

Perceptions of Teachers towards Children Usage of Electronic Gadgets

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ABSTRACT

The purpose of this research paper is aimed to study the perceptions of teachers towards children usage of electronic gadgets. The sample comprised of sixty preschool teachers selected from private preschools situated in Hyderabad, Telangana State. The data was collected by using an interview schedule and preschool teachers were primary respondents. Results reveal that 78% of preschool teachers are aware of recommended screen time of preschool children whereas 22% of teachers are not aware. Teachers below 30 years have shown more positive perceptions on children gadget usage while above 30 year teaches raised concern about health issues. Similarly, undergraduate teachers have positive perceptions and postgraduate teachers expressed negative impact towards children usage of electronic gadgets.

Keywords: *Perceptions, Teachers, Preschool children, Gadgets, Screen time, Usage*

In the contemporary society, electronic gadgets are integrated into the lives of adults, children and even the youngest age group. Bansal and Mahajan (2017) conducted a survey on 450 children and the findings show that ninety six percent children were using either parents or relative's mobiles. The study showed that only eight percent of children have never used mobiles. Majority (43%) of the children were using mobiles for 1-3 hours followed by 29% children those who used mobile for more than 4 hours. Nearly forty three percentage of the children were using mobile for playing games, followed by 35% watching YouTube videos and 25% children were surfing internet. In fifty percent of cases, mobile was given to children to tackle with the tantrums and in 37% cases mobiles were given to keep them engaged.

After home, children spend considerable time in the school. Preschool teachers play vital role in the early educational settings in shaping child's behaviour. They develop bonding and communication with young children. As they influence children in many ways, it is essential to understand preschool teachers' perceptions towards children usage of electronic gadgets.

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Wolfe and Flewitt (2010) reported in their study that most of the teachers were concerned that children's frequent use of technology may impede their development. Another study revealed that majority of teachers and parents were against children having technology in their bed rooms. Teachers were more vocally opposed on the grounds of impact on classroom behaviour and performance (Downey et al, 2007).

Teachers influence not only children but also parents. In the present study, an attempt is made to know the perceptions of teachers towards children usage of gadgets.

METHODOLOGY

Sample

The sample of this study consists of 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 3. Distribution of Teachers as per their Age and Education (N=60)

Age	Number	Percentage
24-29 years	17	28
30-34 years	21	35
35-39 years	22	37
Education		
UG	31	52
PG	19	32
Professional Degree	10	16

It is evident from the above table that 28% preschool teachers belong to 24 to 29 years age group. Thirty five percent of teachers are in the age group of 30-34 years and 37% of teachers are in between 35-39 years age group. Fifty two percent of preschool teachers are undergraduates, 16% of them are post graduates and ten teachers have done their professional courses like B.Ed.

Tool

A questionnaire on "Perceptions of teachers towards their children usage of electronic gadgets" was designed and used for collecting the data. The primary respondents were preschool teachers. The questionnaire contains 21 positive and negative statements with agreed and disagreed options. The test re-test reliability with the gap of two weeks is 0.73.

RESULTS AND DISCUSSION

If preschool teachers are knowledgeable on experts recommended screen time for preschool children, they can educate children and parents. Figure 1 depicts teachers' awareness on recommended screen time of preschool children.

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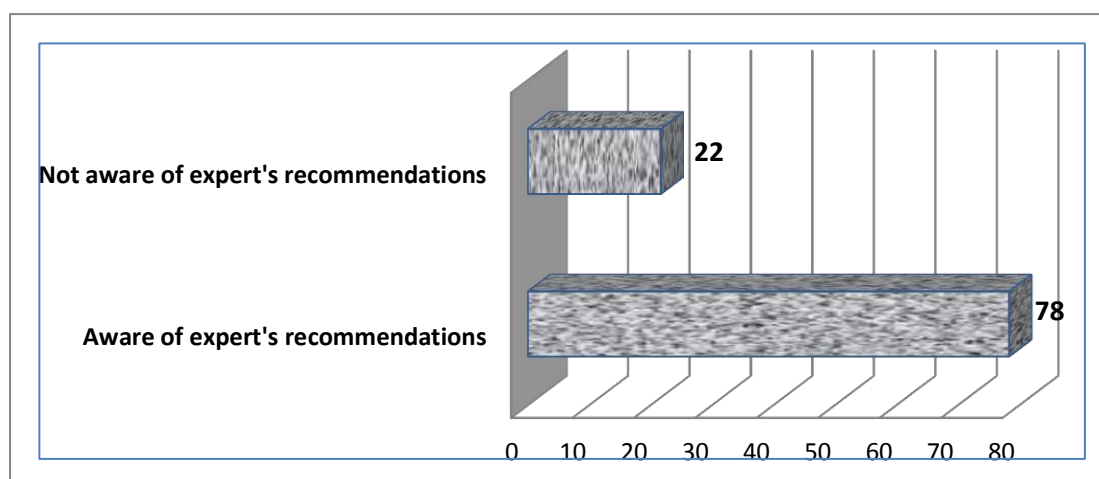


Figure 1. Teachers' Knowledge on Recommended Screen Time for Preschool Children (N=60)

It is evident from the above figure that majority (78%) of preschool teachers have knowledge of experts recommended screen time for young children. Twenty two percent of teachers are not aware of experts' recommendations. Early childhood teachers need to have awareness on positive and negative impact of children screen time so that they can educate parents and children. The table presented below shows the perceptions of teachers towards children usage of electronic gadgets.

Table 2. Perceptions of Teachers towards Children Usage of Electronic Gadgets (N=60)

S.No.	Statement	Agreed N (%)	Disagreed N (%)
	Electronic gadgets influence children...		
1	To develop language skills	57(95%)	3 (5%)
2	To develop reading and writing skills	39 (65%)	21 (35%)
3	Reduces their outdoor play time	59 (98%)	1 (2%)
4	To develop social skills	44 (73%)	16 (27%)
5	To develop emotional skills	38 (63%)	22 (37%)
6	To develop cognitive skills	48 (80%)	12 (20%)
7	To develop gender stereotypic behaviour	54 (90%)	6 (10%)
8	To show aggressive and violent behaviour	54 (90%)	6 (10%)
9	To develop creativity	56 (93%)	4 (7%)
10	To develop moral values	31 (52%)	29 (48%)
11	To develop attention and concentration	32 (53%)	28 (47%)
12	Children spending more time with electronic gadgets creates health problems	58 (97%)	2 (3%)
13	Electronic gadgets create positive influence on children's academic performance	30 (50%)	30 (50%)
14	Commercial ads influence children to seek kids' products	54 (90%)	6 (10%)
15	Electronic gadgets create positive influence on children extra-curricular activities	31 (52%)	29 (48%)
16	Usages of electronic gadgets induce healthy eating habits	13 (22%)	47 (78%)
17	Usage of electronic gadgets disturbs children sleeping pattern	55 (92%)	5 (8%)
18	Electronic gadgets play an important role in making children adapt to technological trends	54 (90%)	6 (10%)
19	Computer based games diminish the time spent on indoor activities	55 (92%)	5 (8%)

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S.No.	Statement	Agreed N (%)	Disagreed N (%)
	Electronic gadgets influence children...		
20	Electronic gadgets have lots of fun things to keep children entertained	56 (93%)	4 (7%)
21	Electronic gadgets have lots of educational content that teaches important lessons	56 (93%)	4 (7%)
22	Schools with digital class rooms improves quality of education	55 (92%)	5 (8%)

The findings from above table reveal that majority (95%) of teachers agreed with the statement “*electronic gadgets influence children to develop language skills*”. They shared that young children are quick learners and they can easily pick up vocabulary from different programmes. These results are in line with Itler (2015) study which stated that teachers’ perceived technology has a positive effect on children’s language awareness when it is used appropriately.

More than half (65%) of teachers perceived that “*electronic gadgets influence children to develop reading and writing skills*”. They mentioned that educational apps are helpful for children to develop these skills. Almost all (98%) early childhood teachers accepted that “*children’s time with electronic gadgets reduces their outdoor play time*”. They shared that outdoor play is an important activity for young children to develop gross-motor skills.

Nearly three fourth (73%) of teachers opined that “*electronic gadgets influence children to develop social skills*”. Morrison and Krugman (2001) reported in their study that television viewing promotes “television talk” where family members and friends can establish a means for positive communication and social interaction. They also mentioned that television programmes can become “a topic of conversation” whilst giving “people something to talk about” and as a result, is contributing to social interaction between individuals. Sixty three percent of teachers agreed upon the statement “*electronic gadgets influence children to develop emotional skills*”. They stated that preschool children observe different emotions in the cartoon programs and they would love to enact their favourite characters. Such activities will help children to develop emotional skills.

Majority (80%) of the teachers agreed with the statement that “*electronic gadgets influence children to develop cognitive skills*”. Children can easily grasp the content through educational videos and gain knowledge. Ninety percent of teachers accepted with the statement “*electronic gadgets influence children to develop gender stereotypic behaviour*”. Teachers shared that technology strongly influences children’s thoughts and behavior. They develop gender stereotypic traits through cartoon programmes, videos, commercial ads etc. Ninety percent of teachers accepted that “*electronic gadgets influence children to show aggressive and violent behaviour*”. A comprehensive meta-analysis conducted by Anderson et al (2010) found that exposure to violent video games increases aggressive thoughts, angry feelings, physiologic arousal, hostile appraisals and aggressive behavior and decreases pro-social behavior and empathy among young children. A greater percentage (93%) of preschool teachers agreed with the statement that “*electronic gadgets influence children to develop creativity*”. Teachers mentioned that creative development through gadgets can happen when children exposed to creative apps.

Fifty two percent of the teachers agreed and remaining half (48%) of them have disagreed that “*electronic gadgets influence children to develop moral values*”. Thus teachers have

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both positive and negative opinion on gadget usage and children moral development. Early childhood teachers opined that moral values can be taught through stories and books for better understanding. In the same way around half (53%) of the teachers agreed and another half (47%) of them have disagreed that “*electronic gadgets influence children to develop attention and concentration*”. Some teachers mentioned that activities like problem solving puzzles, book reading, colouring etc are more useful for children to increase attention.

Almost all (97%) teachers perceived that “*children spending more time with electronic gadgets creates health problems in them such as obesity, visual problems etc*”. Stiglic and Viner (2019) found in their study that children with higher screen time tend to have a less healthy diet, a higher energy intake and more pronounced indicators of obesity. Exactly half (50%) of teachers agreed and another half (50%) disagreed with the statement “*electronic gadgets create positive influence on children’s academic performance*”. When children watch educational content in the gadgets and if they can connect with real time situations, it will be helpful for their academic success.

Majority (90%) of the teachers perceived that “*commercial ads influence children to seek kids’ products*”. Children can easily be influenced by commercial ads when compare with adults. Nearly half (52%) of the teachers agreed and half (48%) disagreed with the statement of “*electronic gadgets create positive influence on children extra-curricular activities*. They shared that extra-curricular activities are helpful for children to develop several skills which are essential for their development. Parents need to divert children in learning such activities rather spending time with gadgets.

Seventy eight percent of the teachers disagreed to the statement “*usages of electronic gadgets induce healthy eating habits*”. Teachers reported that healthy eating habits and table manners should be inculcated in children during preschool stage. Both home and school take part in creating healthy eating habits among preschoolers. For the statement “*usage of electronic gadgets disturbs children sleeping pattern*”, majority (92%) of teachers responded positively. They opined that bed time usage of gadgets creates such problems in children.

Ninety percent of preschool teachers agreed the statement “*electronic gadgets play an important role in making children adapt to technological trends*”. Most of the teachers (92%) accepted that “*computer based games diminish the time spent on indoor activities like board games, puzzles, reading books etc*”. They expressed that such indoor activities are helpful for children to develop pre-reading, pre-writing and pre-mathematical skills. These school readiness activities will help them for academic success.

Ninety three percent of teachers agreed with the statement “*electronic gadgets have lots of fun things to keep children entertained*”. Majority (93%) of the teachers perceived that “*electronic gadgets have lots of educational content that teaches important lessons*”. Vandewater and Bickham (2004) found in their study that children's use of educational television with a cognitive curriculum was related to better reading scores and academic performance.

Ninety two percent of teachers agreed with the statement “*schools with digital class rooms improves quality of education*”. Similar results found in a research conducted by Lindita and Fauzi (2017) stated that teachers agreed with the effectiveness of technology in the education. They agreed that technology increases student’s academic achievement and enhances lifelong learning which is one of most important aims of learning in general.

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With regard to teachers' variables, age is an important predictor which influences their beliefs and perceptions. Mean perception scores of below and above 30 year age group teachers towards children's usage of electronic gadgets presented in table 3.

Table 3. Mean Scores of below and above 30 Year Age Group Teachers on their Perceptions towards Children Usage of Electronic Gadgets

S. No	Statement	<30 years (N=29)		>30 years (N=31)		't' value
		Mean	SD	Mean	SD	
1	To develop creativity	3.20	0.58	2.85	0.60	2.30*
2	To develop moral values	2.24	0.74	2.61	0.72	1.98*
3	To develop attention and concentration	2.41	0.73	2.80	0.78	1.97*
4	Usage of electronic gadgets disturbs children sleeping pattern	2.86	0.74	3.20	0.56	1.98*
5	Electronic gadgets have lots of educational content that teaches important lessons	3.10	0.46	2.87	0.43	2.00*
6	Schools with digital class rooms improves quality of education	3.41	0.47	3.06	0.63	2.42*

* Significant at 0.05 level

The above table reveals that teachers of below 30 years and above 30 years differed significantly on 6 statements. Among these six items, teachers of below 30 years scored higher on 3 items and teachers of above 30 years scored higher on the remaining 3 items. It is evident that teachers of below 30 year age group have shown more positive perceptions on children usage of electronic gadgets compared with above 30 year age group. Below 30 year old age teachers opined that gadgets are useful for children creative development and gadgets have lot of educational content that teaches important lessons to children. They have also perceived that schools with digital classrooms improve quality of education. Teachers of above 30 years believed that usage of electronic gadgets is helpful for children to develop moral values, attention and concentration. They have raised concern about children sleeping disturbances because of screen time.

Teacher's education has an obvious influence on their perceptions. Mean scores of Undergraduate and Postgraduate teachers on their perceptions towards children usage of electronic gadgets is presented in table 4.

Table 4. Mean Scores of Undergraduate and Postgraduate teachers on their Perceptions towards Children Usage of Electronic Gadgets

S. No	Statement	UG (N=31)		PG (N=29)		't' Value
		Mean	SD	Mean	SD	
1	To develop attention and concentration	2.90	0.79	2.45	0.74	2.29*
2	Usage of electronic gadgets disturbs children sleeping pattern	2.80	0.48	3.19	0.77	2.33*
3	Electronic gadgets have lots of fun things to keep children entertained	3.23	0.50	3.00	0.38	2.02*

* Significant at 0.05 level

The above table shows that perceptions of undergraduate and postgraduate teachers differ significantly on 3 items. Undergraduate teachers have more positive perceptions that gadget

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usage is helpful for children's *attention, concentration and entertainment* than post graduate teachers. Post graduate teachers perceived gadget usage causes *sleeping disturbances* among children. Preschool teachers suggested that parents and children need to develop healthy media usage habits. As adult content and porn videos are widely available in the internet, parents should aware of parental control tools and monitoring strategies.

SCCOE (Santa Clara County Office of Education) report (2016) stated that "teachers, parents, health providers and child development experts all agree that the media children use can have a profound impact – both positive and negative – on learning, social development, and behavior. Technology is also an integral component of schools today, and applying the sensible recommendations of experts in medicine and education can increase the likelihood of positive outcomes".

CONCLUSION

1. The findings reveal that 78% of preschool teachers have knowledge of experts recommended screen time for young children and 22% of teachers are not aware of experts' recommendations.
2. Majority of preschool teachers agreed upon that gadget usage is helpful for children to develop language, social, cognitive, reading and writing skills. They have also agreed that gadget usage creates negative impact and health problems among children.
3. It is evident that teachers of below 30 year age group have shown more positive perceptions on children usage of electronic gadgets compared with above 30 year age group. Teachers of above 30 years raised concern about children sleeping disturbances because of screen time.
4. Undergraduate teachers have more positive perceptions that gadget usage is helpful for children's attention, concentration and entertainment than post graduate teachers. Post graduate teachers perceived gadget usage causes sleeping disturbances among children.

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Conflict of Interest

The author declared no conflict of interests.

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