fulfill my desire to study Early Childhood Development here.

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Table of Contents

List of Acronyms

WHO	World Health Organization
ADHD	Attention Deficit and Hyperactivity Disorder
DVD	Digital Versatile Disc

Chapter I

Introduction & Background

Introduction

Electronic screen media including mobile, television, video games, iPad have become widely accessible by children, teenagers and adults of all ages (Detnakarintra, et al., 2020). These early childhood digital technologies expose children and they spend a lot of time exposed to screens than the recommended guidelines (Detnakarintra, et al., 2020). Our children`s prolonged exposure to screens likely to start from very early infancy (Anand, et al., 2014). 'Prolonged screen time' refers to more than 2 hours a day of time spent in front of the screen (Robinson, et al., 2017). According to Common Sense Media's nationwide survey in 2011 the rate of using mobile device among the children aged infancy to 8 years in USA, the base line data indicated it is 38% and in the year of 2013 it dramatically increased at 72%. Even in terms of 2 years old child the end line data reported that this rate reached at 38% in 2013 from 10% in 2011 (Kabali, et al., 2020). The same study also reported that 28% parents think media contribute to them spending less time together (Kabali, et al., 2020).Our parenting styles, mother-child interactions, care-giving behavior have been shown to stimulate the extended screen time of children, especially exposure to background media (Howe, et al., 2017). Research indicates that while technology has many practical benefits, screen time can be linked to adverse outcomes in children (Sanders, et al., 2016).Numerous research studies have shown that the use of digital devices by children aged 2 to 11 years is growing largely due to the increase of mobile devices such as smartphones, iPads, etc. (Bernard, et al., 2017).Madigan, et al. (2019) found that 98 percent children live in a household with a smartphone, in Calgary, Alberta, Canada, for more than 2 hours a day on devices from infancy to eight years old. Sanders, et al. (2016) recorded that children subject to unattended

screening times and longer periods may have issues such as speech delay, sleep disturbance, low school results, trouble focus, violent behaviour, brain damage or other health problems.In the early childhood prolong screen exposure leads to sleep disorders, obesity, cognitive, language, social and emotional delays (Lumeng, et al., 2006). Moreover, prolong screen time exposure is also associated with lower levels of physical activity (Sandercock, et al., 2017). This prolong screen time also promotes poorer eating habits of fewer fruits and vegetables and consumption of more high energy foods and beverages (Liang, et al., 2009). Increased screen time often correlated with disadvantageous body compositions, reduced fitness, concentration deficiencies and lower scores of psychosocial and cognitively measures (LeBlanc, et al. 2012; Tremblay et al. 2011). The prevalence of poor health outcomes among children aged between 2 and 5 years, including such as obesity and overweight, was detected in the world, with an estimated rise from 4.2% in 1990 and 6.7% in 2010 to 9.1% in 2020 (de Onis, et al., 2010).Not only that even teenagers, adolescents and young adults may have multiple mental and physical problems when they spend too much time on the screens and too little time interacting together with people and things around them (Beurkens, 2017).

Statement of the Problem

When digital media and electronic devices are improving our lives in many ways, research has found that overexposures can causes many problems. Numbers of mental and physical health issues can occur to not only the children, but also teens, and young adults when they spend less time engaging with the people and activities around them and too much time in front of screens (Beurkens, 2017). According to Hinkley, et al. (2018),”Screen-time is referred to as time spent engaged with a television, computer, video console, smart phone or portable screen device such as an iPad or tablet.”

Excess screen time also decreases quality family time and leads to friction between parents and children (Turner, 2019).Children's screen time is related to the perspective of parents and to their beliefs on how and how much household electronic devices are used (Sanders, et al., 2016).According to Bartolo, et al. (2017), the misconception of parents that devices can effectively teach children to regulate their behavior, as many parents now use devices as "babysitters." Besides, lower levels of maternal education, maternal depression, single motherhood also parenting style and attitudes associated with child`s prolonged screen time (Lumeng, et al., 2016).

In a longitudinal study on African-American mother-infant pairs, Thompson, et al., (2013) recorded that infants as young as 3 months were drawn to the screens on average for 2,6 hours a day, and nearly 40 % of children were exposed to screens three-hour a day by 12 months. Yalçın, et al. (2002), in a cross-sectional study in Ankara, found children at pre-school watching Television for an amount of 2.2 hours a day, and 10.7% of them watching Television for more than 4 hours each day. In another semi-structured interview study in Indianapolis, involving 3,254 children, 50 % of children viewed television at the age of 2 months, 75% viewed at 4 months and 90% viewed TV at the age of 2 years (Anand, et al. 2014). The risk of mental illness, especially depression, anxiety, ADHD, psychological disorders and suicidal tendencies dramatically increased as a result of the immense screening period (Sampasa-Kanyinga, et al., 2015).A study findings of the researchers of the University of Alberta were that ADHD symptoms were five times more likely to be presented among the five years old children who spent more than two hours a day on a screen reported by their parents compared to their peers who were on screens for 30 minutes or less(Kneteman,2020).

However studies suggest that excessive use of the screen can create social detachment and negative impacts on children's perception of how to communicate with others. The growth of social and relational skills is also adversely influenced (Beurkens, 2017). Excessive screen

time even decreases quality time with family and contribute to friction between parents and children.As a result, children isolated themselves from their family, and their loneliness makes connections to drugs, alcohol and many criminal activities in their adulthood (Beurkens, 2017).

In this regard, the American Academy of Pediatrics (AAP) recommended in 2016 that children under the age of 18 months should avoid the use of screen media to monitor what children look for and that the viewing period for children under the age of 2 to 5 years should be limited less than 1 hour a day (Guram, et al., 2018). Furthermore, the World Health Organization (WHO) has recent guidelines not to expose children under 2 years of age to screens and not advised to spend more than 1 hour everyday on screen for children between 2 and 5 years of age (WHO, 2019). Chinese Education Ministers released a notice in 2018, regulating screen time for electronic devices, computers and consoles to children and adolescents (Szablewicz, 2020).

Purpose of the study

Research has shown that how negatively prolonged screen time can affect a child. In Bangladesh studies on the effect of prolonged screen time is limited, which indicates a necessity of this type of study here to explore how much our parents are aware about the consequence of prolonged screen time on family interaction. This study is designed to explore the perceptions of mothers having children of 3-8 years old regarding the effect of prolonged screen time on family interaction in Dhaka city. This study will also explore the practices done by mothers that promote or lessen children's screen time coming from different socio economic background.

Significance of the study

For this study I have chosen only mothers of children aged between 3 to 8 years because mothers are main caregiver as well as primary teacher. Child depends most on his/her mother most, she fulfill child`s all needs and demands. And particularly this age because usually this age referred to as the preschooler to middle childhood and physical, social, and mental skills develop quickly at this time. This is an essential time for children to create trust in all aspects of life, including family, peers, schoolwork and sports. Children in this age group could show greater independence from parents and families and more awareness of their role in the world. But nowadays children are more engage with the screen and screens captivate children's attention in a way that nothing else does. So it is very important to focus at this age so that interactions cannot affected by the prolong screen time.

So to find out this, from the perceptions of parents is very much important for understanding their views and will help to find the possible remedies for the raising problems. In developing country like Bangladesh, research on perception and practices of parents regarding the effect of prolonged screen time on family interaction is limited. A very little attention is given health issue awareness as well as the effect on family interactions. Besides there is no guidelines for the children`s screen time like other developed countries. Without experiencing the perspectives of parents, we may not understand where there is a difference in knowledge. Perhaps a successful intervention or advocacy program cannot be planned. It is important to document parental perceptions on the effect of prolonged screen time for further research and to design intervention programs for all the stakeholders. This study will help to find out the factors or reason behind children`s excessive screen time and also help to understand what parents are thinking or their knowledge regarding this issue. This study might create awareness among the parents and also might help decision makers to take this matter into considerations.

Research Topic & Research Questions

The objectives of the study are,

- To explore the perceptions of mothers having children of 3-8 years old regarding effect of prolonged screen time on family interaction in Dhaka city.
- To explore the practices done by parents that promote or lessen children's screen time.

Research questions:

Research question: 1

What are the perceptions of mothers having children of 3-8 years regarding the effect of prolonged screen time on children's family interactions?

Sub research questions:

1(a) What is the understanding of mothers regarding prolonged screen time?

1(b) What do mothers think how does prolonged screen time affect family interactions?

Research question: 2

What are the practices done by parents that escalate or lessens children's prolonged screen time?

Sub research questions:

2(a) What are the practices done by parents that promote the children to engage more on screen time?

2(b) What are the practices done by parents that lessen the children to engage less on screen time?

Operational definition:

Parents: One who begets, gives birth to, or nurtures and raises a child; a father or mother. In this study mothers are considered as parents and will be used interchangeably.

Perceptions: The word perception comes from the Latin perception-, perception, meaning “receiving, collecting, action of taking possession, apprehension with the mind or senses." Perception is the process by which stimulation of the senses is translated into meaningful experience (Encyclopedia, 2019).

Prolonged screen time: Banda & Robinson (2017) said that the American Pediatrics Academy is recommending parents to limit the total time of children's television screens to under 2 hours per day. The phrase 'prolong screen time' in this study attributed to the time spent more than two hours a day in front of the screen.

Family Interaction: Family interactions have always been the most occipital control mechanism within family members, and structures of family activity are "isomorphic" to more general aspects of relationships, including family roles, strength, ideologies, and cohesion. The primary purpose of family interaction is to preserve and strengthen family interactions.

Middle income class: Banerjee & Duflo (2008) consider those who spend US$ 2 to US$10 per capita per day as a part of the Middle class. The Asian Development Bank (Chun 2010) utilize the US$2 threshold as well. These thresholds are set in global context. For a threshold in national context, renowned Bangladeshi economics Dr. Binayek Sen consider US$ 2 to US&3 as middle class (JICA, 2016).

Lower income class: Those whose purchasing power parity is below $1.90 per day falls into this category (ADB, 2020).

Chapter II

Literature Review

Screen time is explained as “time spent using an electronic screen, such as a TV,computer, or a mobile device” (Olson, et al 16) and “anything else that requires watching a screen” (Aong, 2013). On the other hand, “Screen time is time spent on screen-based behaviors, such as watching television, playing video games, using smartphones and computers, or other electronic devices with screens (McDonald, et al., 2018).

Today`s world is very fast-forwarding and our children`s screen time is increasing with the advancement of modern technology. Children are addicted to the screen and they’re never to sail an interaction with their parents. Parents also recognize some confusion about how best to handle the integration of multiple mobile devices into the everyday life of their children, despite the growing adoption rates of new technologies (Ostrov et al., 2006, p. 621).For instance, parents considered modern technology to be essential to academic and future work achievements of their children(Ostrov et al., 2006, p. 621), while results from many other experiments indicate parents are concerned the detrimental effect of media on their children (Lampard et al., 2012, p. 528).With any of these technical devices increasing in family life, the decision on these conflicting values by the parent will possibly affect the manner in which they want to control the access of their child to the media. Nevertheless, even though parents try to restrict the use of modern technology by their child, they find it very difficult with that (Jordan et al., 2006). The screen time of children is related to household expectations that are partly dictated by level of the individual factors, such as parental attitudes and ideologies about how much and under what forms media applications in the house are used (Coyne et al., 2014, p. 678). Such perceptions and practices, in turn, are surprisingly linked to relational variables that affect the parent-child relationship especially parenting practices seen in the family (Padilla-Walker, 2006, p. 79).Parental perceptions towards media devices and

appliances can affect screen time exposure level and quality(Sanders et al., 2016, p. 30). For instance, parents with detrimental opinions towards the use of smart technologies (e.g., adverse media effects) are much more likely to experience minimal screen time for their children (Nathanson et al., 2002, p. 405); however those with favorable perceptions experience increased youth screen time (Vaala & Hornik, 2013, p. 170). Besides, growing a child's age, the amount of time parents spend watching the screen also associated with the increasing of screen viewing when higher socioeconomic status, parental laws, and a healthy community perception are connected with little screen viewing (Atkin et al., 2014, p. 804). Research has shown that children of marginalized or low socio - economic status have reported spending so much time watching television content and playing video games than their peers of higher socio - economic status (Aishworiya, et al., 2018, p. 890). Moreover, some researches have also found that increasing screen time in young children is correlated with the amount of household screens, the existence of a TV in children's bedrooms, and the employment and educational attainment of the mother (Kourlaba et al., 2009, p. 229). Thus parents play an essential role in the advancement of a child through parenting activities including certain engagement and conduct management, mostly in the form of supervision and setting of rules (Sanders et al., 2016b, p. 33).

According to a study 68% of children below the age of three are exposed to devices screens, such as TV, smart phones, DVDs and video games, everyday (Duch, et al., 2013, p. 863).Not only that, they also highlighted that use of screen increased with age. Beginning at the age 2, occupancy of mobile phone device crossed that of TV. At the age of 4 where one-half, children had their own TV on the other hand three-fourth have their ownership over mobile phone. Among these, tablet was most popular among two-thirds of aged 4 children (Duch, et al., 2013, p. 863).Surprisingly most children are started using before their age 1 (Hilda, et al., 2015). In a cross-sectional study conducted on a low-income minority community in

Philadelphia, Pennsylvania showed, that around 97% households had TV, 83% had access with tablets, 77% were using smart phones and 56%, 58% and 59% had respectively access with video consoles, computers and Internet (Kabali et al., 2015, p. 1049).

Impact of screen time on child development:

Early childhood is known as a pivotal period of development when children lay the groundwork for development and growth. This period is also very crucial time for neurodevelopment (Black et al., 2017, p. 85). By growing experience and wisdom of health facts, encouraging social networking, and teaching emotion regulation, such as compassion and understanding, acceptance and respect for everybody, screen media can have a significant impact on children's health.(Strasburger, et al., 2010, p. 759). But studies found that in terms of aggressive behaviour, antisocial promiscuity, drug use, individualism, educational attainment, overweight, and other health hazards, screen media can also adversely impact early childhood development (Strasburger, et al., 2010, p. 759). Numerous studies have proven that screen time for pre-school children can be extremely hazardous to their biological, psychological, and intellectual development, while physical activity may promote favorable consequences in all developmental domains (Carson et al., 2016, p. 577). Notwithstanding all these, studies have confirmed that throughout the whole period children engage in high screen time and low physical activity (Hinkley, et al., 2012, p. 459). Like most health and developmental consequences including such creative thinking, amusement and social interaction, parents indicated active play was advantageous, while recognizing hazards such as safety and extraneous hazard (Hinkley & McCann, 2018, p. 18).A variety of detrimental physical, psychological and social effects have been associated with prolonged screen time. While screen time can disrupt with learning opportunities, however it is likely that children with delays obtain more screen time to help amplify behavioral problems (Duch, et al., 2013, p. 862). In terms of children's sleep, physical activity and screen time habits,

Australia, South Africa, Canada, New Zealand and WHO have provided 24-h motion recommendations for under 5s, advocating a 'optimal day' (Okely, et al., 2017, p. 869). But still child engaged with screen and due to prolonged screen time simultaneously, insomnia and sleep disturbance have increased and it has shown itself to be a growing health problem, hypertension, coronary heart disease, suicidal thoughts, and death in general (Grandner, et al., 2011, p. 428). Blue spectrum light, which generated from a smartphone, can reduce melatonin production resulting in lower somnolence, trouble sleeping and unsettling sleep (Holzman, 2010, p. 118).

In a cross-section and longitudinal study of 119 Hispanic infants, and toddlers who watched television for more than 2 hours a day had delayed language learning ratings relative to children who were exposed to television for less than two hours a day (Duch et al., 2013, p. 863).Another longitudinal study analysis of the relationship between television exposure and vocabulary skills with one-on-one surveys indicates that education books have a stronger effect on vocabulary than television (Alloway, et al., 2014).One more, cross-sectional survey of1778 toddlers ages 24 to 30 months of age that the average Korean toddler watched television for1.21 hours per day, and toddlers who spent between 2 to 3 hours of television had 2.7 times more risk of language delay than those who watched less than one hour of television (Byeon & Hong, 2015).One study done unearthed that expressive speech delays around 6.6% and 8.8% communication delays in 18-month-old children is associated with the use of mobile media devices (iPad, cell phone, etc.), who use these for 30 minutes a day (van den Heuvel et al., 2019, p. 100).

A longitudinal research was carried out by Barr, et al., (2010) to look at the cognitive effects at 4 years of age and examined the association between the frequency of child-directed and adult TV exposures at 1 and 4 years of age. And the outcomes were that 4-year-old children who already had greater levels of adult-directed television exposure all through their

childhood had lower executive skills compared to those with low to moderate levels of adult television.In addition, this research notes that household TV exposure in childhood and infancy ended up in worse performance at age 4 with executive and cognitive abilities (Barr, et al., 2010).Children with increased participation in violent sports, TV shows, and films tend to be more offensive, less prospective, and less moral (Beurkens, 2017).

Children's prolonged screen time also plays an important role in creating and managing body mass index (Poitras et al., 2017, p. 864). Excessive screen time raises early life obesity and heavy weight by decreasing physical activity involvement (LeBlanc, et al., 2015). Children do not have enough opportunities for physical activity, and aren't developing the motor skills as they need to walk, run, ride a bike, or throw a ball because their days are consumed with screen time (Madigan, et al., 2019). Prolonged screen time sitting in front of the screens leads to poor muscle and result of too much weight gain (Beurkens, 2017). Moreover there is growing evidence of screen time which aligned with many other cardiovascular disease conditions such as heart disease, elevated cholesterol levels, insulin secretion and type 2 diabetes, and metabolic disorders, in addition to the associations with obesity and overweight (Aishworiya, et al., 2018, p. 893).

According to the survey of Pew research center 2018, 45% of American adolescents spend "almost constantly" their time in online (Anderson & Jiang, 2018). Number of them psychologically dependent on the device and reveal addiction symptoms (Shambare, et al., 2011). The contradictory result assign to smartphone addiction included high level of distress, difficulty to concentrate, fatigue, and impairments in daily functioning (De-Sola Gutiérrez, et al., 2016). Furthermore, in a quasi-experimental design, adolescents who were driven away their smartphones they experienced physical and psychological sensations associated with the absence of the device (Blondheim & Rosenberg, 2016, p. 49). Even it has been found that toddlers who experience difficulties with self-regulation get more screen time than someone

without difficulties (Radesky, et al., 2014). Excessive media multitasking was also found to be connected with a higher attention impulsivity (Uncapher, et al., 2016).Young children may be missing some important opportunities to practice and master interpersonal, motor, and communication skills when they observe screen (Madigan, et al., 2019).

Link between parents' practices and children's exposure to screen time:

The parents have significant impact on the physical activities and screen time of young children and previous cross-sectional research has shown us that the actions of parents can influence physical activity and screen time both positive and negative way (Smith, et al., 2010). Prior observational research showed that mothers of children between aged 2 and 5 thought there were too many physical obstacles (Pratt, et al., 2017, p. 771). Notably, mothers also felt that they had little quality time with children because of domestic requirements and security issues regarding physical activity at home, thereby restricting the possibilities for physical activity (Pratt, et al., 2017, p. 771). Mothers of same child age group depended on screen time to amuse their kids to do daily activities (Bentley, et al., 2016, p. 718). Many studies indicated that parenting style and the home environment are associated with young children's screen time. Children who brought up in families with an authoritative or authoritarian parenting style they have lower screen time in compared to children in families with an indulgent or neglectful parenting style (Veldhuis et al., 2014).

According to a qualitative study on "Mothers' views of their preschool child's screen-viewing behavior" done by the researchers of University of Bristol, they pointed out several reason of children`s exposure to screen time. Mothers found screen viewing is the good way to rest, relax and help their child to calm down and prevent disruptive behavior (Bentley, et al., 2016, p. 718). Besides some mothers refused their child screen time as a punishment for bad behavior and encourage screen time as a reward of good behavior. Several reason also came

out including: to do household tasks, to take a break from their child, traveling in the car, to avoid child`s to much questions and many more (Bentley et al., 2016, p. 718).This same study revealed that mothers encourage their preschool child to watch or learn how their siblings use computers or other devices and play video games. Mothers from the Bristol city encourage child`s screen time for many purposes. Reasons like: screen time provided valuable educational opportunities, and helps their children with language development, academic attainment, general knowledge and also encourage children`s learning (reading, colors, letters, and numbers etc) came out from the study (Bentley, et al., 2016). Besides a sense of amazement at their children`s ability to use screen or mobile and computer made the mothers feel about their children being competent at an early stage where they (mothers) did not found competent about themselves (Bentley et al., 2016, p. 718).

Many parents use TV before bedtime to wind down their child, and screen time before bed can backfire (Morin, 2020). The sleep cycle in the brain might be interfered by the light emitted from screens. On the other hand, these night time interruptions can have highly damaging effects the next day on the child's mood, focus, behaviour and all other aspects of behaviour, (Cain & Gradisar, 2010, p. 741). Sleep has been disturbed over time and can cause extreme sleep loss that can lead to serious issues in physical and mental health. Children can be stimulated easily from screen times without realization, which leads to increased anxiety, higher irritability, worsening moods and bad behavior (Cain & Gradisar, 2010, p. 741).

Study has shown that children aged five also spend less time watching TV while raising in families with controlled screen time and that demonstrates an insightful parenting style (Veldhuis, et al., 2014). Many studies indicated that the style of parenting and the home atmosphere are correlated to the screen time of young children. Children growing up in authoritarian or oppressive parents' families have lower screening time than children in indulgent or neglectful parental families (Veldhuis, et al., 2014).The importance of social

interaction in cognitive development is reinforced by observation by Vygotsky (1978) that children are able to master more advanced tasks when working together with adults or advanced peers than when they play independently.

Research findings in Bangladeshi context:

Nearly 50 percent of 3-5 year-old children in Bangladesh watched TV regularly, and among television watchers 83 percent urban preschoolers watched Sesame Street, while the rate of rural preschoolers is 58 percent (Khan, et al., 2007).

Two studies had conducted on Bangladesh by the same author named Prof Asad Khan, University of Queensland's School of Health and Rehabilitation Science. The first study investigated "the cumulative physical and screen time impact on psycho-social problems of adolescents in Bangladesh" and the result was that Bangladeshi teenagers who had less than an hour's exercise and had more than two-hour time a day recorded depressed symptoms twice as much as those who exercised one hour a day.

While the earlier study was on examining depressive symptoms only, the second study examined psychosocial difficulties, which included "behavioural and emotional problems, anxiety disorder, conduct disorder and attention deficit hyperactivity disorder (ADHD)" which are very common among children and adolescents in Bangladesh.

Chapter III

Methodology

Research Participants

For my analysis, the sample of the study was mothers with children aged between 3 and 8. In the analysis, sample mother are homemakers and working as well. Data was also collected on age, education, family form and family income.

Research Site

Study site for this research were Uttara, Mirpur and Dhanmondi area of Dhaka city. I had chosen these areas for the current study because these are the most densely populated urban areas of Dhaka city corporation (BBS, 2011). Another reason of choosing these areas Uttara & Mirpur areas represent both the income groups people.

Research Approach

The present study was an exploratory research about parental perceptions towards prolonged screen time exposure. Due to the nature of the problem an exploratory research is initially needed as Brown (2006) suggests, “Exploratory research tends to tackle new problems on which little or no previous research has been done”. For this study data collected using qualitative methods because researchers are keen to gather rich information to get a more comprehensive description of questions, cases or incidents using qualitative analysis techniques (Arora & Stoner, 2009).As this study was to explore on the effect of prolonged screen time on family interactions and parental perception & practices, the influencing factors only qualitative data was able to provide with ‘a deep understanding of the issue’ (Trochim, 2005). It used one data collection method to collect qualitative data from participants which is in-depth interview. The aim of most qualitative studies according to Polit & Beck (2010) is

not to generalize because the focus is on the local, the personal and the subject. In order to comply with the study criteria, in-depth interviews was carried out.

Data Collection Methods

After approval from the ethical committee of BRAC University data collection process was started. Before the data collection the In-depth Interview (IDI) guidelines was developed and reviewed by the experts. After conducting two pilot IDIs with 2 participants the researcher revised the guidelines through required revision for further improvement and to make the data collection more effective.

The researcher conducted 8 IDIs in the Dhaka city at Uttara, Mirpur & Dhanmondi. The length of each IDI was 45 to 60 minutes. Data from IDIs were collected by the researcher herself. To conduct the IDIs with the mothers coming from middle and lower income background the oral consent had taken as because their interview conducted over phone. With both groups the researcher clearly introduced and addressed the objectives of the study as well as she built rapport with the participants. The researcher also took permission for audio record. The participants ensured about the confidentiality and anonymity of the information. The participation to the study was voluntary and participants have given option to withdraw from research in any time if they feel uncomfortable. The researcher then asked the specific questions listed in the guidelines. The researcher documented the data descriptively through field notes, journal and tape recorder. The socio economic background information collected from the mothers.

One IDI was conducted in a day. The IDI guideline contains semi-structured questions for mothers to ask regarding their children`s screen time, their perspectives on the effect of prolonged screen time on family interactions as well as their practices. The responses were recorded with audiotape and written notes.

Sampling Procedure

In this study, sampling technique was purposive. The inclusion criteria was the mothers who have a child aged between 3 years to 8 years coming from middle and lower economic background and living in Dhaka city.

Data Analysis

For this study In-depth interviews conducted and data managed from the starting of the data collection procedure. During the In-depth interview participant`s comments and reflections recorded at the same time. Every day after talking to the participant notes reorganized with date and time. In terms of transcriptions, without any delay it putted on paper exactly what participants shared from the tape recorder. Before reviewing and memoing the data, at least two copies of data were made and kept in safe place. After that the entire transcript organized and then reviewed. During memoing the data or transcript, all commencing impression of the participants recorded and the key data relevant to research questions and sub-questions sorted and highlighted.

For this study, researcher used the approach of content analysis which is the analysis of what is contained in a message, as it categorized verbal or behavioral data for the purpose of classification and summarization. According to Holsti (1968) “Content analysis is any technique for making inferences by systematically and objectively identifying specified characteristics of messages” (Haggarty, et al., 1996). Another reason why content analysis method used because it involved classifying and coding data with an aim of making sense of the collected data and to highlight the important messages, features or findings.

At the initial stage of the data analysis, all research questions and methods reviewed again and when data collection done, transcriptions and notes read several times to get prime sense of data and in order to ensure that no themes are overlooked. Then categorizing (In-depth

interview) was done based on data. Thereafter, patterns in the category examined to establish themes and issues of the study. In qualitative research, thematic analysis is the most common form of analyzing interview. The thematic analysis is a tool used in 'identifying, analyzing and documenting trends (themes) within the data", according to Braun & Clarke (Terry, et al.2017).The purpose of this method that the researcher used in this study is that 'rigorous thematic approach which can produce an insightful analysis that answers particular research questions' (Braun & Clarke, 2006). Finally, the findings of the study were presented descriptively under each theme and interpreted and presented according to them.

Ethical Issues

The study followed all ethical principles of research and the proposal of the study submitted for ethical approval from BRAC University ethical review committee. During the process of data collection, the participants are invited to participate willingly in the study, and potential participants are notified of the process and intent of the study before signing the consent document. The confidentiality and anonymity of the participant`s identifying information obtained about them throughout the data collection, analysis and presentation maintained released to anyone outside the study. Besides respondents were under no pressure to respond to the researcher immediately and had freedom to withdraw.

Validity & Reliability

Researcher took utmost care in conducting the study. As validity is an issue in qualitative research to defend the accuracy and credibility of the study, several strategies maintained to ensure validity of this study. To ensure credibility, peer debriefing also done with mentor. Member checking conducted with one research participant. Researcher read out some data from the transcript to check accuracy and meaning with the selected participant. In order to ensure transferability, detailed descriptive data collected. Appropriate method and techniques

were maintained based on the research objectives and questions and guideline for in-depth interview along with the translated version will be checked and reviewed by three experts. For conformability and reflexivity practice reflective journal also kept.

Reliability of the study maintained by formulating the questionnaire clearly. Easy and clear language used, checked and reviewed by experts and based on their feedback, in-depth-interview questionnaire edited several times. Field testing also conducted with two mothers to field test the guideline before the actual data collection.

Limitations of the Study

In terms of sampling, generalization of the study was limited as it was done only in three areas of Dhaka city and only urban areas are selected. Another limitation of the study was the limited sample size and also the time duration is short. While conducting the study, the researcher faced some challenges in conducting IDIs keeping in mind the pandemic situation.

Chapter IV

Results & Discussion

Results

The aim of the chapter is to present the results and findings emerged from data. Data was first compiled from eight (8) in-depth-interview questionnaire. The thematic approach to defining and evaluating emerging themes and subthemes was focused on data. This chapter is organized into two sections. Four key themes and eighteen subthemes were presented in the first section. . In the following section, the key findings derived from the study are discussed.

Demographic profiles of mothers and children:

In the study, the demographic profile explored the age range of mothers and children, mothers' academic qualifications, and their socio-economic status. The mothers' age range were from 24-38 years of age which indicates that the study included both young and older mothers. Four mothers are from Dhaka North City Corporation like Uttara and Mirpur and the rest four mothers are from Dhaka South City Corporation like Dhanmondi. In this study, and all the children are between the age of 3 to 8 years. Six of them were female, and four were male. Among them, two are going to preschool, three are in the kindergarten, and the rest of them are in the second grade. The educational attainment standard of the mothers coming from middle income families were from HSC to M.B.B.S. Among these mothers, one is a single mother who works as an HR in a private company, and one is a doctor, and the rest of them are homemakers. On the other hand, educational qualifications of mothers from lower socio economic group are from class eight to HSC. One of them work in a garment factory, and rest of them are housewife. In the study, the researcher did not consider that qualified parents only understand why interaction with their children is significant but instead wanted to identify parental perceptions of screen time and family interactions.

Theme-1: Parental perceptions towards prolonged Screen Time

I. Parents understanding about Screen Time:

Findings of the study showed that most of the mothers coming from the lower economic and also from the middle class background have a very little perception about the true notion of screen time. Only one mother coming from middle income family seems to have the understanding of screen time.

"Screen time is actually on top of the mobile that we touch."(IDI# 01, 24 October, 2020)

"I don't really understand screen time. Is it about mobile addiction? You mean, like, mobile phones?" (IDI# 02, 24 October, 2020)

I think the time which passes with activities done in front of screen such as watching TV, or working on a computer or for entertainment or playing video games etc. (IDI# 03, 26 October, 2020)

II. Parental perceptions on how long a child should spend time on screen:

Mothers think children are spending more time on screen than necessary. It was shared by the mothers from the middle and lower income group that children engage more than 1 hour in a day as screen time. In this regards middle income mothers prefer child should spend maximum 30 to 40 minutes, not exactly 1 hour as screen time. However, mothers who are from lower income group, they think 3 to 4 hours are fine for their child to watch the screen.

"Maximum 30 to 40 minutes I will not say even an hour." (IDI# 03, 26 October, 2020)

"I think ideal screen time for a four years old child like the age of my baby is daily one hour in morning and two hours in evening." (IDI# 05, 28 October, 2020)

III. Parental perception of the reason behind prolonged screen time:

Mothers from the lower and middle socio economic group feel that they are the responsible for their child`s prolonged screen time as mothers keep busy with household chores and cannot spend time with child. Along with congested area of living, lack of playground, family size and unsafe environment also recorded as the reason behind the prolong screen time.

"I put the phone in my child`s hand or put him in front of the TV. When I`m busy at my work, I used to tell her "don`t bother me, you watch TV". In fact by doing this her addiction to phones and TV has doubled." (IDI# 08, 30 October, 2020)

"I can`t give my kids much time despite being a single mom. I locked them in a three-room flat. In that case, TV is the biggest companion of my children." (IDI# 06, 29 October, 2020)

IV. Parental perception of prolonged screen time effects:

Mothers from the middle socio economic group, they do not find any benefits of screen time. They believe screens have a negative impact on a child's development. They think synchronization between the body and brain is affecting due to the screen. Besides, speech delay, disrupting sleep cycle, interrupting with child's vision, swollen of vain, obesity others physical issues, brain injury and child`s overall mental health problem has also been recorded from middle income mother`s perceptions. One mother from this group shared that her child use to complain right after spending time with the screen, *"Maa, my neck hurts". (IDI# 04, 27 October, 2020)*

Different point of view have been noted from lower income mothers' perceptions. They find screen time helping their child's language skills. Because her child can speak in Hindi along with Bangla. Another mother thinks her child might learn something instructive by watching screen. Children are learning rhymes, name of colors, which are consider the good side of their child`s development.

"My child learns Twinkle, Twinkle Little Star and Jony, Jony Yes Papa rhymes from the screen." (IDI# 07, 29 October, 2020)

However, getting angry at words, showing too much stubbornness, not wanting to spend time with parents, these types of statements are also recorded from both classes.

"*It seemed to me that he was very disturbed and suddenly become annoyed and become a little irritable." (IDI# 04, 27 October, 2020)*

V. Recommendation by parents to solve the problem:

Mothers of middle income families are concerned about the prolonged screen use of their children and they find due to lack of time of parents, play opportunity are the reasons of why

children are engaging more on screen time. They also have the perceptions that through spending more quality time, meaningful interaction children will be able to learn more and also the use of screen time will go down. Mothers coming from lower income background they do not make any recommendation in relation to the prolonged use of screen time of their children.

Theme-2: Children's preferences and their practices

I. Preferred devices by the children:

The study reveals that children have access to multiple devices such as TV, mobile, laptop, ipad etc. Children belongs to middle income households prefer to use smart phone. Whereas, children having lower income background prefer to use both phone and TV.

"*my daughter prefers to use mobile. The reason is that she can go to bed with the mobile and she can be lying on the sofa. In case of watching TV, she has to watch in one place and TV runs with the remote. This is the easiest way where you just need to touch to operate it." (IDI# 06, 29 October, 2020)*

"my daughter actually uses both. It has been seen that after watching cartoons playing games on mobile for a long time, she also watches the TV and both of them are actually her favorite." (IDI# 03, 26 October, 2020)

II. What children prefer to watch on screen:

Children from the both groups enjoys animated cartoons most. But variations have been also noticed in terms of preference. Children from lower income group watched all TV cartoons shows telecast by "Nicklodeon" and Duranto" channels. On the other hand children from middle income family, watched all types of youtube cartoons channels and mothers have also the inclination to watch child friendly programs such as learning program, musical show, craft shows with their children. On the other hand mothers of lower income background

prefers to watch Indian TV serial ssuch as Nagin, Khirer Putul, Soudaminir Sansar with their children in the evening.

"Nicky & Bella are possibly having a show for kids. Tom &Jerry, Shaun the Sheep, Dora the Explorer, Sesame Street, Spongebob Squarepants are also watched by them. And some of his favorite YouTube channels are shows, rhymes and short stories also." (IDI# 06, 29 October, 2020)

"My son woke up at 7:30 am to watch the drama series Nagin 4 on Colors Bangla Channel." (IDI# 08, 30 October, 2020)

III Time spend on screen by children:

According to the claim of mothers having lower income background, children spend 8 to 9 hours in a day on screen. However, participants from the middle income families indicated that their children have 6 hours of screen engagement in a day, rising from zero to 120 minutes in one sitting.

"My child watches TV all day long. It is often seen that he sits for one or two hours in a row. It looks like 3 hours in a row from 9 am to 12:30 pm before taking a bath. In the afternoon she watches TV for 1 more hour. The time from 8 pm to before going to bed is 2 more hours. I think it is like 9 hours in total." (IDI# 01, 24 October, 2020)

"I think my child has more screen time than 2 hours." (IDI# 03, 26 October, 2020)

IV Child's reaction when parents are using screen:

Irrespective of social classes, children reacts negatively while mother watch TV, either by nagging to get attention, by pulling dress, screaming or by getting angry. One mother from the middle income group shared her child complains,

"Maa why you are sitting with your mobile now? I don`t like. What I'm going to do now! You are watching now and it's fine, what happens when I see the mobile!" (IDI# 07, 29 October, 2020)

Theme-3: Parental perception on Interaction, its importance

I. Parental understanding on interaction:

According to the middle income mothers interaction is conversation, communication, gazing into the eyes etc. Lower income mothers find the term difficult to understand.

"Can you tell me the Bengali of interaction? I didn't really understand what that meant, I just have no idea." (IDI# 01, 24 October, 2020)

"What I mean by interaction is that the time spent with parents has to be quality time. I listen to him talking into his eyes and he can take my words. The bonding that was created like this between me and my child is the interaction for me." (IDI# 04, 27 October, 2020)

II. Parental perception on the importance of interaction:

Almost every mother from the middle income class feels the importance of interaction in the development of a child. Maximum mothers feel that interaction helps to create bonding between mother and child, and communication helps to know their child better. They'll know how their child feels, how they're behaving when they talk or connect with the child. Mothers from this synonyms group also emphases interaction for creating secure attachment so that child feels loved, importance by their parents to impede children's exploration of the world.

"I think the interaction of my child with me is very important. Because if the child's interaction with me is not proper then how can a child have a good relationship with me! If my child doesn't have a good relationship with me, he won't feel safe with me. I have to create a place of love for him to feel secure. That will not happen if we do not have a regular proper interaction." (IDI# 04, 27 October, 2020)

Among the all middle income group mothers one mother firmly believes that screening is not mandatory for the growth of children.

"Screen time is only a part of entertainment. But interaction is mandatory and development unlikely to evolve without interaction." (IDI# 03, 26 October, 2020)

In this regards, lower income mothers did not express anything.

III. Parental perceptions on how prolonged screen time is affecting child's interaction with them:

Middle income mothers have the understanding that prolonged screen time has an impact on family interaction by making a distance between them. Children tend to forget their surrounding and become non responsive, reluctant to communicate, play during the screen time.But different statement have been recorded from lower socio economic group, like one mother she thinks screen time is not affecting her interaction with children.

"*He is watching the cartoon with that mobile and was not listening to me and not even responding to my call." (IDI# 06, 29 October, 2020)*

"I don`t think screen time hampers interaction where I`m allowing my child to engage with the screen. If I am able to interact with my child all day then I will not allow him with the screens. I am talking to her in between his screen time." (IDI# 08, 30 October, 2020)

Rest of them from this group did not respond on that question which might be indicated that they unaware about the fact.

Theme-4: Parental practices

I. Practices done by the parents to control children screen time:

A few of lower income parents engage children in play to control/lessen their screen time. Apart from playing with children middle income parents do crafting, painting, dine out, go to amusement park, watch movie together, take pictures, plantation, take care of pets, read story books, shopping center etc to engage children in other work.

"When I see that he has been watching TV for a long time, I tell him that let`s play now," (IDI# 02, 24 October, 2020)

"*I engage myself in her favorite crafting work, bake together, take pictures, and planting trees," (IDI# 07, 29 October, 2020)*

II. Use of screen time during meal and bed time:

Use of screens during meal and bed time is very usual among the children of middle and lower income group. All the mothers from the both socio economic group, think that if they let their child to watch mobile while eating, the child will eat without any stubborn. One mother from the lower income group stated that,

"*All I do is, let him see when he eats. Because at that time I can feed him. Or it is very difficult to eat food." (IDI# 03, 26 October, 2020)*

In terms of bed time, middle income family stopped their child to watch screen and read story books before sleep.

"*Not at all, I don't let them see the phone before I go to sleep." (IDI# 06, 28 October, 2020)*

However, children are very stubborn from the lower income group if they are not allowed to look at the mobile before going to sleep.

"if I don't let him see the mobile, he won't sleep. I had to give him a mobile phone while feeding him also. When he sees such a mobile phone, he sleeps for a while and if he doesn't, he is very reluctant." (IDI# 08, 30 October, 2020)

III. Use of screen during Covid-19 Pandemic:

Majority of mothers from all socio economic groups are claiming that screen time for children in COVID-19 lockdown has increased. A mother from middle income group mentioned that,

"*It is clear that the screen time for kids in Covid-19 Lockdown has increased a bit." (IDI# 01, 24 October, 2020)*

They comprehend, online schooling is the main reason for increasing their child`s screen time because they sit from the morning to till afternoon until the class ends. They also conceive that due to this pandemic going outside becomes risky so children have less opportunities of

going outside for play, school or for weekend. Due to no more outside play, visiting relatives, the tendency of children to watch mobile and TV has increased. In keeping with that, another mother from lower income group stated,

"Kids actually sitting bored at home, they have nothing to do except watching TV. And we are not stopping them because they have nothing to do but spend screen time." (IDI# 07, 29 October, 2020) All of the parents agreed that children's screen time has increased.

IV. Rules and guidelines for screen time:

Middle income parents have an understanding what children should watch or not, that`s why they prefer their children to watch child friendly content. Among all the mother from middle income group only mother shared that she formed a rule that no one is allowed to watch TV for more than 1 hour. But like everyone she also unable to limit the screen time. On the other hand, lower income parents do not have the understanding regarding child friendly content and also unable to limit screen time.

"No we do not have any guideline for screen time. Everyone is watching whatever they want to watch at any time." (IDI# 08, 30 October, 2020)

"After lockdown I tried not to allow my child to watch screen not more than 1 hour but actually it didn`t happen." (IDI# 03, 26 October, 2020)

V. Activities parents are doing to promote interaction:

Mothers from the middle and lower socio economic group shared that they interact with their child in regular activities like eating, sleeping and child`s bath time. Besides, mothers from middle income group also claim that talking a lot, reading story books, cuddling taking selfies, crafting, drawing, singing, sharing feelings with the child, pretend play and playing with the child are they ways they try to interact with their child.

"I encourage my child to play with me because I think play helps in creativity development, socio emotional development, language, physical and cognitive also. As play is crucial for development, I encourage my child to play with me, rather than watching screens." (IDI# 04, 27 October, 2020)

Mother from the lower economic background actually do not practices any extra activities except playing with their child.

"I pray together with my child, occasionally tell her stories and within TV together." (IDI# 02, 24 October, 2020)

Key Findings:

- Mothers from the both middle and lower socio economic have a very minimal understanding with the true notion of the screen time.
- Mothers from the middle socio economic group think children are spending more time on screen than necessary. According to middle socio economic mothers prefer their child should spend maximum 30 to 40 minutes, not exactly 1 hour as screen time and lower socio economic mothers prefer 3 to 4 as screen time.
- Mothers from the both socio economic group stated that except for the time of reading, sleeping and bathing, their children are spending the rest of the time watching TV. In this regards lower socio economic mother claim that 8 to 9 is the hours that their child spend on screen. Mothers from middle socio economic group think the amount of time their child watches the screen is incredibly excessive, more likely spend 6 hours on the screen.
- Most of the mothers from middle socio economic group feel that they are the responsible for their child`s prolonged screen time and additionally there are other factors like: congested area of living, lack of playground, family size and unsafe environment recorded as the reason behind the prolong screen time by the middle

socio economic group mothers. On the other hand no perception regarding the reason behind prolonged screen time recorded by the lower socio economic mothers.

- Different perceptions came out from this two socio economic class in terms of effect of prolonged screen time. Mothers from the middle socio economic group, they do not find any benefits of screen time. But surprisingly, mothers lower socio economic group find beneficial for child`s development.
- Children have access to multiple devices such as TV, mobile, laptop, ipad etc at their home. In terms of preference children coming from middle income group prefer smartphone where lower children from income group prefer smartphone and TV both.
- Each mother said that her child enjoys almost every animated film, such as cartoons, etc. But the difference between the screen usages of the children of two groups is that the children of middle income families love to watch youtube more than TV. And lower income group children love to watch Indian TV serials.
- Children respond aggressively when mother watches TV regardless of the social backgrounds, either by nagging to get attention, pulling dress, screaming or getting angry.
- Most of the mothers have very little understanding on the term interaction specially lower income group.
- Mothers who are have middle income background, feels the importance of interaction between the mother and the child and in the development of a child. But lower income parents did not say anything in this regards which might indicate that they do not have understanding on this.

- Multiple practices have been recorded by the middle socio economic group to control child`s screen time, where lower socio economic mothers they find only play to control their child's screen time.
- During meals and bed time, the use of screens is very common among children in the middle and lower income group.
- Middle income family prefer their children to watch child friendly content where mothers coming from lower income group have no control of their child`s screen content.
- Online schooling, boredom are the main reason during the Covid-19 pandemic that has increased child`s screen time that have recorded by the both socio economic group.
- Several activities have been recorded by the middle socio economic group mothers to promote interaction between them and their child but except regular activities like eating, sleeping and child`s bath time lower socio economic mothers do not give extra afford to promote interaction.
- Mothers coming from middle income group are concerned about the prolonged screen use of their children and made some recommendations but no concerns and recommendations has not received from lower socio economic group.

Discussion

The demographic profile in the study shows that in different economic groups, the educational context of each mother is different. The study indicates that they are the main caregivers of children in the household, despite the professional identity of mothers (working or home maker).

The study's first major analysis revealed that the perception of how mothers define “Screen Time” is distinct. It emerged from the interview that mothers from the lower socio economic and also middle income community limited understanding regarding screen time. Most of the mothers have very limited understanding of screen time from the middle socio-income group.In terms of devices, it has been recorded that smartphones and TV are currently being occupied by the children most. Even the researcher also identified that mothers from both socio economic group, think children's preferable device are smart phones and TV and these two types of devices are the most exposed by children. Since all parents use mobile phone, children can easily get mobile phone at hand. Correspondingly, study has shown that most of the children's time is occupied by smartphones. Smart phones, cable and internet connections are now very easily accessible and as a result, children of all socio-economic backgrounds are very addicted to smartphones. Without a parental assistant, every child from the middle income group can browse Youtube.

Variations have been seen in terms of mothers preference on how long their child should watch screens. Where middle group mother prefer 40 minutes to 1 hour, lower income group prefer 3 to 3 and half hours. If we look at WHO`s recommendations for children 3 to 4 years age there should be no more than 1 hour of sedentary screen time even less is better. So it has also been recognized that the middle income group achieves the WHO recommendation standard and is much more conscious of it than the lower income group. Study also revealed that most of the mothers who are coming from the middle income group comprehend that speech delay, disrupting sleep cycle, interrupting with child's vision, swollen of vain, obesity others physical issues, brain injury and child`s overall mental health problem are the effects of screen. Global study findings also highlighted these issues. This actually indicates that middle income mothers have the perception of negative effect of prolonged screen time but practices are missing. On the other side, surprisingly, all mothers from lower socio income

group find beneficial for child`s development. That`s could be reason for their child`s prolonged screen time. If we go through the literature that have done across the world on this regards, then findings says that parent`s attitudes, ideologies and their beliefs are the responsible for child`s prolong screen time (Coyne et al., 2014, p. 678).This is quite similar with this findings like as lower income mothers belief screen time is beneficial their child spend more time with screen. This also indicates the knowledge gap among the lower income mothers. Basically, study findings highlighted that irrespective of mothers' employment status no mother has any idea about screen time and its usage. Due to lack of educational attainment, lower income mothers have limited knowledge about the usage of screen time. On the other hand, it`s application was not seen even in the condition of having knowledge in middle class families.

Children from the both groups have extreme tendency to spend time in front of the screens for all day long. It has been recorded that child enjoys around 6 to 9 hours screen time which is extremely dangerous as per the WHO guidelines. Studies also documented that prolonged screen times are the result of numerous negative long term health issues. The reason behind this prolonged exposure mothers from the middle income group feel they are the responsible for their child`s prolonged screen time. Instead of spending a quality time mothers are promoting screen so that they can do their work. Besides, family size also influence child`s screen time. So as the main caregiver mothers and others member should spends more time with their child. It is often seen that parents hold a smartphone or tab in their hand to keep the child calm. Children are kept calm by playing songs, cartoons or funny videos. This is the common practice of everyone's home, at consequence the children are watching their favorite cartoons and others programs. Another reason I found really extreme that is mothers don`t let their child to go outside or in the flat next door because they consider it`s unsafe. In a metropolitan city that is also the capital of a country with even more than 23,000 inhabitants

per square mile, it`s a matter of great regret that playgrounds are limited and children are confined in the four walls. Besides Covid-19 Pandemic is one of the issue that highlighted by the mother of both group. Children are locked in the room. To remove the boredom they are engaging more with the screen and less with their surroundings and their family members.

As we noted that kids spent significantly more time on the screen, mothers from middle income group finds this harmful and worried about this but lower income mothers do not bother about this. At this point we can noticed in our literature it says that socio-economic status and parental education are associate with the increasing of child`s screen time. Similarly in our study we found lower socio economic child watched more screen than middle income group.

There has also been less of a desire among mothers to watch TV or other devices together. As a consequence, mothers have lost control over the screen content of their children. But it has also been noted that when middle income mothers watch together they then the quality of the children's show is regulated and the children watch academic program. Otherwise, all types of animated shows such as, cartoons are most favorite content of children of both socio economic groups. On the other hand mothers from the lower income group used to watch Indian serial in the evening. As a consequence children have been especially involved in TV serials like: Nagin 4, Khirer Putul, Soudaminir Sansar along with cartoons. This types of drama kills child`s imagination and creativity. This drama shows a lots of negativity in the family unity. Introduced them to the world of make believe. Take Nagin 4 that the child watches for instance, this shows that these are make-believe based on reincarnation, returning to life after death, nags or nagins. Not only would this make our child believe in them, but it would also give them a distorted worldview.

Among children, the use of screen time is so high that the child just doesn't want to consume foods without the screen. Therefore, mothers from both communities encourage screen during meal so that children eat without tantrum. That actually disclosing the pattern of responsive feeding is currently almost negligible among mothers of the two socio-economic classes. Children even have access of screen before their sleep. Even mothers from the middle income group they have noticed that child seem quite disturb or irritated before screen. Again if you look at the literature we may also discover that finding also indicated that child who has access of screen just right before sleep it hampers child`s sleep cycle.

According to the findings of the study, most of the mothers have very minimal idea about interaction especially lower income mothers. On the other hand mothers who have some basic idea about interaction, they find it important and mandatory for child development. They also find interaction to communicate and express of emotion which is very much essential for child`s growth. Less interactions with mothers can make a gap between mother child relationship and that`s can lead in a low self-esteem, insecurity, hesitation, and even unsuccessful in later relationship. Where it was expecting everyone know the benefits of the interaction only few mothers know the importance of interaction with their children and the growth of a child is significant. But in this sense, lower income parents did not claim anything that could mean they do not have an understanding of this. As a result, the most common behavior encountered due to unmodified use of screen time among the children of both socio economic groups is tantrum of impulsivity, moaning and aggression, moodiness, disobedience and irritation.

Some practices also been noted to reduce the prolonged screen time and promoting the interaction by the middle income group. Talking a lot, reading story books, cuddling, taking selfies, crafting, drawing, singing, sharing feelings with the child, pretend play and playing with the child these types of activities have been noted by middle income group to interact

with the child. Unfortunately no comments have been recorded by the lower income mothers to promoting interaction.

Some commonalities have been seen in the responses of mothers from both group. Mothers from the both group do not perceive the true notion of screen time and interaction. Even both group stated that except for the time of reading, sleeping and bathing, their children are spending the rest of the time watching TV. All most all the mothers feel they are responsible for their child`s prolonged screen time.

Along with similarities some dissimilarities also seen in mother`s perceptions. Mothers have different point of view regarding reason behind extended screen time. When multiple reasons have been recorded by the middle income group, mothers from the lower income group thought not spending time might be reason for prolonged screen time. Mothers have also different perceptions of prolonged screen time effects. Middle income mothers think screen have some detrimental effects but lower income mothers think it has some beneficial impact on child`s growth. Mothers from the lower income group also do not find any benefits of interactions where middle income group mothers think interaction is more essential for child`s growth than screen time. Middle income mothers think screen time affecting interaction but no comments have been documented by lower income mothers. As findings showed that middle income mothers are concerns about child`s addictions towards the screen they are trying to control screen time and promote interactions by doing bundle of activities. But mothers from lower income group are not concerns as well as far away from controlling child`s screen time and promoting interactions.

According to the study, most of the mothers also think they'll know how their child feels, how they're (child) behaving if they connect or interact with the child. Even for some of them interaction create secure attachment so that child feels loved, importance by their parents. So,

mothers from the both groups should practice a healthy screen time and need to promote interactions to ensure child`s growth.

Conclusion

The use of smartphones, digital appliances with display screens has become more and more popular worldwide. Inadequate play space, family size and unsafe environment, lack of quality time, parents busy schedule these are reason for child`s prolonged screen time recorded by the mothers. The aim of this study was to explore the perceptions of mothers regarding effect of prolonged screen time on family interaction and also explore the practices done by parents that promote or lessen children's screen time. This study supports the claim that prolonged screen time interfere with the family interactions as mothers are thinking children are not responding by their names and seems very irritated. Children are becoming non responsive and forget the surroundings when they are in front of the screens. Mothers further express their concern that they are struggling to talk to their child, to play, to feed and even to sleep with them. A main message from this study is that increasing interaction with family members can be more valuable than increasing screen time. If children share a secure attachment with their family members they will try to explore more and that will create a strong bond. In this sector, adequate consideration should be installed by taking some steps by governments and policy makers and awareness programs should be continued by workshops, seminars which will help to enable our future generations to be a safe foundation of community. However, this exploratory study will also determine the requirements and challenges that stakeholders might face while implementing and recommended some strategies to encourage interactions with family members.

Recommendations

Study evidence indicated that children of Dhaka city don't have enough time to spend outside. They spend all the time with screens and less interact with family members. It is also confirmed that parents are not knowledgeable of the impacts of prolonged screen-time. They gladly take precautionary steps. The parents, however, are really not adequately aware of the necessary steps. Based on the findings these are some recommendations for parents and for the policy makers. Like:

- Awareness program need to create for both socio economic groups. For middle income group “behavioral changing program” should be implemented because they have the perceptions regarding the effects of screen time on family interaction but practice is missing. On the other hand, “knowledge gap program” for the lower income group to develop their knowledge.
- Create family guidelines and adhere a limited screen time per day. Additionally, try not to turn on TV in the background.
- Healthy modeling of roles is essential. Child would potentially imitate our usage of the media, so being a positive role model is important. Reading novels, getting interested in physical activities, and spend time outside and placing healthy limitations on the usage of our own gadgets are very essential.
- Screen time in the preschool period should be limited to watching educational programming with a caregiver. Besides, limit non-educational screen time for children 2-5 to about 1 hour per weekday and 3 hours on weekend days.
- Parents need to be responsible towards child`s cues. They have to ensure no screens during mealtime and establish responsive feeding. So during family dinners and trips, switching off all the screens. As pacifiers, babysitters, or to stop tantrums, screens

should be avoided. Turning off screens and remove them 30-60 minutes before bedtime also needed.

- Select non-screen-based activities and entertainment wherever possible. Such as increasing physical activity, crafting, art, playing with clay, doing creative work, baking. Since there is very little playground now, children can play with various creative activities at home. If want then only use of screen for video chatting with an adult until the age of 18 months can be ensure for example, with a parent who is out of town.
- Government should develop a policy which will identify the amount of time children spend engaging in sedentary small screen activities. Besides, need to make a guideline for parents on their children's screen use.
- NGO's need to get involved and raise awareness among families. Workshops, seminars and other support group need to be formed to spread knowledge among parents.
- More research with larger population is needed on this topic.

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Appendix A.

IDI Questionnaire

Interviewer's Name _____Date of Interview_____

Mother's Name _____ Age_____ Qualification_____

Family income_____ No of children:_____

Session duration: 45 to 60 minutes.

Mother's perception related questions:

1. How does your child spend his / her time at home? What does he / she enjoy most? Can share with me his/her daily activity routine?

2. What do you mean by the term "Screen time"?

3. What kind of screens are in your home (e.g., TV, tablet, computer, smartphone)? Which one does your child like to use most?

4. Did you ever feel that your child is spending more time on screen? If yes, then on average, how much time does your child actually spend on TV/mobile?

5. Why do you think they spend too much time on watching TV/spend time on mobile/Tab?

6. According to you, what should be the amount of time your child should watch TV/mobile/Tab?

7. What particular time during a day actually does your child watch TV/spend time on mobile/Tab more?

8. Do you think screen time is important for your child's development? If yes, why & how?

9. Do you think prolonged screen time negatively affects your child? If yes, how?

10. According to you, what are the effects of too much screen time?

11. According to you what are the factors that influence your child to engage in more screen time?

12. What do you mean by the term ‘Interaction’?

13. Do you think your child/children’s’ interaction with you is important? If yes, why ?

14. What are your ways to interact with your child? How do you do that ?

15. Do you think too much screening time has an effect on parent-child interaction? If yes, then why and how?

16. Do we think your child learns better through interaction or through spending time on screen? (After the response) ask why and how?

17. Are children spending much more time on screen than usual during this COVID time? If yes, then why? Other than online schooling

Practices related questions:

1. Do you play with your child? If yes, how long do you play with him/her ? Do you encourage your child to play with you?

2. Are you playing more with your child during this COVID-19 situation as children are now mostly spending time at home?

3. Do you offer them to us phones/Tab to play or watch things they like?

4. Do you encourage or discourage conversation with your child while you are using screens? If not then how does your child react?

5. What are your ways to interact with your child? How do you do that ?

6. When you try to interact with your child while they are busy with phone/tab/TV, what are the reactions you see? What are the reasons of their reactions according to you?

7. What do you watch with your child? What does your child watch alone?

8. How are you maintaining a balance between family time & screen time?

9. Do your family have rules or guidelines for screen use? If yes, please explain

10. Does your child use any kind of screen devices before bedtime? How long before bedtime? Is there a TV or computer in your child's bedroom? Does your child take mobile devices into the bedroom?

11. Does anyone in the family use screens during mealtimes? Or does your child use screens during mealtimes?

12. Does your child use screens while you do chores around the home?

13. How do you think your child's too much use of screen time is affecting yours mother-child interaction?

14. How do you think the practices you are doing are influencing your child's screen time?

15. How do you model your child`s screen time?

16. Do you think there is any solution of this problem? If yes, then what & why do you think so?

Appendix B

মায়ের উপলব্ধি সম্পর্কিত প্রশ্ন:

১. আপনারশিশুকীভাবেবাড়িতেতারসময়কাটায়? সেকীউপভোগকরে? তারপ্রতিদিনেরকার্যকলাপেররুটিনটিশেয়ারকরতে পারেন?

২."স্ক্রিনটাইম" শব্দটি বলতে আপনিকী বোঝেন?

৩. আপনার বাড়িতে কী ধরণের স্ক্রিন রয়েছে (যেমন, টিভি, ট্যাবলেট, কম্পিউটার, স্মার্টফোন)? আপনার শিশু কোনটি ব্যবহার করতে সবচেয়ে বেশি পছন্দ করে?

৪. আপনার কি কখনো মনে হয়যে আপনার সন্তান স্ক্রিনএ বেশি সময় ব্যায় করছে? যদি উত্তর হ্যাঁ হয় তবে জিজ্ঞেস করুন, গড়ে, আপনারসন্তানটিভি / মোবাইলের দেখার পিছনে কতটা সময় ব্যয় করে?

৫. আপনি কেন মনে করেন যে আপনার সন্তান টিভি / মোবাইল / ট্যাবে খুব বেশি সময় ব্যয় করে?

৬. আপনার মতে, আপনার সন্তানের টিভি / মোবাইল / ট্যাবটি কতক্ষণ দেখা উচিত?

৭. দিনের কোন সময় আপনার সন্তান টিভি/মোবাইল / ট্যাবে বেশি সময় ব্যয় করে?

৮. আপনি কি মনে করেন যে আপনার সন্তানের বিকাশের জন্য স্ক্রিন টাইম গুরুত্বপূর্ণ? যদি হ্যাঁ, কেন এবং কি ভাবে?

৯. আপনি কী মনে করেন যে দীর্ঘক্ষণ টিভি/মোবাইল/ট্যাব ব্যবহার আপনার শিশুকে নেতি বাচক ভাবে প্রভাবিত করে? যদি হ্যাঁ, কিভাবে?

১০.আপনার মতে, দীর্ঘক্ষণ টিভি / মোবাইল / ট্যাব ব্যবহারের প্রভাব কী?

১১. আপনার শিশুকে দীর্ঘক্ষণ টিভি/মোবাইল/ট্যাব ব্যবহার করতে প্রভাবিত করে এমন প্রোভাভোক গুলি কী কী?

১২. 'ইন্টারঅ্যাকশন/মিথষ্ক্রিয়া শব্দটি বলতে আপনিকী বোঝেন?

১৩. আপনি কি মনে করেন যে আপনার সাথে আপনার সন্তানের মিথষ্ক্রিয়ার বিষয়টি গুরুত্বপূর্ণ? যদি হ্যাঁ, কেন?

১৪. আপনার সন্তানের সাথে কী কী উপায়ে আপনিইন্টারঅ্যাক্ট করে থাকেন?

১৫. আপনি কি মনে করেন যে দীর্ঘক্ষণ টিভি/মোবাইল / ট্যাব ব্যবহার পিতামাতার সাথে সন্তানের মিথষ্ক্রিয়াকে প্রভাবিত করে? যদি হ্যাঁ, তবে কেন এবং কিভাবে?

১৬. আপনি কি মনে করেন যে আপনার শিশু টিভি/মোবাইল/ ট্যাব ব্যবহার করে নাকি ইন্টারঅ্যাকশনের মাধ্যমে ভাল শিখতে পারে? যদি উত্তর হ্যাঁ হয়তবে জিজ্ঞেস করুন, কেন এবং কীভাবে? যদি উত্তর না হয় তবেও কেন এবংকীভাবে?

১৭. এই কভিড সময়কালে বাচ্চারা কি স্বাভাবিকের চেয়ে অনেক বেশি স্ক্রিনে সময় ব্যয় করছে? যদি উত্তর হ্যাঁ হয়তবে জিজ্ঞেস করুন, কেন?

মায়ের অনুশীলন সম্পর্কিত প্রশ্ন:

১. আপনি কি আপনার সন্তানের সাথে খেলেন? যদি হ্যাঁ, আপনি কতক্ষণ তার সাথে খেলেন? আপনিকিআপনারবাচ্চাকেআপনারসাথেখেলতেউত্সাহিতকরেন?

২.এই মহামারীর সময়ে শিশুরা যেহেতু বেশি সময় ধরে বাসা থাকছে, আপনি কি এই সময়ে সন্তানের সাথে আরও বেশি খেলছেন?

৩. আপনি কি আপনার শিশুকে ফোন দিয়ে খেলতে উৎসাহিত করেন অথবা ফোন দিয়ে খেলতে দেন?

৪. আপনি যখন স্ক্রিন ব্যবহার করেন তখন কি আপনার সন্তানের সাথে কথোপকথনকে উত্সাহিত বা নিরুৎসাহিত করেন? এই ধরণের পরিস্থিতিতে আপনার শিশু কেমন প্রতিক্রিয়া দেখায়?

৫. আপনারসন্তানেরসাথেইন্টারঅ্যাক্টকরারউপায়গুলিকীকী? আপনি এটাকিভাবেকরেন?

৬.আপনার শিশু যখন টিভি দেখে অথবা মোবাইল ব্যবহার করে, সেই সময় যদি আপনি তার সাথে কথা বলতে বা খেলতে চান তখন কি ধরণের প্রতিক্রিয়া আপনার শিশু দেখায়? আপনার মতে এই ধরণের প্রতিক্রিয়ার কারণ কি?

৭.আপনি আপনার সন্তানের সাথে টিভিতে কী দেখেন? আপনার শিশু একা একা কী দেখে? আপনার সন্তানকি একা ফোন ব্যবহার করতে পছন্দ করে?

৮.আপনি কীভাবে পারিবারিক সময় এবং স্ক্রিন সময়ের মধ্যে ভারসাম্য বজায় রাখছেন?

৯. আপনার পরিবারের কী স্ক্রিন ব্যবহারের জন্য নিয়ম বা গাইড লাইন রয়েছে? যদি থাকে তাহলে ব্যাখ্যা করুন

১০.আপনার শিশু কি ঘুমানোর আগে কোনও ধরণের স্ক্রিন ব্যবহার করে? যদি করে তাহলে শোবার কতক্ষণ আগে? আপনার সন্তানের শোবার ঘরেকি টিভি বা কম্পিউটার আছে? আপনার শিশুকি শোবার ঘরে মোবাইল নিয়ে যায়?

১১.পরিবারের কেউকি খাওয়ার সময় কোন প্রকার স্ক্রিন ব্যবহার করেন? অথবা আপনার শিশুকি খাবারের সময় স্ক্রিন ব্যবহার করে?

১২.আপনি যখন বাসার কাজ করেন তখনকি আপনার শিশু স্ক্রিন ব্যবহার করে?

১৩.আপনি কী মনে করেন যে আপনার সন্তানের খুব বেশি স্ক্রিন ব্যবহারের সময়টি আপনার মা-সন্তানের মিথস্ক্রিয়াকে প্রভাবিত করছে?

১৪. আপনি কী মনে করেন যেকাজ গুলো আপনি করছেন তা আপনার শিশুকে স্ক্রিনে আরও বেশি সময় থাকতে উৎসাহিত করে?

১৫. আপনি কি মনে করেন যেকাজ গুলো আপনি করছেন তা আপনার শিশুকে স্ক্রিনে কম সময় থাকতে উৎসাহিত করে?

১৬. এই সমস্যার কি কোনো সমাধান আছে? যদি হ্যাঁ, তবে কোন উপায় তা সমাধান করা যায় এবং আপনি কেন এমনটি ভাবেন?