

A Descriptive Study to Assess the Parental Control Practices to Manage the Smartphone Dependency Among the Young Children in A Selected Community of Delhi

Babita Devi¹, Jahanara Rahman², Dr. Shilpi Sarkar³

¹Student, MSc Nursing (Pediatric), Rufaida College of Nursing, Jamia Hamdard, New Delhi

^{2,3}Assistant Professor, Pediatric Nursing, Rufaid College of Nursing, Jamia Hamdard, New Delhi

ABSTRACT

Background: The use of smartphones, especially among young children (3-6 years old), is increasing for entertainment and educational purposes, making them more vulnerable to behavioural changes, reduced physical activity, impaired social skills, which lead to developmental concerns. This underscores the need for good parenting and supervision to balance digital exposure with healthy developmental activities.

Aims of the study: The study aimed to assess the occurrence of smartphone dependency among young children, to assess the risk factors for smartphone dependency among young children, to assess the parental control practices used to manage the smartphone dependency among young children, and to determine the relationship between parental control practices and smartphone dependency among young children.

Design and Setting: A descriptive survey with a quantitative research approach was conducted in five areas (Jagjeewan Nagar, Ram Nagar, Bhagwanpur Khera, Chander Lok, Balbir Nagar Ext.) in the community of Delhi.

Sample and sampling: 200 parents of young children (3-6 years of age) were selected by using a convenience sampling technique.

Method: A structured checklist to assess the risk factors, two Likert scales to assess the smartphone dependency among young children, and parental control practices were used to collect data from the parents of young children.

Keywords: Young children, mobile phone addiction, smartphone dependency, problematic mobile phone use, parental control practices, screen addiction, digital dependency, factors for mobile phone dependency.

INTRODUCTION

Today's smartphones integrate AI, high-resolution cameras, biometric security, and global connectivity, making them indispensable in everyday life. Smartphones have become an integral part of modern life, offering connectivity, convenience, education and entertainment, etc.¹

In the modern world, smartphones have become essential tools for people of all age groups, especially the younger generation. However, improper or excessive use of smartphones can lead to both psychological and physical health problems in children.²

Excessive smartphone use can harm children's cognitive development, physical health, emotional well-

being, social skills, and academic performance. Studies have shown that excessive media use is associated with difficult temperament or self-regulation problems in infants and toddlers. Parents play a significant role in shaping children's screen time through their knowledge, attitudes and practices.⁶

The American Academy of Pediatrics (2016) advised: no screen use under 18 months (except video-chatting); 18–24 months, only educational programs with parents; ages 2–5, less than 1 hour of high-quality content; and for 5 years or older, not more than 2 hours with parental awareness. Similarly, WHO recommends no screen time under 1 year, up to 1 hour for ages 1–4, with less being preferable.⁴

Vyas et al.⁵ studied children aged 8–12 in Gujarat during the COVID-19 pandemic and found a sharp rise in smartphone use for education and entertainment. High addiction levels were reported, with children experiencing eye strain, irritability, poor sleep, and reduced concentration, showing how lockdowns accelerated dependency.

A global review by Regis College found that increased reliance on smartphones and tablets during COVID-19 led to sedentary lifestyles, emotional issues, and dependency. Parents often gave devices to calm or occupy children, reinforcing unhealthy patterns. While smartphones supported education, they also caused lasting behavioral and developmental risks beyond the pandemic.⁶

Kabali et al.⁷ surveyed parents of 350 children (6 months–4 years) and found 77% had smartphone access, with 96.6% using devices, often before age one. Parents mainly offered phones during chores (70%), to calm children (65%), or at bedtime (29%). This widespread use underscores the need for parental supervision and structured control.

Children's self-control and parental monitoring are key to smartphone dependency, influenced by age, gender, academics, parental screen habits, and caregiving style (Li N, et al., 2025). Interventions should build self-regulation and support parents with effective boundary-setting. Research on parental control in India remains limited, especially for younger children.

Method:

Formal permission for conducting the final research study was obtained from the authority of the selected community of Delhi. Ethical permission was taken from the Institutional Ethical Committee of Jamia Hamdard University, New Delhi. Informed and written consent from the parents of young children was obtained after explaining the purpose of the study and other details. Anonymity and confidentiality of the participants were maintained. Then a research tool and a pen were provided to the one parent to tick on the appropriate answers to questions to assess the occurrence of smartphone dependency among young children, to assess the risk factors for smartphone dependency among young children, to assess the parental control practices used to manage the smartphone dependency among young children, and to determine the relationship between parental control practices and smartphone dependency among young children.

Sample and Sampling: Data were collected from 200 parents of young children (3-6 years of age) from the five areas (Jagjeewan Nagar, Ram Nagar, Bhagwanpur Khera, Chander Lok, Balbir Nagar Ext.) in the community of Delhi who were selected by using a convenience sampling technique.

Ethical Consideration:

Ethical permission was obtained from Jamia Hamdard Institutional Ethics Committee (JHIEC), New Delhi, to conduct the research study.

Written informed consent was taken from each participant. They were assured of the confidentiality of the information provided during the study.

Validity and Reliability:

The content validity of the tool was established by nine experts in pediatric nursing, community nursing, clinical psychologists, child psychologists, and psychiatrists. Reliability of Smartphone Addiction Scale for Children-Parent Version (SASC-P) is calculated by Cronbach’s alpha, and it was 0.972. It is a standardized tool developed by Rajendhiran G. et al.⁹ The reliability of the Structured Risk Factors Assessment Tool (Tool-1) was calculated by the Kuder-Richardson Formula (KR-20), and it was found to be 0.7104, indicating a normal range of internal consistency. The reliability of the structured parental control practices assessment tool was also calculated by Cronbach’s Alpha formula, and it was 0.8684, indicating a good internal consistency.

DATA ANALYSIS:

This chapter presents the analysis of data from 200 parents using structured questionnaires and Likert scales. It explores risk factors for smartphone dependency, its occurrence among young children, and parental control practices. The study aimed to assess how parents manage smartphone dependency in early childhood.

RESULTS:

TABLE-1: Frequency and percentage distribution of socio-demographic variables of parents and young children.
n = 200

Socio-Demographic Variables of Parents and Young Children		Frequency (f)	Percentage (%)
Age of Mother (in years)	20 – 25	2	1
	26 – 30	79	39.5
	31 – 35	47	23.5
	36 – 40	2	1
	>41	2	1
Age of Father (in years)	20 – 25	19	9.5
	26 – 30	11	5.5
	31 – 35	10	5
	36 – 40	28	14
	>41	10	5
Relationship with the child	Mother	122	61
	Father	78	39
Age of child (in years)	3 - 4	89	44.5
	4 - 5	34	17
	5 - 6	77	38.5
Gender of child	Male	117	58.5
	Female	83	41.5
e average screen time of	30 minutes	38	19
	1 hour	74	37

child per day	2 hours	59	29.5
	3 hours	27	13.5
	> 3 hours	2	1
Number of smartphones available at home	1	71	35.5
	2	86	43
	3	16	8
	4 or more	27	13.5
Wi-Fi Availability	Yes	111	55.5
	No	89	44.5

TABLE-2 Frequency and percentage distribution of risk factors for smartphone dependency.
n = 200

Risk Factors for Smartphone Dependency Among Young Children	Frequency (n)	Percentage (%)
Limited outdoor play	159	79.5%
Insufficient toys/books/sports items at home	149	74.5
Use of smartphones due to the rare opportunity of TV	89	44.5
Use of a smartphone secretly	92	46
Use of a smartphone while eating	88	44
Easy access to a smartphone	122	61
Ignorance of tasks due to smartphone use	123	61.5
Use of a smartphone while feeling bored/lonely	98	49
Wi-Fi always accessible	87	43.5
Family members use smartphones near the child often	73	36.5
Parents use smartphones late at night in front of their child	47	23.5
Smartphones are used as a reward or a pacifier for the child	79	39.5
Parents use smartphones to calm/distract the child	104	52
Time limit not set for child's smartphone use	156	78
Phone allowed for educational learning apps	84	42
Prefers online games over physical play	122	61

TABLE- 3: Frequency and percentage distribution of smartphone dependency in young children.
n=200

Level of smartphone dependency (score range)	Frequency (f)	Percentage (%)
No smartphone dependency (24 – 48)	54	27
Mild smartphone dependency (49 – 72)	124	62
Moderate smartphone dependency (73 – 96)	22	11
Severe Smartphone dependency (97 – 120)	0	0

TABLE-4: Frequency and percentage distribution of parental control practices to manage the smartphone dependency.

n=200

Parental Control Practices (score range)	Frequency (f)	Percentage (%)
Low (21 – 42)	0	0
Moderate (43 – 84)	142	71
Good (85 – 105)	58	29

TABLE-5 Mean, Standard deviation, ‘r’ value and p-value for correlation of parental control practices with the smartphone dependency among young children:

n=200

Variables	Mean +SD	# ‘r’ value	p- value
Parental Control Practices	73.94 + 12.82	-0.4327	<0.0001***
Smartphone Dependency among Young Children	56.255 + 13.61		

Pearson’s correlation test, *** ‘p’ highly significant at 0.0001 level

Section I:

Findings related to Table I: Most mothers were aged 26–30 years (39.5%), followed by 31–35 years (23.5%), while very few were below 25 or above 41. Fathers were mainly 36–40 years (14%), with smaller proportions in younger and older groups. Mothers provided most responses (61%), compared to fathers (39%).

Among children, 44.5% were aged 3–4 years, 38.5% were 5–6 years, and 17% were 4–5 years; 58.5% were male and 41.5% female. Daily screen time showed 37% used one hour, 29.5% two hours, 19% 30 minutes, 13.5% three hours, and only 1% exceeded three hours. Households typically had one or two smartphones (78.5%), with 55.5% having Wi Fi access.

Section II:

The parents' report findings related to Table 2:

Parents reported that most children (79.5%) had limited outdoor play and 74.5% lacked toys or books. Nearly half (44.5%) used smartphones due to rare TV access, with secret use noted in 46% and use while eating in 44%. Easy access was reported by 61%, and 61.5% ignored tasks due to phones. About half used smartphones when bored or lonely, and 43.5% had continuous Wi-Fi.

Family influence was evident: 36.5% said members used phones near the child, 23.5% admitted late-night use in front of them. Smartphones were used as rewards (39.5%) or to calm children (52%). No time limits were set in 78% of cases, 42% allowed educational apps, and 61% noted preference for online games over physical play.

Section III:

Findings related to Table 3 for smartphone dependency in young children:

The data shows that 27% (n = 54) exhibited no smartphone dependency, indicating healthy usage patterns. 62% (n = 124) fell under the category of mild smartphone dependency. 11% (n = 22) showed moderate dependency. No children (0%) were classified as having severe smartphone dependency.

Section IV:**Findings relate to Table 4: parental control practices to manage the smartphone dependency:**

The data shows that 71% (n = 142) demonstrated moderate parental control practices, indicating that most of the parents are engaged in regulating their child's smartphone use. 29% (n = 58) exhibited good parental control practices, that managing screen time and preventing smartphone dependency. No parents (0%) fell into the category of poor parental control.

Section V:

Table-5, presents the descriptive statistics and correlation analysis between parental control practices and smartphone dependency among young children. The mean score for parental control practices was 73.94 with a standard deviation of 12.82, while the mean score for smartphone dependency was 56.255 with a standard deviation of 13.61. Pearson's correlation coefficient ($r=-0.4327$) indicates a moderate negative correlation between the two variables. The correlation was found to be statistically significant with a p-value < 0.0001 . This finding underscores the potential protective role of parental involvement in regulating children's digital behavior and highlights the importance of promoting healthy smartphone habits within the family environment.

MAJOR FINDINGS:**Demographic profile of parents and children:**

Most mothers (39.5%) were aged 26–30 years, while most fathers (14%) were aged 36–40 years. Mothers provided the majority of responses (61%). Children were predominantly aged 3–4 years (44.5%), with more than half being male (58.5%). One hour of daily screen time was most common (37%). Most households had two smartphones (43%), and Wi-Fi was available in 55.5% of homes.

Risk factors for smartphone dependency:

Limited outdoor play (79.5%) and insufficient toys/books/sports items at home (74.5%) were the most reported risk factors. Easy access to smartphones (61%), ignoring tasks due to smartphone use (61.5%), and preference for online games over physical play (61%) were also significant. Parents frequently reported smartphone use while eating (44%), secretly (46%), or when children felt bored/lonely (49%). No time limits were set for smartphone use in 78% of cases.

Smartphone dependency level in children:

27% of children exhibited no dependency, 62% showed mild dependency, and 11% had moderate dependency. No children were classified as having severe smartphone dependency.

Parental Control Practices:

Most parents (71%) demonstrated moderate control practices, while 29% showed good control. No parents fell into the poor control category, indicating active engagement in regulating smartphone use.

Correlation Between Parental Control and Smartphone Dependency. A statistically significant moderate negative correlation ($r = -0.4327$, $p < 0.0001$) was found, suggesting that stronger parental control is associated with lower smartphone dependency among children.

DISCUSSION:

The study found that most children (66.5%) used smartphones for 1–2 hours daily, with 37% at one hour and 29.5% at two hours. These results align with prior Indian research showing rising exposure without structured limits, raising developmental concerns.¹⁰ The American Academy of Child and Adolescent Psychiatry, however, recommends restricting screen time to one hour per day for children aged 2–5 years.³

The findings of the present study revealed that boredom, loneliness, and lack of toys or books at home (74.5%) were major risk factors contributing to smartphone dependency in young children. These findings are in line with the study conducted by Sulaiman et al. (2021),¹¹ which showed that children without adequate environmental stimulation or peer interaction were more prone to mobile phone addiction.

The findings of the present study revealed that parents often used smartphones to calm or distract the child (52%) and as a reward (39.5%). These findings are consistent with the report by Anusuya¹², who described that parents frequently hand over smartphones to children as babysitters or to stop tantrums, which gradually increases the smartphone dependency.

The study revealed that 62% of children had mild smartphone dependency, 11% moderate, and none severe. Similar findings by Kriplani et al.¹³ showed most preschoolers had mild dependency, with few progressing to moderate levels, often due to early exposure and weak parental control. Li et al.¹⁴ also reported mild dependency as common in rural China, linked to low self-control and inconsistent supervision.

The study found that 71% of parents showed moderate control practices, yet 78% did not set time limits for smartphone use. In contrast, Muñoz-Carril et al.¹⁵ reported that Spanish parents widely applied monitoring and clear limits, with 93.7% using control mechanisms to reduce overuse.

The study found a moderate negative correlation between parental control and smartphone dependency ($r = -0.4327$). Consistent with Lee et al.,¹⁶ lack of parental regulation was linked to higher addiction risk, while effective monitoring reduced dependency in young children.

CONCLUSION:

The study concludes that smartphone dependency in young children is a growing concern, with most showing mild and some moderate levels, but none severe. Early childhood is thus a critical stage for preventive measures. Active parental monitoring, avoidance of reinforcing smartphone use, and modeling healthy digital behavior were linked to lower dependency.

NURSING IMPLICATIONS:

Administrative bodies should promote awareness and parent education programs on healthy digital habits. Nurses can counsel parents during pediatric visits about risks of excessive smartphone use and emphasize structured routines and outdoor play.

LIMITATIONS OF THE STUDY:

The present study was focused only on children aged 3–6 years. Findings may not be generalizable to older children or adolescents who may exhibit different patterns of smartphone use.

RECOMMENDATIONS:

- Replicate the study on larger samples for generalization.
- Conduct similar research in rural settings.
- Extend studies to older school-aged children to assess developmental differences.
- Evaluate nursing interventions (parental education, structured play, digital literacy) through experimental studies.

REFERENCES:

1. Wikipedia contributors. *History of smartphone*. Wikipedia; 2025.
2. Rather M, Rather SA. *Impact of Smartphones on the Young Generation*. Library Philosophy and Practice. 2019.
3. American Academy of Child and Adolescent Psychiatry. *Screen Time and Children*. 2025.
4. WHO. *Guidelines on physical activity, sedentary behaviour and sleep for children under 5 years*. 2019.
5. Vyas N, Patel H, Patel R. *Effect of smartphone addiction among school-going children*. JETIR. 2021;8(6).
6. Regis College. *Effects of technology on children during a pandemic*. 2021.
7. Kabali HK, et al. *Exposure and Use of Mobile Media by Young Children*. Pediatrics. 2015;136(6):1044–1050.
8. Kaur NK, et al. *Screen time in children*. Indian Paediatrics. 2019;56:773–88.
9. Rajendhiran G, et al. *Smartphone Addiction Scale for Children–Parent Version*. Indian J Public Health Res Dev. 2019;10(6):915–20.
10. Dr. D.Y. Patil College of Nursing. *Negative Effects of Smartphones on Child Development in India*. 2024.
11. Sulaiman R, et al. *Mobile phone addiction among children aged 5–12 years*. IJCMPPH. 2021;8(12):5938–5942.
12. Anusuya P. *Smartphone addiction in children*. Times of India. 2022.
13. Kriplani V, et al. *Smartphone Use among Pre-School Children – An Exploratory Study*. 2024.
14. Li N, et al. *Parental supervision, children’s self-control and smartphone dependence in rural China*. Front Psychol. 2025.
15. Muñoz-Carril P, et al. *Parental control measures to regulate smartphone use by children*. Psychology, Society, & Education. 2023;15:39–47.
16. Lee J, et al. *Parental Control and Smartphone Addiction in Young Children*. J Korean Med Sci. 2024;39(34):e254.

