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How Children Under 10-years Access and Use Digital Devices at Home and What Parents Feel About It: Insights from India

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Abstract: This study was conducted to assess how children under 10-years access and use digital devices and parental views about it from an Indian context. Using thematic analysis of in-depth semi structured interviews with fourteen parents in Manipal, South India, this study examined three critical areas: a) the extent of ownership, access, and use of digital media by young children in their homes; the activities they indulged in and content they engaged with using digital devices b) parental views and c) the strategies that parents used to manage and monitor young children's digital devices usage. The study found that children under 10-years have easy and high access to digital devices at home in the form of parents' smartphones. They also owned their own smartphones and game consoles. Young children in Manipal used digital devices to watch videos on YouTube, daily soaps on Hotstar, play games on various game apps, send text and voice messages on WhatsApp, used the voice search to look for desired information, and even shop for books on Amazon. In addition, the study found that children were adept at downloading and installing apps, sharing multimedia files between two devices, and even do media multitasking. Some parents believed that digital devices were beneficial to children and therefore encouraged its use while others did not think so. Parents used digital devices as digital pacifiers and also felt that young children's excessive use of digital devices was a normal development; almost a "generational thing". They managed and monitored children's digital media usage through open conversations, by relying on parental control and passwords; and through clever deception.

Keywords: digital media, children under 10-years, India, smartphone, parental views, parental monitoring and management

Increased Access and Usage of Digital Devices by Young Children

Digital devices play a key role in children's lives. They are screen-based and include the smartphones, tablets, computer, game consoles and even television (Blum-Ross & Livingstone, 2016). Today, children around the world have a high degree of access to these digital devices and with increased access their use of smart devices has naturally risen too. Their omnipresence in children's lives make them extremely influential.

Media have been around for years and families have consumed books, newspapers, magazines, comics, radio, films, and even TV with both enthusiasm and skepticism (Luke, 1999) (Marsh, et al., 2005). However, ever since the smartphones and tablets became affordable and popular just over a decade ago, their usage by children has increased by several folds. Insightful work by (Kabali, et al., 2015) (Radesky, Schumacher, & Zucke, 2015) (Buckingham, 2004) (Dinleyici, Carman, Ozturk, & Sahin-Dagli, 2016) (Livingstone & Bovill, 1999) (Luke, 1999) have acknowledged that the interactivity and mobility of smart devices make them very different and more impactful than any other traditional or electronic media hitherto consumed by children. In Kabali, et al., (2015)'s study, the researchers found that by 4-years of age, half the children in the sample had their own TV and three-fourths of them also had their own mobile devices and that less than one year olds used mobile devices on a daily basis to play games, watch a video or use apps. Findings from annual studies by Common Sense Media and Of Com conducted a decade ago and their recent inquiry into the same age group of children reveal that there is a drastic change in the nature of children's media usage. (Rideout 2011) (OfCom 2014) (Rideout 2017).

Recent trends in children's media usage indicate more media multitasking, more hours of screen time, independent usage and even early ownership (Common Sense

Census: Media Use By Kids Age Zero to Eight, 2017) (Zero to Eight Children's Media Use in America, 2011) (Kabali, et al., 2015) (Chassiakos, Radesky, Christakis, Moreno, & Cross, 2016). For instance, if PC/ laptop was the preferred device to go online for 5-15 year olds in 2004, today it is the smartphone. If the age at which children regularly watched TV was 4 years in 1970, in the case of digital media usage it was reduced to 4 months in the past decade (Chassiakos, Radesky, Christakis, Moreno, & Cross, 2016). **The Positive and Negative Impacts of Digital Devices on Children**

Luke (1999) argued that children using electronic and digital media had to deal with the complexities of a hypertext environment: multitude of information choices, quick responses to information cues, instant decision making and swift actions like a click or swipe in addition to what he calls interconnected-information modalities that includes text, pictures, graphic, sounds, and videos.

Unfortunately, evidence points out that excessive use of screen based media by children across all age groups leads to negative health effects like obesity, sedentary behavior, poor dietary habits, poor sleep (Dinleyici, Carman, Ozturk, & Sahin-Dagli, 2016) (Chassiakos, et al. 2016) and adversely affects their learning and cognition, language development, social interaction skills and overall social wellbeing including a higher chance of experiencing depression and being exposed to unsafe content and contacts (Chassiakos, Radesky, Christakis, Moreno, & Cross, 2016) through cyberbullying, online predators, sexting, multiplayer games, and social media (Heitner, 2016) (International Telecommmunication Union, 2010) (Venkatraghavan, 2015) (Ray & Jat, 2010). Moreover, even experimental studies have noted that screen-based virtual environments fail to scaffold young children's learning or other cognitive skills (Chen & Siegler, 2013), (Tarasuik, Demaria, & Kaufman, 2017).

However, several research studies have also highlighted the positives of digital media use by children. Marsh, et al., (2005) have pointed out that contrary to popular belief children's active engagement with media promotes play, speaking, listening and reading. Other known benefits of internet enabled smart devices are helping family members to stay in touch and know about each other's whereabouts during the day (Ericsson Consumer Lab, 2105) and also improve medical care delivery to infants and toddlers when the smartphone is used as a distraction tool while administering medicines or performing medical procedures (Chassiakos, Radesky, Christakis, Moreno, & Cross, 2016). Radesky, Schumacher, and Zucke (2015)'s study makes references to uses of interactive media in facilitating learning and building early literacy skills and instances of video chat apps retaining or strengthening familial connections when parents are away. Thus, it is evident that the ill-effects of internet-enabled, screen-based, smart digital devices far outweighs its positives.

This compels one to ask: internet and digital media usage by children is on the rise everywhere. But how well equipped are parents to ensure that they make children's experiences with emerging digital technologies positive and meaningful? What strategies do they use to manage children's digital media usage? What is their level of awareness of children's digital media usage habits? Does parents' digital literacy influence their children's media usage? What are the common parenting style and family communication methods parents adopt to mediate children's digital media use at home? What are the common concerns expressed by parents about their children's digital media usage? These are questions that require immediate research attention (Livingstone & Bovill, 1999) (Helsper & Livingstone, 2008) (Clark, 2011).

Research Objective

This study attempted to understand 0-10 year old children's digital media habits, the role parents play in enabling or preventing their children's digital media uptake and their general perceptions about children's digital media use. The study was conducted in Manipal, an educational town on the South West coast of India.

Methodology

The study was conducted using thematic analysis of semi-structured, in-depth interviews with 17 parents whose children went to private schools in Manipal. In some instances both the mother and father were available at the time of interview whereas in other cases either only the mother or only the father was available. The interviews were recorded using an audio recording application on the researcher's phone. Each of the interviews lasted between 17 minutes and 50 minutes. Out of the 17 in-depth interviews conducted, three faced issues with audio recording and hence had to be left out of the final analysis. Thus, for the final analysis 14 interviews considered which were then transcribed and thematic analysis applied according to Braun & Clarke (2006)'s 6-phase step-by-step guide.

Thematic Analysis

Thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) within data (Braun and Clarke 2006). According to them, thematic analysis is a "very flexible method" of qualitative analysis and is a "method which works both to reflect reality, and to unpick or unravel the surface of reality". While a lot of qualitative research is essentially thematic, researchers have not acknowledged the use of thematic analysis as much as they have modified or extended forms thematic analysis which are grounded theory, discourse analysis, narrative analysis among others.

Themes

Following Braun & Clarke's guidelines, six themes wereintially identified. However, in order to keep the themes inline with the research questions, the themes were further refined. In the end, the following themes were identified:

1. The nature of access and use of digital devices by young children

2. Parents' attitudes towards digital technologies

3. Parents' actions to manage and monitor children's digital devices use

Analysis and Discussion

Theme 1: The nature of access and use of digital devices by young children

Nature of access

a) High and low access: This study found that there were some children who had high (number of devices available for their use) and easy access to digital devices and some children had low or limited access to any form of digital devices. There were also children who in spite of having access to multiple digital devices at home their usage of those devices was limited.

Excerpts:

> *Researcher (R): but has there been instances where they have seen relatives or friends play these games and have they demanded to play?*
> *Parent14 (P14): Yeah, they have seen it. My sister's kids have devices like this and they do play on it but my kids have not asked to play…I don't have to face any issues, they (the kids) are away from it (games). I have consciously kept them away from it. [P14, father of 5-year old boy and 9-year old girl]*

> Note: P14's house also has three smartphones, laptops, and an iPad. The five year son, in fact, has a smartphone of his own. Yet, as the father points out he has deliberately restricted his children's use of certain content like games on the digital devices.

> *She has access to all the devices – if not one then definitely the other. I do not give my device…her mother's phone is always available, so is her grandfather's and grandmother's. [P10, father of 7-year old girl]*

b) Early access: This study found that under 10-year children in Manipal were introduced to digital devices – mostly the smartphone – very early in their life. Parents said that they introduced their children to smartphones even before they turned one and some other parents said that they had taught their toddlers how to use the various features of a smartphone or a desktop or a laptop. Parents also believed that their children learnt how to use these devices by seeing them use one. Ownership of smartphone was also noticed. Below are some case in point examples from in the form of excerpts from the interviews:

> *R: Do both the kids use these devices? Has the daughter been introduced to any of these devices?*
> *P5: Mobile and TV. He (the son) uses the laptop or desktop for school purposes.*
> *R: When was it introduced for him?*
> *P5: From childhood he has spoiled so many phones – he would put it into the water or throw it while feeding. [P5, mother of 8-year old boy and 1-year old girl]*

> *R: Can you tell me when was your daughter introduced to digital devices?*
> *P10: As a baby she was introduced to internet first – on the computer – and then was introduced to phones. She was a fussy eater, so my wife would show her videos on YouTube on the computer. What began like that at age 1-year to 1.5-years moved to mobile phones by 2-years to 3-years. By that time she was smarter. Earlier she didn't know how to unlock the phone; by 3-years she had learnt everything by looking at how we do it. [P10, father of 7-year old girl]*

This indicates that prior research findings about young children's digital devices usage that infants and toddlers get easy access and therefore use them from a very young age is true to the Indian context too. The parents in the above examples had multiple digital devices at home. P5's home had five functional devices including a smart TV and P10's had five smartphones and one desktop. As the second largest internet and smart phone market (International Telecommunication Union , 2017) (KPMG-FICCI, 2016) in the world, India has seen rapid growth in the telecommunications industry over the past couple of years. Affordability of internet data and smartphones coupled by aggressive marketing by telecom firms, smartphone

makers, and favorable government polices has enabled Indian families to own multiple internet enabled screen devices. Therefore, we believe that these factors have contributed to increase in families 'ownership of digital devices which in turn has fostered increased access to and use by young children in Indian homes.

c) Father's phone is not accessible: The study found that in most families children accessed their mother's or other family member's smartphones but not their father's. However, the study found that wherever mother's phone was not enabled with internet children used their father's phone.

Examples:

> *RI: child uses your phone or your husband's phone?*
> *P13: My phone… (sic) husband like…he never gives his phone to her…like I'm at home only so she mostly takes my phone. [P13, mother of 6-year old and 8- months old girls]*
>
> *P9: …His father's phone he doesn't touch, it's a strict no. [P9, mother to 7-year old and 1-year old daughter]*

The fact that father's phone is usually not accessible by children points at two key features of Indian families – one, father is usually the strict one. He is accorded the highest respect and a no from him is almost, always a no, even in the case of smartphone access; two, that young children are mostly in their mother's care as she stays at home or juggles work and home while the father goes to work. This characteristic feature of Indian nuclear family is applicable to the parents in this study's sample.

d) Children access to digital devices was enabled by an older sibling, cousin or others: Young children mostly learnt the various techniques of using a digital device (locking/ unlocking the device, sharing files over Bluetooth, using Google search or YouTube search, installing apps among others) from an elder sibling, friend, or family member. Young children learn new things through observation and imitation. The

findings from this study reveals that for young children, older children in the family

are the 'role models' for exploring and using the features offered by digital devices.

> *P5: Our 12-year old neighbor has introduced my son to internet on TV. We had deliberately not used the feature knowing that if did it the kid would also want to do it, but yesterday the neighbor kid meddled with the TV and figured it out and now both he and my son use internet on the TV. [P5, father of 8-year old boy]*

> *P3: (Sic) Her brother (14-year old) has taught her a few games that she now plays on her own.*
> *P2: She wouldn't have learnt it but for her brother [P2 and P3, parents of 5-year old girl]*

Nature of use

When, why, and how do children under ten in Manipal use digital devices for? The

research found that children engaged with a variety of different content on the digital

devices and used different applications to achieve it. The use of YouTube was found

widely for watching entertainment videos. The OfCom's children and parents' media

use and attitudes report (2014) too noted a similar trend. Other widely used

applications included WhatsApp, Hotstar, and Amazon.

a) WhatsApp: WhatsApp was used for family communication including sending text,

voice and picture messages to family members and making WhatsApp video calls.

One exceptional use of WhatsApp was noticed in the 5-year old child of P14. His

activities on WhatsApp included sharing links of songs that he liked on YouTube, and

random text and voice messages to his father and other family members.

Here is an excerpt from the interview:

> *P14: Yes…and my son is on WhatsApp.*
> *R: your son has an account on WhatsApp?*
> *P14: If I come across any art references for my daughter, I send it to my son on WhatsApp and he shares it with his sister. Similarly, he will do a drawing,*

he will take a picture and send it to me. And he will send me links of songs that he likes.
R: He knows how to copy and paste a link from YouTube to WhatsApp or rather share a link?
P14: Yes…he will send my links and he will send me voice messages…I love you daddy like that. And he has a group where my mum and dad – his grandparents are there. He will share photos to that group.[P14, father of 5-year old boy and 9-year old girl]

b) Hotstar: A 6-year old child, the daughter of P2 and P3 used Hotstar, a popular Indian Video-on-Demand, online streaming service to watch a daily Kannada language soap, *Neeli*. Such was the child's obsession with this daily soap that she demanded her father's smartphone to watch it every day. Excerpts from the interview with parents, P2 and P3:

> *P3: She likes to watch her favorite soap, Neeli.*
> *R: So, she uses the phone to watch the serial?*
> *P2/P3: We disabled the cable connection on TV. So, she uses the phone to make up for it.*
> *P3: Jio offers 1 GB of free data every day. She watches it until that 1 GB is consumed entirely.*
> *R: Does she watch the said serial every day?*
> *P3: Yes. Everyday. On weekends (Saturday/Sunday) when the serial is not broadcast, she watches old episodes of it.*
> *R: What application does the child use to watch the serial?*
> *P3/ P2: Hotstar.*
> *R: Does she demand the phone?*
> *P3: Yes, for the serial, she will ask for the phone.*
> *P2: If she feels the need to watch something, she will take it.[P2 and P3, parents of 5-year old girl]*

c) Amazon: A 7-year old child used his mother's phone for online shopping of books using Amazon's phone app.

> *R: So you said he orders books on Amazon, how did that happen?*
> *P9: He saw me do it…and started doing the same. In one instance I didn't even know when he had ordered…after the book was received itself I came to know about it. [P9, mother to a 7-year old boy]*

The above findings suggest that under 10-year old children use digital devices to engage in various activities and consume a wide variety of content and are proficient in using various platforms including YouTube and online streaming services. The

findings resonate with larger national level trends in the US and UK (Rideout 2017) (OfCom 2014).

b) Digital devices are digital distractors or pacifiers: An important finding that emerged from this study is that parents have and continue to use their smartphones as digital distractors for kids, especially during meal times.

> *P5: She doesn't sit one place… So my husband downloaded some rhymes and ads (she likes ads). He has put it all on the USB which I connect to the TV…But I do this only when she is not feeding and I don't have any other go. [P5, mother of 1-year old girl]*
>
> *P10: She was a fussy eater, so my wife would show her videos on YouTube on the computer. [P10, father of 7-year old girl]*

Using digital devices, especially as digital pacifiers and detractors is a disturbing development (Kabali, et al., 2015) (Radesky, Schumacher and Zucke 2015). This study points out that the same is prevalent in Indian context too.

c) Young children use the digital devices independently or with minimal assistance: Listening to the parents about their children's proficiency in using digital devices tells that children use the devices independently or with minimal assistance. Parents also acknowledge that the kids know more than they do.

Excerpts:

> *R: Did you download the games?*
> *P8: No, he himself downloaded it. He went to Google Play and downloaded. Initially he didn't know how to use it but since he uses the phone daily. Every day for half an hour to one hour, he automatically learnt it. Day by day practice (Sic). [P8, father of 5-year old boy]*

> *P7: I did not know what Share.it or Bluetooth was. But he knows all about it and how to use it. [P7, father of 8-year old boy].*

> *RI: Is he proficient in searching for the desired songs on YouTube?*

P14: Yes. He will ask for the spellings or use the voice search. [P14, father of 5-year old boy]

Children in this study possessed superior digital skills. Five year olds independently used Video-on-Demand services and shared YouTube links to their fathers on WhatsApp. While searching for desired information, they sought and got help from parent for the correct spelling of content or used the applications' search history or used their voice search feature to make up for their poor spelling skills. Market research agency, Nielsen's Mobile Kids 2016 report summarised in a blogpost on their website terms this development like this: "today's kids aren't just carrying smartphones—they're mastering them. In fact, many are just as skilled as their parents—or even more so in some cases." (Mobile kids: The parent, the child and the smartphone, 2017). This is an aspect that other scholars of media research and child psychologists (Freed, 2015) have pointed out.

d) Children depended less on digital devices when parents highly encouraged and offered adequate alternate stimulation: Our study found that children who depended less on digital devices involved in non-media activities like reading, making puzzles and drawings, outdoor play among others. Parents too have acknowledged this with some parents even attributing the lack of alternate stimulation as a primary reason for their children's dependence on digital devices.

Here is an excerpt:

> *P10: If it is holidays it is the biggest worry for me because now a days they don't go outside. Majority of her time goes towards digital devices – that's a concern.*
> *Earlier when we were young we had enough outdoor spaces – grounds – to play. But now there are buildings everywhere and no space for children to play. Even the roads are unsafe. So we keep the kids at home; for us it is safety.*
> *She says she is getting bored. What will I tell her? There is no park near our house or children of her age; she doesn't play much with the neighborhood kids.*

> *R: So would you believe that the fact that there is no alternate stimulation to her is making her dependent on the mobile devices?*
> *Yes, that factor is highly there. [P10, father of 7-year old girl]*

In another example, parents P11 and P12 rely on story books and book-based activities to keep their children off-smartphones.

> *P11: Whenever we go somewhere, we all carry a book and we try to engage ourselves, no matter what. And if he (son) gets annoyed or doesn't want to read, then I read to him; involve myself. We wanted to set an example to other parents too.*
> *P12: From the time she (daughter) was in my womb, I used to buy children's books and read aloud, the same with him (pointing to son). When he was 6 months old I would read to him, he used to love it. So from that time till today, I have made it a point to read a book every night. That way it was conscious decision from my side to keep them away from smartphones. [P11 and P12, parents of 5-year old boy and 10-year old girl]*

Research by Luke (1999), Chassiakos, Radesky, Christakis, Moreno, & Cross, (2016) and scholars like Heitner (2016) and Freed (2015) have pointed out to the hazards of screen-based media – high level of audio, visual, and touch-based interactivity – as a factor that easily attracts and keeps young children hooked to digital devices. And therefore, their research calls for parents to find and provide effective alternatives to screen-based media. These alternatives include creating an unplugged zone in the house, inculcating reading habits, and encouraging outdoors activities. This study found that some of the parents in Manipal were already practicing some of these techniques very successfully while some others were struggling to find solutions to this.

Theme 2: Parents' attitudes towards digital technologies and their children's use of digital devices

Parents interviewed for this study expressed both favourable and unfavourable attitudes towards digital technologies in general and smartphones in particular. Below are the excerpts from the interviews:

a) "Internet is fine, it is educational"

The findings of our study tell that parents in Manipal have mixed attitudes towards digital technologies. Excerpts from the interview:

> *P10: Just a few days ago – I didn't want her to get overexposed to radiation (on the smartphone). So, I showed her how to connect the phone internet to the PC and use internet (for viewing kids channels on YouTube). I taught her how to do it. So my worries are a little less now because internet is fine: they will learn something new. And plus, educational games – they will make learning fun. [P10, father of 7-year old girl]*

> *P7: In a way, using a digital device aids in developing mental skills but if they use it for games and YouTube videos which will give them access to a lot of other things then it can be dangerous but otherwise for their mental development, internet is useful but it has its affects.[P7, father of 8-year old boy]*

The findings of this study are in tune with previous studies that gauged parents' views about digital technologies (Dinleyici, Carman, Ozturk, & Sahin-Dagli, 2016). Parents today are familiar with and also use digital technologies and devices at workplace and home. In fact, Blum-Ross and Livingstone (2016) term such parents as a "new generation of parents" who are making "increased investments in digital technologies as a means of furthering their children's education, maintaining social and familial connections or simply facilitating and enjoying daily life" (Blum-Ross and Livingstone 2016).

b) "If you don't give them certain digital devices they will lag behind"

Parents in Manipal felt that it was important and essential for their children to be familiar with digital devices and technologies because everyone around them – in schools especially – knew and used it. Parents feared that if their children didn't have the necessary digital skills of the digital era they would lag behind, which of course to absolutely unacceptable to any Indian parent given the amount of importance attached to academic perfromance in Indian society. Parents in India often think that if their

children are not proficient in the lastest technology or digital device out in the market, it may impair their social and academic development.

Excerpts:

> *P6: I also have to add here that if you don't give them certain digital devices they will lag behind compared to other children…the other day I noticed, another child from son's class out performed him because he did not have access…*
> *Even with rhymes (pointing at daughter) if we don't expose them to it through technology they will never learn now a days. Other children may be exposed. Whether I should give or not; should I encourage or not is a challenge. [P6, father of 8-year old boy and 1-year old girl]*

c) *"Digital devices and children? It's a generational thing, you can't do anything about it"*

The third interesting view expressed by the parents is that it is natural for children to use digital devices because "it's a generational thing".

Excerpts:

> *P1: Today's generation is like that; they need mobiles for eating too [P1 mother of 8-year old boy]*

> *P5: We can't keep our children from using it (digital devices), now generation is like that [P5, mother of 8-year old boy and 1-year old girl]*

Parents brushing aside children's digital media dependence as a generational thing is a cause for worry. Yes, it is true that modern world's children are digital natives (Freed, 2015) who quickly adopt new technologies and use it with ease and proficiency, but, Heitner (2016) also cautioned against equating children's good digital proficiency with good digital citizenship. Therefore, when parents think that their children use digital devices like every other kid on the block, it shows that they have taken young children's digital media usage too lightly and consider it to be a normal development.

d) *"Smartphones are harmful"*

There were parents who expressed a high amount of displeasure towards the smartphone.

> *P11: Smartphones – No. I was too much concerned about how it might affect them. That way it was conscious decision from my side to keep them away from smartphones.*
> *P12: We know how much harmful they can be. There are proven research studies that tells how they are adversely affecting children; they are hazardous to the health. In fact, I have also decided that I would use the phone in a limited manner… [P11 and P12, parents of 5-year boy and 10 year old girl]*

These findings tell us that every parent has a different viewpoint about the merits and demerits of digital technologies. Their different attitudes may be influenced by personal experiences or other social factors like their own upbringing, socialization, and family environment. This study found that parents in Manipal had positive, negative, and mixed attitude towards digital devices. However, this study cannot tell if both the parents in a given family held a common view or if there were contradictions. Nevertheless, this study tells that parents' attitudes may directly influence the way in which they manage and control their children's digital devices usage. For example, one parent, P8 who believes that internet is useful doesn't limit his five year old son's use of digital devices. On the other hand, the couple, P11 and P12's attitudes towards digital media in general and smartphone in particular has made them, in their own words, "consciously keep them (their children) away from it" by facilitating their children's involvement in non-screen activities like reading and play.

Theme 3: Parents' actions to manage and monitor children's use of digital devices

The study found that parents in Manipal use five distinct but not mutually exclusive ways to monitor and manage their children's digital devices access and use:

a) Through conversations:

Parents use the power of talk to help their children realise the merits and demerits of digital devices:

> *P7: I often talk to him about how games can be misleading – I tell him how internet games can be harmful. [P7, father of a 8 year old boy]*

b) Through tech tools:

Enabling passwords or activating parental controls on apps or having effective firewalls were a useful method that parents in Manipal used in order to manage their children's digital devices usage.

Excerpts:

> *P6: My son uses WhatsApp to watch videos. We are on many groups, so videos do get downloaded. So we had to put in restrictions and passwords. [P6, father of 8-year old boy, and 1-year old girl]*

> *P14: On YouTube and in fact, even on my mobile I have restricted mode is on. So content is safe, no misleading videos or even advertisements are unlikely to come. I have checked it. [P14, father of 5-year old boy]*

c) Through deception:

It was found that parents also told lies to their children in order to prevent their child's access and use of digital device of certain applications within the devices. One common form of deception was this: parents deleted an application or restricted a channel through password but told their children that someone else – like the 'internet-person' or 'cable-man' had done it.

> *P10: I don't give my phone to her. I have told her my personal phone belongs to the office…that's how I cheated her. [P10, father of 7-yaer old girl]*
>
> *P6: We put parental lock on some of the channels on TV, but he thinks it is the cable- uncles who did it; that's what we've told him. [P6, father of 8-year old boy]*
>
> *P2: We had enabled the password for YouTube, and she would throw a tantrum and demand we put the password. Finally the internet people deleted YouTube. [P2, father of 5-year old girl]*
>
> (Note: the father says this because the child is in the room as this is being discussed. In reality, the parents deleted the application and have had to tell that the internet people deleted it).

d) Parent's own periodic monitoring of the phone

> *P2: On WhatsApp, I delete videos and images that I think are inappropriate for kids.* **[P2, father of 5-year old girl]**

> *P8: Since most of the time the phone is with me, if I come across anything that is wrong or incorrect for kids, I delete it. For the child's sake, I also installed mobile anti-virus. I also check my phone once in three days to see if it overused, if it hanging, or if there are unwanted games etc. If there are more than necessary games, then I will delete it. [P8, father of 5-year old boy]*

From the above excerpts, it is clear that parents in Manipal have put in place some form of strategy to manage and monitor their children's digital media usage habits. Some of the strategies employed are positive, for example, the use of honest, open talk. Heitner (2016) notes that conversations with children about how digital devices work, what about them is good and what is not or how to make the most efficient use of those devices are extremely useful in guiding children, as well as winning their trust, and making them responsible digital citizens.

Parents' reliance on tech tools to make their devices as child-friendly as possible denotes parents' digital literacy skills wherein they are aware of the technical best-practices to keep their devices safe from viruses, malwares, and inappropriate content. It is unfortunate that parents have had to use deceptive tactics to prevent access or usage of digital devices but this could also be because the children in this study are under ten years of age. Young children can be demanding in choices of everything and often don't heed to parents logical explanations for avoiding something. This could be one of factors for parents to employ deceptive methods which in their view is essentially a safe, easy way to put an end to their children's excessive demands for digital devices usage.

Conclusions

The study examined the digital device usasge of children under 10 years of age and their parents perception .The data was anaalysed under three broad themes:- parental attitudes towards digital technologies and their children's use of digital devices;two,the nature of access and use of digital devices by young children and their parents' actions to manage and monitor children's use of digital devices.

While probing the nature of access and use of digital devices by children,it was found that they had easy access.Mostly multiple smartphones in a single household in addition to tablets,laptops,desktops,smart TV and game consoles. Few Children under two had access to digital devices enabled by parents.The devices such as smartphones were used as digital pacifiers and distractors when children made a fuss about eating.The father's phone was inaccessible.It was always an elder sibling or cousin who helped the children master the features of digital devices.

A popular activity for children was watching videos on the smartphone/ internet TV/Tablet.In addition,children were found using Hotstar for entertainment and Amazon shopping app for online shopping.They used Whatsapp to make instant,free calls to grandparents and share text messages on family groups.Using voice search they looked for content on Google.The children were adept at using the digital devices in their homes independently or with minimal assistance.

The parents' attitude towards their children 's digital media use varied.Some parents opinioned that digital technologies and devices are beneficial to the children.Some parents felt that children's use of digital devices was a "generational thing".They encouraged its use-even by very young children-to make them competent and equipped enough to meet the challenges of the digital age.Different strategies were practised by parents to monitor and manage their children's digital media use:-using

conversation,using tech tools,by entirely limiting the use of digital devices and by parents personally scanning the phone for risks.

The study finds resonance in Buckingham (2004)'s report on Media literacies.The study also noted that children depended less on screen-based devices whenever they received non-screen based alternatives like books,games or other outdoor activities.

Thus, it is clear that young children's access, adoption, and use of digital devices increases the challenges for parents, educators, caregivers, and even policy makers to help them correctly and positively navigate their digital media environment.

To conclude, the findings from this study is relevant proof that there is an increse in young children's ownership, access, and use of digital devices. As new digital technologies find their way to family homes and digital devices become affordable, young children's use of digital devices will see an upward surge in the future. However, as Christakis (2014), Freed (2015) and Heitner (2016) have pointed out concerns about overuse and wrongful use by children exists among parents, educators, and caregivers. Parents in this study have largely enabled their children's digital media use and nurture positive attitude towards digital media in general and their children's digital media usage. However, as researchers and child-care experts continue to debate about the benefits or lack of it of digital media on young children and its abilities to replace important life and social skill life like self-regulation, empathy, family communication, problem solving, and adjustments among others, parents have to question themselves and find out how their young children – whose reasoning abilities are still underdeveloped – are navigating the digital media ecosystem: are they digital devices correctly and responsibly? This presents an opportunity to policy makers, child-focused professionals, and pediatricians to equip

parents with information resources that will help them understand and guide their children's digital media choices.

As internet has become cheap and affordable for families with low income;there is increased penetration of smartphones. Undoubtedly, children in India have more access to digital media and digital content like they have never had before. From educational apps to video streaming services exclusively for kids, they are spoilt for choice. Therefore, the findings from this study will offer enough valuable insights to other parents, educators, and researchers to apply them to their specific cultural and social contexts aand understand digital media habits of young children in their families and communities.

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