eISSN 2583-6986
IDEALISTIC JOURNAL OF ADVANCED RESEARCH IN PROGRESSIVE SPECTRUMS (IJARPS)
A Monthly, Open Access, Peer Reviewed (Refereed) International Journal
Volume 04, Issue 06, June 2025

Effectiveness of an Integrated Instructional Programme on Parental Awareness of the Harmful Effects of Excessive Mobile Phone Use Among Children in Urban Mandya

Mrs. Deepthi R[1]
[1]Associate Professor, Department of Child health Nursing RVS Institute of Nursing sciences Mandya

Received: 21 June 2025 Accepted & Reviewed: 25 June 2025, Published: 30 June 2025

Abstract

Background: Early teenagers are the age range most impacted by mobile phone addiction. Due to their low cost, mobile phones have quickly become a teenager's best friend. Their complete dependence on cell phones might cause problems with brain development and behavioral issues. According to a study, adolescents are the most vulnerable group of smartphone users, and they have the potential to utilize their gadgets for both beneficial and detrimental purposes.

Method: For this study, an evaluative research approach was employed. The Independent Variable: Integrated instructional programme on harmful effects of excessive usage of phone and Dependent Variable: Awareness and perception on harmful effects of excessive usage of phone. The information was gathered using aninterview schedule.

Results: The respondents' total mean % knowledge scores on harm full effects of smart phone usage were 34.36with means score 17.18and standard deviation 3.29 in pretest and in posttest 55.2with means score 27.6and standard deviation 3.97 in posttest. The overall before test awareness score was 17.1 and after test awareness score was 27.6 and mean difference of knowledge score was 10.4 The obtained t- test value was 14.0 which shows statistical significance at $p<0.05$.

Conclusion: The study emphasizes the importance of incorporating regular awareness programme into community health education, school health initiatives, and primary care outreach, thereby empowering parents to guide their children in adopting healthier technology usage habits.

Key words: Integrated instructional programme, knowledge, harmful effects, excessive usage of phone

Introduction

The modern world has altered family dynamics. Children are raised in a technologically advanced environment. Children play with devices much of the time these days. This reliance limits the obstacles that children's imaginations and inventiveness may face. Furthermore, it limits the challenges necessary for both physical and mental development, including the development of motor and sensory abilities.

Movement, touch, engagement, and exposure to nature are some of the most crucial components needed to ensure a child's healthy growth. Research indicates that when children do not receive the previously indicated exposure, their capacity for self-regulation is compromised. The same study claims that playing violent arcade games on a personal computer encourages aggressive behavior.

Furthermore, found that kids benefit from using technology. It enhances hand-eye coordination, teaches cause-and-effect linkages, and makes friendships easier to form. Considering the advantages and disadvantages, it is critical to comprehend a child's conduct. It's also critical to assess if excessive exposure to technology is impeding any aspect of a child's development. A variety of viewpoints from parents have been presented on the advantages and disadvantages of technology. Developing dispositions to learn, expanding their understanding of the world, gaining operational skills, and comprehending the role of electronic devices

eISSN 2583-6986
IDEALISTIC JOURNAL OF ADVANCED RESEARCH IN PROGRESSIVE SPECTRUMS (IJARPS)
A Monthly, Open Access, Peer Reviewed (Refereed) International Journal
Volume 04, Issue 06, June 2025

in daily life are the four main areas of learning that adults believe gadgets can support, according to a recent study on parents (Plowman and colleagues et al, 2010). Furthermore, Plowman,

McPake and Steve also found that children who use technology for extended periods of time may develop health problems. These also result in a number of other health risks, such as obesity and an addiction to technology. There is no denying the benefits of using technology in today's environment. Therefore, studies should be conducted to identify the risk factors for the developmental issues linked to excessive technology use.

In the modern world, existence would be impossible without technology. That is a reality. Nevertheless, there are benefits and drawbacks. Overindulgent technology usage in children can lead to a number of problems. Parents' perspectives on it differ. Again, parents with varying social origins have different opinions on technology use. A rising number of people are interested in learning how parents see their kids' usage of technology.

Cell phone technology has come a long way and is quite beneficial. To address the country's communication needs, 4.5 lakh mobile phone towers have been erected in India, where there are already 80 cr mobile phones customers. Even without taking into account its drawbacks, the total amount of cellphones has dramatically expanded due to their lower cost and enhanced mobility. By the end of the fiscal year 2030, there could be more than 511,000 towers overall, with 30,000 of those likely to be used exclusively as supporting data sites, based to studies conducted by Deloitte India. According to the Indian Tower magazine

The neuronal activity impacted by the heat effect of prolonged phone usage is altered by the electromagnetic radiation released by mobile phones. Prolonged use of cell phones has been linked to several brain disorders, including Parkinson's and Alzheimer's diseases. Studies and research have shown that children's and teens' cognitive development is adversely affected by mobile phone use. The brain and neural cells of kids and teenagers in the development phase are both growing and changing. Research has demonstrated that children's cognitive functioning varies with the amount of SMS / phone calls they get. Teenagers have also mentioned a variety of negative effects of mobile phone use, including headaches, tiredness, sleeplessness, and problems focusing.

This study especially looked at how parents in Mandyafelt about their early primary-aged children using technology excessively.Now that the term "excessive" has been precisely defined, this study will analyze parents' opinions about early primary school pupils and excessive technology use. Therefore, in a specific Vishakhapatnam neighborhood, study was done to find out how an enrichment program affected parents' attitudes and comprehension of the harmful health effects linked with mobile phone use.

MATRIALS AND METHODS

In order to evaluate the effect of integrated instructional programme on parental awareness and perception regarding harmful effects of excessive usage of phone by their children, the current study used an evaluative research technique. To achieve the current study's goals, a single group pre-test post-test (pre-experimental) design was employed.The study was carried out at a particular urban area of MandyaIndependent Variable: Integrated instructional programme on harmful effects of excessive usage of phone and Dependent Variable: Awareness and perception on harmful effects of excessive usage of phone. Parents from a few urban areas of Mandyamake up the study's target group. Data was gathered from 40 parents from a chosen urban area using the purposive sampling approach. The two-month data gathering

eISSN 2583-6986
IDEALISTIC JOURNAL OF ADVANCED RESEARCH IN PROGRESSIVE SPECTRUMS (IJARPS)
A Monthly, Open Access, Peer Reviewed (Refereed) International Journal
Volume 04, Issue 06, June 2025

period ran from February 2025 to April 2025. SPSS for Windows, Version 16.0, was used to evaluate the data once it was imported into Excel sheets.

Regarding duties and responsibilities in participant recruiting and data collection, the researcher complied with a number of important ethical guidelines. 1] The institutional human rights committee has given its approval. 2] The management of a school granted formal administrative approval. 3] Parents and subjects signed an informed written agreement. 4] Preserve data confidentiality.

Criteria for sampling

The following preset set of criteria was used to choose the samples.

Inclusion criteria for sampling:

1] Parents who are willing to participate in the study

2] Parents who are cooperative

3] Parents who are available throughout the study.

4] Parents with children (1-14 years)

Exclusion Criteria for sampling:

1] Parents who are critically ill and taking treatment

2] Parents who are dump and deaf

3] Parents who are engaged in their occupation.

4] Parents who are from other locality.

The tool's development and selection

Data was gathered using a standardized interview schedule. It is said to be the best tool for getting answers from both literate and uneducated people. There are two parts to it. Part A- It consists of Socio demographic profile of the sample under the study.Part B- It consists of a structured interview schedule to assess awareness on harmful effects of excessive usage of phone.

Creation of anintegrated instructional programme

Based on the goals of the study, the first draft of anintegrated instructional programmeon harmful effects of excessive usage of phone was distributed to eight child health and mental health nursing specialists. Following evaluation of the experts' opinions and ideas (such as extending the usage of acronyms and revising specific elements), the final draft of the program was created.

Consistency

The Split Half method was employed to determine the tool's reliability, and the raw score formula was utilized to get the reliability coefficient. The created tool was proven to be extremely dependable, with an estimated "r" value of 0.82.

Data collecting method

Following official consent from the relevant authorities, data was gathered from 40 parents. The parents were chosen through the technique of purposeful selection. Following their introduction and explanation of the study's objectives, the researcher evaluated the subject's preparedness for participation. The subjects have been guaranteed anonymity and the confidentiality of the information they have submitted, and

eISSN 2583-6986
IDEALISTIC JOURNAL OF ADVANCED RESEARCH IN PROGRESSIVE SPECTRUMS (IJARPS)
A Monthly, Open Access, Peer Reviewed (Refereed) International Journal
Volume 04, Issue 06, June 2025

their signed informed permission has been acquired. The pre-test was administered on the first day, and on the seventh day, an integrated teaching programme and a structured interview schedule about harmful effects of excessive usage of phone were provided. The same technology was used to administer the post-test on the eighth day, and each participant had 30 minutes to finish the interview schedule.

RESULTS

The currenteducation was showed to assess harmful effects of excessive usage of phoneamong Parents

Section – I The sociodemographic characteristics of parents

Variable		Frequency	Percent
1.	**Age**		
a.	18-25 years	4	10.0
b.	26-30 years	16	40.0
c.	36-40 years	16	40.0
d.	41 years and above	4	10.0
2.	**Gender**		
a.	Male	16	40.0
b.	Female	24	60.0
3.	**Relationship with child**		
a.	Father	16	40.0
b.	Mother	24	60.0
4.	**Religion**		
a.	Hindu	28	70.0
b.	Muslim	8	20.0
c.	Christian	4	10.0
5.	**Type of family**		
a.	Nuclear family	16	40.0
b.	Joint family	4	10.0
c.	Extended family	20	50.0
6.	**Number of Children**		
a.	1	20	50.0
b.	2	12	30.0
c.	3	4	10.0
d.	4	4	10.0
7.	**Education**		
a.	Primary	8	20.0
b.	Secondary	20	50.0

eISSN 2583-6986
IDEALISTIC JOURNAL OF ADVANCED RESEARCH IN PROGRESSIVE SPECTRUMS (IJARPS)
A Monthly, Open Access, Peer Reviewed (Refereed) International Journal
Volume 04, Issue 06, June 2025

c.	Graduation	8	20.0
d.	Post graduation	4	10.0
8.	**Occupation**		
a.	Daily wager	4	10.0
b.	Self employer	12	30.0
c.	Private job	16	40.0
d.	Others	8	20.0
9.	**Family income**		
a.	< Rs. 15000	12	30.0
b.	Rs. 25001-35000	4	10.0
c.	Rs. 35001-45000	8	20.0
d.	> Rs. 45001	16	40.0
10.	**Residence**		
a.	Rural	12	30.0
b.	Urban	28	70.0
11.	**Dietary pattern**		
a.	Vegetarian	24	60.0
b.	Mixed	16	40.0
12.	**Type of Mobile**		
a.	Android	28	70.0
b.	Tablet	8	20.0
c.	I Pods	4	10.0
13.	**Previous information**		
a.	Yes	20	50.0
b.	No	20	50.0
14.	**Source of Information**		
a.	Mass media	12	30.0
b.	Neighbors	8	20.0
c.	Family members	8	20.0
d.	Health Personnel	12	30.0

Age higher % of parents 16 (40.0%) were in 36-40 years, followed by 16 (40.0%) were in 26-30 years, 4 (10%) were in 18-25 years and only 4 (10%) were 41 years and above.

Gender higher % of parents 24 (60.0%) were females and only 16 (40.0%) were Males, relationship with child higher % of parents 24 (60%) were mothers and only 16 (40.0%) were fathers.

eISSN 2583-6986
IDEALISTIC JOURNAL OF ADVANCED RESEARCH IN PROGRESSIVE SPECTRUMS (IJARPS)
A Monthly, Open Access, Peer Reviewed (Refereed) International Journal
Volume 04, Issue 06, June 2025

Religion higher % of parents 28 (70.0%) were Hindu, followed by 8 (20.0%) were Muslim and only 4 (10.0%) were belongs to Christian.

Family type higher % of parents 20 (50%) were belongs to Extended family, followed by 16 (40%) were belongs to nuclear family and only 4 (10%) were belongs to Joint family.

Number of children higher % of parents 20 (50.0%) were had one child, followed by 12 (30.0%) were had 2 children, 4 (10.0%) were had four children and only 4 (10%) were had 3 children.

Education higher % of parents 20 (20%) were completed secondary education, followed by 8 (20.0%) were completed primary education, 8 (20.0%) were completed Graduation and only 4(10%) were completed Post graduation.

Occupation higher % of parents 16 (40.0%) were doing Private job, followed by 12 (30%) were Self-employer, 8 (20.0%) were doing other job and only 4 (10%) were Daily wager.

Family income higher % of parents 16 (40.0%) were > Rs. 45001, followed by 12 (30.0%) were < Rs. 15000, 8 (20%) were had Rs. 35001-45000 and only 16 (40%) were Rs. 25001-35000.

Residence higher % of parents 28 (70.0%) were residing in urban area and only 12 (30.0%) were residing in urban area.

Dietary pattern higher % of parents 24 (60%) were Vegetarian and only 16 (40.0%) were mixed diet.

Type of mobile phone use higher % of parents 28 (70.0%) were using Android, followed by 8 (20.0%) were using Tablet and only 4 (10.0%) were using I Pods.Previous information.higher % of parents 20 (50.0%) were had information and 20 (50%) were had no information.

Sources of information higher % of parents 12 (30%) were had information from Health Personnel and mass media, followed by 8 (20%) were had information from Neighbors and family members.

Section II: Understanding and contrasting knowledge of parents

Table 2: Pretest and posttest level of knowledge N=40

Level of knowledge	Pre test		Post test	
	Frequency	Percent	Frequency	Percent
a. Inadequate knowledge	39	97.5	16	40.0
b. Moderate knowledge	1	2.5	24	60.0
c. Adequate knowledge	0	0.0	0	0.0
Total	40	100	40	100

Above table depicts overall pretest and posttest knowledge score of parents in pretest majority 39(97.5%) were had Inadequate knowledge and 1 (2.5%) had Moderate Knowledge and none of the

eISSN 2583-6986
IDEALISTIC JOURNAL OF ADVANCED RESEARCH IN PROGRESSIVE SPECTRUMS (IJARPS)
A Monthly, Open Access, Peer Reviewed (Refereed) International Journal
Volume 04, Issue 06, June 2025

participants had adequate knowledge where as in posttest 24 (60.0%) had moderate knowledge, 16 (40.0%) had in in adequate Knowledge none of the participants had in adequate knowledge.

Table 3**:**Mean, mean % and standard deviation for the knowledge score of Parents

N=40

l. o	**Knowledge**	**ax Score**	**Pre test**			**Post test**		
			ean	**ean %**	**D**	**ean**	**ean %**	**D**
	General evidence on mobile phone usage		.2	4.00	.40	.3	6.0	.96
	Reputation of mobile phone usage		.58	0.89	.23	.85	5.0	.21
	Harmful effects of excessive usage of phone on physical health	2	.95	1.59	5.5	1.75	3.4	.63
	Harmful effects of excessive usage of phone on psychological health	1	.3	0.00	.24	.7	1.8	.32
	Harmful effects of excessive usage of phone on social health		.15	8.33	.86		6.6	.01
Overall		**0**	7.18	4.36	.29	7.6	5.2	.97

The overall mean % knowledge scores on harm full effects of smart phone usage were 34.36with means score 17.18and standard deviation 3.29 in pretest and in posttest 55.2with means score 27.6and standard deviation 3.97 in posttest.

Table 4: Comparison between pretest and posttest knowledge scoreN=40

l. o	**Knowledge Level**	**Pre test**		**Post test**		**Mean difference**	**test**	**nference**
		ean	**D**	**ean**	**D**			

eISSN 2583-6986
IDEALISTIC JOURNAL OF ADVANCED RESEARCH IN PROGRESSIVE SPECTRUMS (IJARPS)
A Monthly, Open Access, Peer Reviewed (Refereed) International Journal
Volume 04, Issue 06, June 2025

	General evidence on mobile phone usage	1.2	.4	.3	.9	1.1	.4	
	Reputation of mobile phone usage	4.5	.2	.8	.2	1.2	.2	
	Harmful effects of excessive usage of phone on physical health	6.9	4.5	1.7	.6	4.8	1.2	
	Harmful effects of excessive usage of phone on psychological health	3.3	.2	.7	.3	2.4	.5	
	Harmful effects of excessive usage of phone on social health	1.1	.8		.0	0.8	.7	
Overall		17.1	.2	7.6	.9	10.4	4.0	

The overall means knowledge scores before and after integrated instructional programme of parents regarding harmful effects of excessive usage of phone. The overall before test awareness score was 17.1 and after test awareness score was 27.6 and mean difference of knowledge score was 10.4 The obtained t- test value was 14.0 which shows statistical significance at $p<0.05$. There was statistically significant difference in level of knowledge of parents after implementation of integrated instructional programme.

DISCUSSION

The findings of the study revealed a significant improvement in the knowledge scores of parents regarding the harmful effects of smartphone usage following the intervention. During the pretest, the majority of participants, 39 (97.5%), demonstrated inadequate knowledge, and only 1 participant (2.5%) had moderate knowledge. Notably, none of the parents had adequate knowledge at baseline.

However, in the posttest, there was a marked shift in knowledge levels. 24 participants (60.0%) attained moderate knowledge, while 16 participants (40.0%) remained in the inadequate category. Interestingly, none of the participants reached the level of adequate knowledge, suggesting room for further educational reinforcement. The overall mean percentage knowledge score increased from 34.36% in the pretest (mean score: 17.18 ± 3.29) to 55.2% in the posttest (mean score: 27.6 ± 3.97), indicating a notable gain in knowledge following the educational intervention.

These findings are consistent with a study conducted by Sharma et al. (2021) reported a substantial increase in knowledge scores post-intervention among parents educated about screen time and digital health, emphasizing the effectiveness of targeted educational efforts.

eISSN 2583-6986
IDEALISTIC JOURNAL OF ADVANCED RESEARCH IN PROGRESSIVE SPECTRUMS (IJARPS)
A Monthly, Open Access, Peer Reviewed (Refereed) International Journal
Volume 04, Issue 06, June 2025

The current results underline the importance of continuous parental education on digital health risks, particularly as smartphone usage continues to increase among children and adolescents.

The results of the present study reveal a significant enhancement in parental knowledge regarding the harmful effects of excessive smartphone usage after the implementation of an integrated instructional programme. The mean knowledge score in the pretest was 17.1, which increased to 27.6 in the posttest, resulting in a mean difference of 10.4 points. The computed t-test value of 14.0 was statistically significant at $p < 0.05$, indicating a meaningful improvement in knowledge levels that can be directly attributed to the educational intervention.

These findings are consistent with the study conducted by Norazman et al. (2024), who evaluated the impact of a structured digital health education programme *"Stop and Play"* among parents of preschool children in Malaysia. Their cluster randomized controlled trial demonstrated a significant increase in knowledge ($\beta = +6.88$, 95% CI 6.11–7.65, $p < 0.001$) immediately after the intervention. The study utilized digital platforms such as WhatsApp to deliver whiteboard animation videos and infographics, which proved effective in enhancing parental awareness and self-efficacy.

Furthermore, a similar study by Mankumari& Mistry (2019) in Navi Mumbai assessed the effectiveness of video-assisted teaching on the health hazards of smartphone overuse. The results showed a notable increase in knowledge among parents, supporting the view that multimedia educational tools significantly influence knowledge retention and awareness. The significant improvement in knowledge scores in the current study validates the use of integrated, interactive educational interventions. These findings emphasize the importance of equipping parents with accurate and accessible information to make informed decisions about children's smartphone usage. Given the growing concerns over excessive screen time and its impact on child development, implementing regular awareness programs at the community level, schools, and healthcare settings could be a valuable strategy in promoting healthier digital habits among families.

RESTRICTIONS

- Because the study was carried out in a particular region, generalization is limited.
- Only the population who met the study's requirements may be included in the findings.
- The sample size was restricted to 40 parents;
- The study solely assessed attitudes; and scheduling restrictions prevented the implementation of long-term follow-up.

CONCLUSION

The present study demonstrated that the integrated instructional programme was effective in enhancing the knowledge of parents regarding the harmful effects of excessive smartphone usage. Improving parental knowledge is a critical step in mitigating the negative consequences of excessive screen time among children. The study emphasizes the importance of incorporating regular awareness programmes into community health education, school health initiatives, and primary care outreach, thereby empowering parents to guide their children in adopting healthier technology usage habits.

ANNOUNCEMENTS

Money: No sources of money

Conflict of interest: With relation to this inquiry, the authors have no conflicts of interest.

Ethics approval: The Institutional Ethics Committee gave its clearance to the study.

REFERENCES:

1. Adam Felman. (2020). Why stress happens and how to manage it. Medical news today. March 12.
2. Baabdullah A, Bokhary D, Kabli Y, Saggaf O, Daiwali M and Hamdi A(2020). The association between smartphone addiction and thumb/wrist pain: A cross-sectional study. Medicine (Baltimore). 2020 Mar;99(10):e19124. doi: 10.1097/MD.0000000000019124.
3. Burns N. Grove S. (2007). Understanding Nursing Research. Elsevier India Private Limited.
4. Covolo Bettencourt, Kaye, Sai T Moturu , Kaylin T Nguyen , Jeffrey E Olgin , Pletcher , Gregory M Marcus (2021). Parents and Mobile Devices, from Theory to Practice: Comparison between Perception and Attitudes to 0–5 Year Old Children's Use. Int. J. Environ. Res. Public Health 2021, 18, 3440. https://doi.org/10.3390/ijerph18073440
5. Creswell, JW (1994) Research Design: Qualitative and Quantitative approaches. Thousand Oaks CA: Sage
6. Dixit, J.V. (2009). Principles and practices of biostatistics. Jabalpur: Simplex printing press.
7. Hakoama M, Hakoyama S (2011). The impact of cell phone use on social networking and development among college students. American association of behavioral and social science 2011; 5.
8. Hungler, B. P. & Polit, D. F. (1999). Nursing research. 6th ed.Philadelphia: Lippincott Williams & Wilkins.
9. MohammadbeigiA(2016). Sleep Quality in Medical Students; the Impact of Over-Use of Mobile Cell-Phone and Social Networks. J Res Health Sci. 2016 Winter;16(1):46-50.
10. Norazman, F., Ishak, W. S., Aris, T., Abd Majid, H., & Sulaiman, L. H. (2024). Effectiveness of the "Stop and Play" digital health education intervention to reduce screen time among preschool children: A cluster randomized controlled trial. BMC Public Health, 24(1), 219.