Preschool Mothers and Teachers Views Towards Children Usage of Electronic Gadgets

Sowmya AS¹, Manjuvani E²

¹PhD Graduate, SPMVV, Tirupati, India ²Professor, Department of HDFS, SPMVV, Tirupati, India

Abstract— The purpose of this research paper is aimed to study the opinions and suggestions of preschool mothers and teachers towards children usage of electronic gadgets. The sample comprised of 200 mothers and 60 preschool teachers selected from twin cities of Hyderabad, Telangana State. The data was collected by using interview schedules. Results reveal that 62% of mothers perceived electronic gadgets have both positive and negative impact on children. Seventy percent of mothers suggested that children can be joined in the hobby classes and 60% suggested to engage children with indoor and outdoor games to reduce screen time. 80% teachers mentioned that gadget usage creates negative impact on preschool children and 65% stated that it causes health problems in children. Seventy percent of teachers mentioned that parents need to engage children with play activities and divert them from the gadget usage.

Keywords: Mothers, Teachers, Preschool children, Gadgets, Screen time, Perceptions, Suggestions

I. INTRODUCTION

Children are growing up in a world where technology is integrated into many aspects of daily life. Fletcher et al (2014) claimed that 13% of 3-4 year olds spend over 4 hours a day in front of screens at home. Barr and Lerner (2014) found that 38% of children under the age of 2 had used a mobile device, in comparison to 10% in 2012. Thus the largest increase in usage of mobile phones among two to four year old children was 80% in 2014, where as it was 39% in 2012.

Parental involvement plays a key role on child's development during early childhood period. According to Erikson survey report (2016), majority of the parents mentioned that they use technology along with their child on a daily basis for up to two hours. Eighty six percent of them reported that they were satisfied with how their young children use technology, relating technology to benefits associated with child development and literacy. More than half of them opined that technology supports school readiness and impacts success in school.

In another survey, 68% of parents expressed that children are more engaged when educational activities are carried out on tablet devices and 84% believed that tablet devices provide educational benefits to their children (Thiruchelvam, 2014).

Same as parents' perceptions, studies have shown positive attitudes of teachers towards children technology usage. Blackwell et al. (2014) found that early childhood teachers' attitudes towards the role of technology are of great significance in terms of technology use. They mentioned that understanding the current practices, views and beliefs of early childhood teachers towards the use of technology can play a critical role to integrate new technologies since they are the main practitioners in early educational settings.

In a recent study, Rodrigues et al. (2020) results demonstrated that children between the ages of 3 to 10 spend more time on screens than is advised, especially for boys. The amount of time spent on screens increases as children get older and younger. The researchers recommended that Efforts must be made to reduce unhealthy behaviors among children and their parents equitably.

Undoubtedly, mothers and teachers play most important role in shaping preschool children's behaviour. Hence it is important to understand their opinions and suggestions about children screen time. The present research paper is aimed to study the opinions and suggestions of preschool children's mothers and teachers toward children usage of electronic gadgets.

II. METHODOLOGY

II.I. SAMPLE

The sample of this study consists of 200 mothers of preschool children and 60 preschool teachers selected randomly from eleven private preschools of Hyderabad city. Table 1 shows the background information of sample distributed as per their age and education.

Table 1. Distribution of Sample as per their Age and Education

Age Mothers (N=200) Teachers (N=60)

	N (%)	N (%)
Below 30 years	76 (38.0)	29 (48.3)
Above 30 years	124 (62.0)	31 (51.7)
Education		
Undergraduates	99 (49.5)	41 (68.3)
Postgraduates	101 (50.5)	19 (31.7)

The above table shows that 62% of mothers belong to above 30 years age group and 38% mothers are in the below 30 years age group. Nearly half (50.5%) of the mothers are graduates and another half (49.5%) are post graduates.

Fifty two percent of teachers are in the age group of above 30 years and forty eight percent of them belong to below 30 years. Majority (68%) of teachers are graduates and 32% of teachers did their post graduation.

II.II. TOOL

Two questionnaires – "Mothers' opinions and suggestions towards their children usage of electronic gadgets" and "Teachers' opinions and suggestions towards their children usage of electronic gadgets" were designed and used for collecting the data. The primary respondents were preschool children's mothers and teachers. No time limit was imposed and subjects can choose multiple (more than one) answers from the options. The test re-test reliability of the above questionnaires with the gap of two weeks are 0.89 and 0.86.

III. RESULTS AND DISCUSSION

III.I. MOTHERS' OPINIONS AND SUGGESTIONS TOWARDS CHILDREN USAGE OF ELECTRONIC GADGETS

This section deals with preschool mothers' views and suggestions about children usage of electronic gadgets. The quality of interaction between the mother and child is more important than the amount of time spent together. Quality time plays a critical role in maintaining the mother-child bond (Bowlby, 1980). The below figure shows how much quality time mothers are spending with their children on a working day. Quality time includes mothers' conversing with their children, bed time stories, reading books, home works, playing games, involve in craft activities etc.

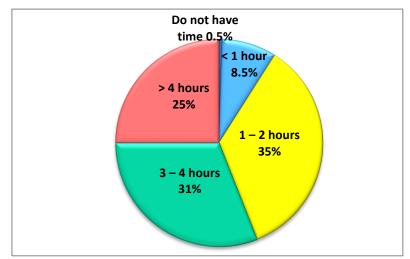


Figure 1. Quality Time Spent with the Child by Mother on a Typical Working Day

The above findings reveal that 35% of mothers are spending 1-2 hours quality time with their children on a working day. Nearly one third (31%) of mothers are spending 3-4 hours, one fourth (25%) of mothers are spending more than 4 hours with their children in a day. Few mothers (8.5%) agreed that they are able to spend less than one hour with their children on a working day. One mother (0.5%) mentioned that she is not getting time to spend quality time with her child due to longer working hours and household tasks. On a typical working day, how mothers are spending time with their children is presented in the table 2.

Table 2. Activities Done by the Child and Mother on a Typical Working Day (N=200)

Activity	Number	Percentage
Playing with child	145	73
Story telling	123	62
Helping in the studies	112	56
Taking them for outings	81	41
Conversation with children	64	32
Doing art and craft activities	41	21
Involve children in the household activities	34	17
Teaching new things	32	16
Unable to spend time with my child due to busy schedule	5	3

Nearly three fourth (73%) of mothers mentioned that they play with their children every day. Most of them said they enjoy playing indoor games like building blocks, puzzles etc. Sixty two percent of mothers shared that they tell stories to their children. Mothers said, preschool children are very much interested in listening to stories and they enjoy bed time stories.

Fifty six percent of mothers mentioned that they help their children in completing the home works every day. Forty one percent of mothers shared that they take children to different places like shops, super markets, parks etc. Around one third (32%) of mothers mentioned that they talk to their children every day about day today activities, school activities etc. Twenty one percent of mothers mentioned that they enjoy drawing, coloring activities and craft works with their kids. Seventeen percent of them expressed that they involve children in the household tasks and 16% stated that they teach new things to children. Three percent of mothers mentioned that they are unable to spend time with their children due to busy work schedule and household tasks. Table 3 shows mothers' views and suggestions on children usage of electronic gadgets.

Table 3. Mothers' Opinions and Suggestions on Children Usage of Electronic Gadgets (N=200)

Statement	Number	Percentage
Effect of Electronic Gadgets Usage on Children		
Electronic gadgets have both advantages and disadvantages	124	62
Gadgets will cause health problem in children	111	56
Parents need to monitor and guide children	102	51
Children can learn new things	98	49
Parents need to set time limits	90	45
Future addiction is a concern	68	34
Gadgets are useful for children	62	31
Gadget usage may lead to violent behavior	41	21
Gadget usage reduces the time spent on outdoor play	28	14
Avoid using the gadgets for children	10	5
Reasons for increased usage of electronic gadgets by children		
Parents are busy	141	71
Availability and easy access of gadgets	130	65
Lot of attractive features and apps which attract children	127	64
Entertainment	84	42
Increased nuclear families	55	28
As parents are using, children are imitating them	51	26
Single child	35	18
Lack of play area	32	16
Apartment culture	19	10
It became a status for parents to keep different gadgets at home and giving for	16	8
children		
Suggestions to engage children during free time		
Join them in activity / hobby classes	140	70
Provide variety of indoor games	136	68

Engage children in outdoor play	122	61
Take them for different places like zoo, parks etc	108	54
Tell them stories	64	32
Engage children with books	62	31
Engage children with relatives, neighbours and friends	32	16
Encourage children to participate in the household activities	22	11
Prepare time schedule for whole day and implement	3	2

For the question "effect of electronic gadgets usage on children", sixty two percent of mothers stated that gadget usage has both advantages and disadvantages. Fifty six percent mentioned that gadgets will cause health problems like visual problems, obesity, sleeping disorders etc and 51% reported that parents need to monitor children usage of gadgets. Nearly half (49%) answered that children can learn new things. Forty five percent of mothers opined that parents need to set time limits and 34% of them expressed concern about future gadget addiction of their children. Thirty one percent opined that gadgets are very useful and in contrast, 21% reported that gadget usage may lead to violent behaviour among children. Fourteen percent of mothers expressed that gadget usage reduces play time and 5% said it is better to avoid using gadgets.

The next question is "Reasons for increased usage of electronic gadgets by children". For this question, Around three fourth (71%) of mothers mentioned that due to increased dual earning families, parents are not able to spend enough time with their children and as a result children are spending more time with the gadgets. Sixty five percent of mothers answered that availability of various electronic gadgets for 24/7 and 64% of mothers reported that because gadgets have wide variety of features and apps children are getting attracted towards them. Forty two percent of mothers stated that gadgets entertain children. Twenty eight percent mentioned that due to increase in families, there is no one to engage children so they are spending time with electronic gadgets rather with family members. Nearly one fourth (26%) of mothers opined that as parents are avid users of gadgets, children are learning and imitating them. Eighteen percent answered that due to single child, the child does not have siblings to play and so spent time with gadgets. Sixteen percent of mothers said due to lack of play area and 10% stated that because of apartment culture children are using gadgets. Eight percent of mothers reported that now a days, it became a status symbol for parents to keep different gadgets at home and give to their children.

The last question is "Suggestions to engage children during free time?" For this question, majority (70%) of mothers mentioned that children should be joined in the hobby classes like dance, music, karate, swimming etc. Sixty eight percent of mothers stated that variety of indoor games can be provided and 61% said that children can be engaged with outdoor games. Fifty four percent answered that children should be taken to different places like zoo, parks, shopping etc.

Nearly one third (32%) opined that children can be engaged with stories and story books and teach them moral values. Similarly 31% expressed that need to engage children with book reading. Sixteen percent of them answered that children can be engaged with neighbours, relatives and friends so that it will be helpful for their social development. Eleven percent stated that children need to be engaged with simple household tasks and 2% suggested to prepare a time table with various activities and it should be implemented.

III.II. TEACHERS' OPINIONS AND SUGGESTIONS TOWARDS CHILDREN USAGE OF ELECTRONIC GADGETS

This section deals with preschool teachers' opinions and suggestions towards children usage of electronic gadgets. According to NAEYC report (2012), early childhood educators are the decision makers in whether, how, what, when, and why technology and media are implemented through applying their expertise and knowledge of child development and learning, individual children's interests and readiness, and the social and cultural contexts in which children live. Teachers must constantly make reflective, responsive, and intentional judgments to promote positive outcomes for each child on usage of technology.

Table 4 presents opinions and suggestions of preschool teacher about children usage of gadgets.

Table 4. Teachers' Opinions and Suggestions on Children Usage of Electronic Gadgets (N=60)

Statement Number Percentage

Effect of Electronic Gadgets Usage on Children		
Usage of gadgets has negative impact on children	48	80
Gadgets cause health problem in children	39	65
Gadgets are useful for children	28	47
Children learn new vocabulary and improve language skills	16	27
Children should be updated with technological trends	15	25
Children will be updated with current issues	11	18
Children may get addicted in the future	9	15
Reasons for Increased Usage of Electronic Gadgets by Children		
Dual earning families / parents are busy	45	75
Lot of attractive features and apps which attract children	40	67
As parents are using, children are imitating them	29	48
Entertainment	27	45
Availability and easy access of gadgets	24	40
Due to increased nuclear families	14	23
Lack of play area at home	11	18
Parents are not sending children out for play due to security reasons	9	15
Comparing with peers and others	7	12
Suggestions for Parents to Engage Children during Free Time		
Parents need to play with their children	42	70
Can take them for outings like parks, super markets, zoo etc.	41	68
Daily conversation between parents and children	31	52
Parents need to regulate their gadget usage timings as children imitate them	29	48
Teach moral values through stories	23	38
Have family meal time without gadgets	17	28
Involve children in the household tasks	8	13
Suggestions to Engage Children during Parental Absence		
Provide variety of indoor games	51	85
Engage children in the outdoor play	36	60
Engage children with book reading	34	57
Join them in activity / hobby classes	31	52
The Role of Home in Regulating Children on Usage of Electronic Gadgets		
Regulate children usage timings and educate them	39	65
Parents need to monitor their children usage and content	35	58
Parents need to spend quality time with children and divert them	31	52
Protect the gadgets by keeping passwords	14	23
The Role of School in Regulating Children on Usage of Electronic Gadgets		
Educate children about advantages and disadvantages of usage	39	65
Provide them interesting home assignments	28	47
School needs to educate parents on how to regulate children usage	21	35

For the question "effect of usage of electronic gadgets on children", majority (80%) teachers mentioned that gadget usage creates negative impact on preschool children and 65% stated that it causes health problems like attention disorders, obesity, visual problems, anxiety disorders etc. Fifteen percent of teachers reported that children may get addicted to electronic gadgets in the future. Contradicting to this, 47% preschool teachers opined that gadgets are useful for children to gain knowledge and 27% of them expressed that children can learn vocabulary and improve their language skills. Exactly one fourth (25%) said that children should be updated with technological trends and 18% stated that when children use gadgets, they will be updated with current issues.

One third (75%) teachers expressed that dual earning families and parents' busy schedule are the main *reasons for increased usage of electronic gadgets by children*". Sixty seven percent preschool teachers mentioned that gadgets are available with lot of features and apps which attract children. About half (48%) teachers stated that parents are role models to children and as parents are using the gadgets, children are also using by seeing them. Forty five percent expressed that gadgets entertain children and 40% mentioned that gadgets are available in the market with lower prices. Preschool teachers reported that due to increased nuclear families (23%) and lack of play area at home (18%), the time spent with gadgets by children has been increased. Fifteen percent teachers opined that parents are not sending children for outdoor play due to security reasons and as a result, children are spending more time with gadgets. Twelve percent of them reported that children are getting influenced by peer group and using gadgets.

The third question is "Suggestions for parents to engage their children during free time" Most of the teachers (70%) mentioned that parents need to engage children with play and divert them from the gadgets. Sixty eight percent of them answered that parents should take children to new places so that children will be explored to new things and acquire knowledge. Around half (52%) of the teachers wrote that parents need to communicate with children on daily basis and 48% of them suggested that parents must regulate their gadget usage time and spend time with children. Thirty eight percent expressed that parents need to teach moral values to children by telling stories and giving real life examples. Twenty eight percent teachers wrote that family meal time without gadgets is essential and 13% of them said that parents can involve children in the household works.

The next question is "Suggestions to engage children during parents' absence". For this question, majority (85%) teachers suggested that children can be engaged with different indoor games like puzzles, blocks, board games etc and 60% of them said that children should be engaged with outdoor games which are helpful for their gross motor skills. More than half (57%) teachers mentioned that children need to be engaged with book reading habit. Fifty two percent teachers suggested that parents can join children in different hobby classes.

The fifth question is "The role of home in regulating children on usage of electronic gadgets". Majority (65%) of preschool teachers answered that parents need to regulate children usage time and they have to explain why children should not spend longer hours with gadgets. Similarly 58% teachers mentioned that parents have to monitor the content regularly. Around half (52%) of the teachers stated that parents should spend quality time with children and divert them from the gadgets. Twenty three percent teachers suggested that parents can protect the gadgets by creating passwords and keeping in the child safe mode.

To the question "The role of school in regulating children on usage of electronic gadgets", 65% teachers mentioned that school administration and teachers should educate children on the advantages and disadvantages of usage. Forty seven percent teachers opined that children should be provided with interesting and innovative home assignments so that it regulates their usage time. Thirty five percent teachers expressed that school needs to educate parents on how to engage children in better ways.

IV. CONCLUSION

- 1. The findings reveal that majority (62%) mothers opined that usage of electronic gadgets has both positive and negative impact on children. 56% mentioned that gadgets will cause health problems like visual problems, obesity, sleeping disorders etc and 51% reported that parents need to monitor children usage of gadgets.
- 2. Seventy one percent of mothers mentioned that due to increased dual earning families, parents are not able to spend enough time with their children and as a result children are spending more time with the gadgets.
- 3. Seventy percent of mothers suggested that children can be joined in the hobby classes and around 60% suggested to engage children with indoor and outdoor games to reduce screen time.
- 4. Majority (80%) teachers mentioned that gadget usage creates negative impact on preschool children and 65% stated that it causes health problems like attention disorders, obesity, visual problems, anxiety disorders etc.
- 5. Most of the teachers (70%) mentioned that parents need to engage children with play and divert them from the gadgets. Sixty eight percent of them stated that parents should take children to new places so that children will be explored to new things and acquire knowledge. 65% of teachers mentioned that school administration and teachers should educate children on the advantages and disadvantages of usage.

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