

Influence of Smart Gadgets on Pre-school Children

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Abstract: Over the past few decades, the role of smart gadgets in our daily life routine has increased and it has become an integral part of human development. Though gadget usage creates a lot of negative impacts on human life, people still refuse to come out of the gadget world. People belonging to different age groups including teens, adults and even preschoolers (children between ages of 2-5) are attracted and addicted to the usage of smart gadgets. The fact that the preschoolers are addicted to gadgets is a serious issue that should be taken care of. Children, being the future generation of the world are addicted to these gadgets and the parents should understand that this results in impairment of the child's growth development. In the present work, a survey has been conducted among a group of 50 parents to study the impact of smart gadgets in the day-to-day life of their children. From the survey, various important data like the vastly used smart gadget, time spent on the gadgets and negative impacts of these gadgets on the children have been elucidated. It has been observed that most of the children are addicted to television and mobile phones. An alarming 30 percent and 10 percent of the children are enjoying a screen time of more than 5-6 hours of television and mobile phones respectively per day. This is observed to be against the American Academy of Pediatrics. This has caused negative impacts such as admanacy and sleeping problems in children. Further, it has been observed that in a few cases parents expose the children to smart gadgets so that they can have some time for themselves and other household chores.

Keywords: Smart gadgets, preschool children, mobile phone, television, impact.

INTRODUCTION

In recent times, people feel that smart gadgets are making our day-to-day work easy and thus helping us in leading a stress-free life. Various smart electronic gadgets such as mobile phones, tablets, computers, [1] television, [2] sensor devices, etc., have become very common in every house for daily life. Among these devices, mobile phone and television are the two most vastly used elements that rule the people's attention and time. [3] Lenhart A (2010) says people of all age groups including kids, 28 percent teenagers, adults and the old aged are equally influenced by these gadgets. Among kids, it is observed to rule their entire childhood phase. On a shocking note, we come across children who claim that mobile phones are their best friends. This is an alarming situation that should be looked into and acted upon.

[4] In the early childhood period, parents are supposed to be the children's friends and caregivers. It is said that each time a parent speaks with their children, the brain connections are stimulated thus sparking its development. [5] However, the use of smart gadgets become an obstacle to this development.

According to WHO 2020, over 300 million children younger than five years of age are exposed to social violence due to the use of electronic gadgets. [6] The children become addicted to a virtual world. [7] Since the parents are very much involved in the usage of gadgets, it becomes difficult and at times impossible to get the children out of this virtual world to the real world.

Early childhood development (ECD) encompasses physical, socio-emotional, cognitive and motor development between 0-8 years of age (World Health Organization). The United Nation's Children Fund (UNICEF) states that 80 percent of the baby brain is formulated by the age of 3 and about a minimum of 15 minutes of active playtime involving physical and mental activity will spark thousands of brain connections. [8] But these smart gadgets are reducing the children's physical playtime and it makes them lazy. Moreover, in families where both the [9] parents work, the children are left-back with the baby sitters who indulge the child in using mobile phones to make their work easy. Also, due to the prevailing child abuses like sexual assaults and kidnapping happening in society, the parents are scared to send their children out of their homes. This makes the child helpless and they eventually end up using mobile phones to engage themselves and over the time they get addicted to it. **In the USA, 'One of the Healthy People' 2020's goals is to "improve health, fitness, and quality of life through daily physical activity" (US Department of Health and Human Services, 2010) [10].**

In the present study, a survey has been conducted among the parents to understand the child's daily routine and also the routine of the parents with their children. From the conducted survey the following were elucidated:

- The most commonly used smart gadget by preschool children
- The problems faced by children using smart gadgets
- The day-to-day influence of smart gadget on children
- Information on the impact of smart gadgets on children activity and child behaviour

METHODOLOGY

Parental survey

To study the "Influence of Smart Gadget on Preschool Children" a survey was conducted among the parents from which various data like the commonly used gadget, problems face due to the use of objects and its influence on the children were elucidated.

The parents to be surveyed were selected based on certain criteria which are as follows:

- Sample criteria
- Area of sample
- Sample size
- Sampling tool

Sample criteria:

The criteria for the parents selected for the study are those with kids between the ages of 2 to 5 years which fall under the purposive sampling technique. Kids of the age of 2-5 years are known as preschoolers. During these years, children change from clumsy toddlers into lively explorers of their world. Each child grows and gains skills at his or her own pace. It is common for a child to be ahead in one area, such as language, but a little behind in another.

Area of sample:

The sample people selected for the study belong to an area named Avadi. It became a new Municipal Corporation in the Chennai Metropolitan Area and became the city corporation of Tamil Nadu in 2019. It belong to the Tiruvallur district, with a population of 345,996, with a sex-ratio of 970 females for every 1,000 males. Among the total population of this area, 36,091 were under the age of six. Avadi is divided into 48 wards and the present study was conducted in ward number 18 selected with a population of 345,996.

Sample size:

Ward number 18 of Avadi has a population of 3,45,996, out of which 175,658 are male and 170,338 are female. And the child under the age of 6 is 36,091. Out of these children, 50 samples were selected based on a few more criteria set for the parents.

Sampling tool:

To find the impact and level of usage of mobile among preschool children, a direct face to face interview schedule was conducted among the selected parents having kids under 2-5 years after framing standardized questions. The objective of the interview is to collect data and information by asking questions, and probing the answers that are given by the interviewee. It may even be described as the "interviewer's script".

RESULTS AND DISCUSSION

The survey was conducted among the parents of 2-5 years kids, to find out the "**Influence of Smart Gadget on Preschool Children**". 50 parents were selected and the general details are discussed in the table below (Table 1).

Table: 1: General Details

| Age in years | Numbers |
|---------------------|----------------|
| 2-3 | 20 |
| 3-4 | 15 |
| 4-5 | 15 |

Children life pattern:

From the survey, the children's (kids between the ages 2 to 5 years) day-to-day life pattern was observed. Their various activities are summarized in Table 2 for the reader's reference. It can be observed that the children mostly wake up between 7.30 am-8.30 pm so that they could get ready for the school which starts around 9 am. Most of the schools close as early as 1 pm and once they reach home they have their lunch and go for their afternoon sleep which lasts for a maximum of 2 hours. Once these children wake up they indulge in their own activities. From the survey, it was observed that very few children are taken outdoor to play provided they are accompanied by their parents, grandparents or caretakers. These children are mostly taken to the parks or play spaces near their living place.

However, it is to be noted that most of the children are left to play indoors only. Of these children, very few of them are indulged in some useful activities like board games and play toys. On the other hand, the other children are left to watch TV, play and use mobiles. Finally, after the play, the children are made to hit the bed between 9.30 pm to 11.30 pm.

| Activity List | Time |
|------------------|----------------|
| Wakeup Time | 7.30am-8.30am |
| School Time | 9am-9.30am |
| Reach Home | 12pm-1.30pm |
| Afternoon Sleep | 1pm-4pm |
| Indoor Activity | 5pm-10pm |
| Outdoor Activity | 4pm-5pm |
| Night Sleep | 9.30pm-11.30pm |

Commonly used smart gadget:

When we consider a smart gadget, mobile, television, tablets, computer, laptops and play stations come under its category. The usage of these smart gadgets by the children based on the number of users per gadget is depicted as a bar chart in Figure 1. From the figure, the most widely used smart gadgets among the preschoolers are observed to be mobile phones and television. Almost all the children are reported to spend their time in front of them. The next widely used gadget is a computer/laptop. And very few are observed to own and use a tablet or a play station.

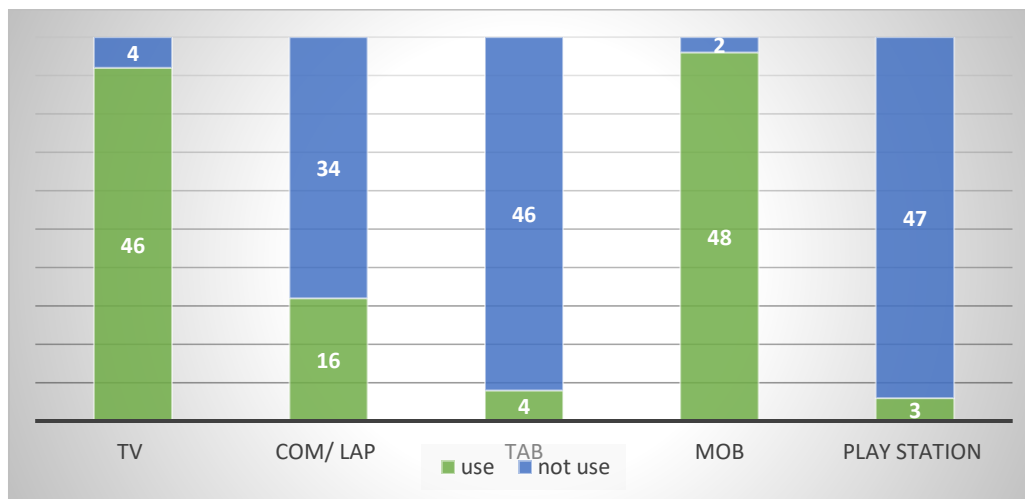


Figure 1. The commonly used smart gadgets and the number of children using each of the gadgets.

Time spent on smart gadgets:

Time spent on watching television:

From figure 1 it can be observed that 46 children watch television during their time at home. The time spent by the children in watching TV is represented as a pie chart in figure 2. It can be observed from the figure that about 82 percent of the children spends more than one hour in front of the television. Of these children, the worst-case shows that about 30 percent of them are spending a whopping time of more than 6 hours watching the TV. The American Academy of Paediatrics says that children of 2-5 years can be given a screen time of not more than 1 hour per day. However, only 18 percent of the children considered in our study is following these standards. The other 82 percent of the children who are watching it for more than one hour per day are at an alarming risk.

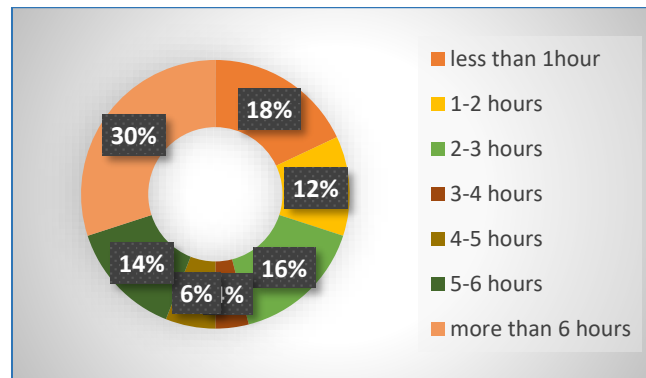


Figure 2. Time spent by the children in watching television

Time spent on mobile phones:

The time by the children in using the mobile phone is represented in figure 3. While The American Academy of Paediatrics says that no mobile screening time should be given to children under the age of 1 years, the shocking results of the surveys show that almost 18 percent of these children are exposed to 5 hours of daily usage to mobile phones. Further, about 12 percent of them enjoy a mobile screening time of 1 to 2 hours per day, 20 percent of the children use for 2-3 hours and 10 percent of the children use it for less than one hour.

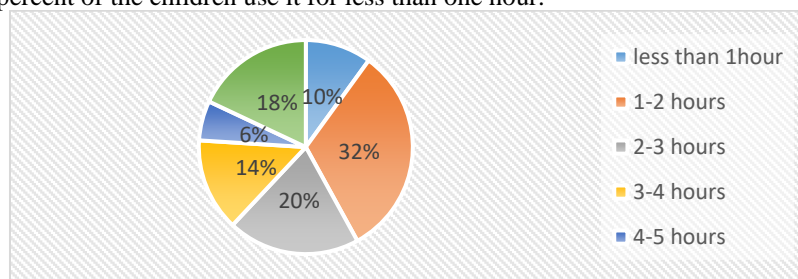


Figure 3. The time spent by the children in using mobile phones.

Impact of using smart gadgets:

The use of smart gadgets has been reported to result in many negative impacts on children. From the survey, the various negative impacts caused have been identified through the parents' interview. The various impacts observed have been represented below in figure 4. The first major problem observed is that the child becomes very much addicted to mobile usage and becomes cranky if the gadget is not given to her/him. The children are reportedly being adamant and they cry until the parents let them use it again. The second most widely observed negative impact among the children is trouble sitting idly. These children are addicted to mobile phones to such an extent that they cannot sit in a place and play with other stuff in the absence of the gadget. Moreover, the children using mobile phones face sleeping problems and they eventually become late sleepers. This causes various side effects health-wise and also the child's concentration level and education. Few other impacts observed are hyper activeness and anxiousness.

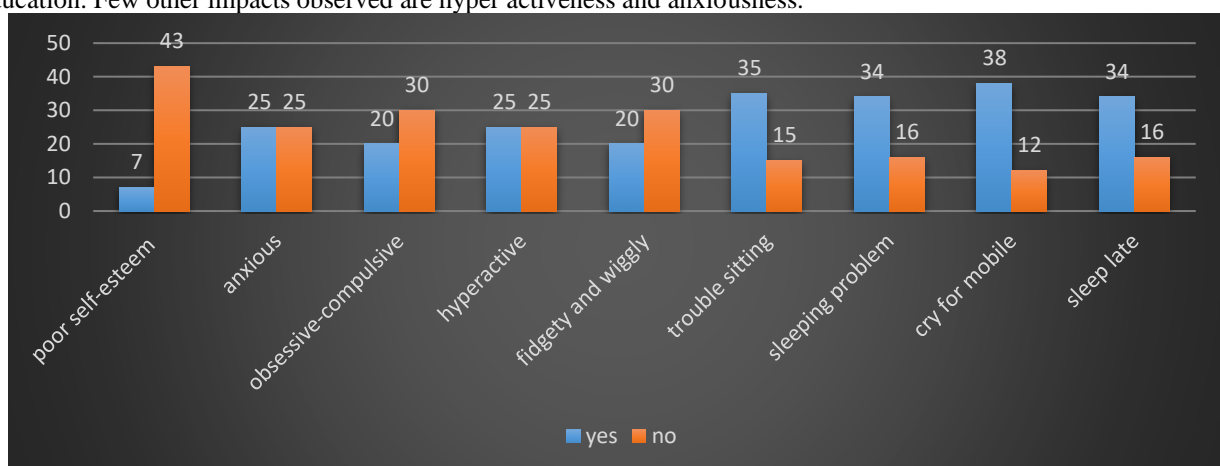


Figure 4. The various negative impacts of using smart gadgets

Reason for the child's attraction towards gadgets:

Few of the reasons why the children are getting attracted to the gadgets are:

- Super-attractive friendly features used in smart gadgets
- Attractive advertisements in media
- Peer group compulsion and
- Various children friendly addictive games

In many cases, it has been observed that the parents themselves provide smart gadgets to the children as a method of engaging them so that they can concentrate on their work and other household chores. Few parents do it just to get some quality time for themselves while the children remain quiet without nagging them.

CONCLUSION

With the recent developments in technology, the use of smart gadgets in our day-to-day life has increased. In the present work, a survey has been conducted among a group of parents whose children are between the ages of 2 to 5 years selected based on certain criteria. From the survey, various interesting data such as the daily routine of the children, the most popular smart gadget among them, the amount of time they spend using it and the various negative impacts they encounter due to its usage have been elucidated. It has been observed that television and mobile phones are the two most attractive and widely used smart gadgets among children. About 82 percent and 90 percent of the children spend more than one hour in front of the TV and mobile phones. And few of them use these gadgets for an alarming period of 6 hours per day. The various negative impacts of using these gadgets are admancy, unhealthy sleeping habits, and anxiousness.

REFERENCES

1. Judy Wajcman. Michael Bittman and Judith E. Brown." Families without Borders: Mobile Phones, Connectedness and Work-Home Divisions Sociology.", vol. 42, issue. 4 , pp. 635-652, 2013.
2. Alkar A and Buhur U. "An Internet Based Wireless Home Automation System for Multifunctional Devices." IEEE Transactions on Consumer Electronics, vol. 51, issue. 4, pp. 1169-1174. 2015.
3. Lenhart Amanda. Purcell Kristen. Smith Aaron. Zickuhr and Kathryn. "Social Media & Mobile Internet Use among Teens and Young Adults." Millennials Pew Internet & American Life Project.2010.
4. Amy N. Mendenhall and Katherine Mount."Parents of Children with Mental Illness: Exploring the Caregiver Experience and Caregiver-Focused Interventions." Families in Society: The Journal of Contemporary Social Services. vol. 92, issue. 2, pp. 183-190. 2018.
5. Tushti .P. Bakrania. "Impact of Social Media on College Students". *International Research Journal on Advanced Science Hub*, 2, Special Issue ICARD 2020, 2020, 236-239. doi: 10.47392/irjash.2020.126
6. Urfana Amin Moharken; S. Mufeed Ahmad. "Need For Learning Materials at Early Grades as Per Nai Talim in J&K – An Empirical Study". *International Research Journal on Advanced Science Hub*, 2, Special Issue ICARD 2020, 2020, 139-148. doi: 10.47392/irjash.2020.110
7. Nirwana Nirwana. Musda Mappapoleonro A and Chairunnisa Chairunnisa. "The Effect of Gadget Toward Early Childhood Speaking Ability."Indonation Journal of Early Childhood Education Studies, vol. 7. Pp. 2. 2018.
8. Rebekah J Willett."The Discursive Construction of 'Good Parenting' and Digital Media – The Case of Children's Virtual World Games." vol.37 issue.7. pp. 1060-1075. 2015.
9. Kerry Devitt and Debi Roker. "The Role of Mobile Phones in Family Communication, Children& Society" vol. 23. issue.3. pp.189-202. 2009.
10. Venaswari. Hanna and Tyastiti. "The Impact of the Use of Gadgets on the Development of Children 3-6 Years of Age" The Southeast Asia Journal of Midwifery. vol. 6. 2020.
11. Nick Turner. Steve Granger. Sean Tucker. KevinKelloway E. "Parents' work injuries and children's mental health: The moderating role of children's work centrality Parents' work injuries and children's mental health: The moderating role of children's work centrality, Journal of Safety Research, vol. 77. pp. 61-66.2021
12. Catherine E Wolf, "Jungle Gym Playroom: Program Development Plan." The University of Toledo. pp. 120. 2013.