



# Behavioral Problem Of Preschool Children Due To Smart Phone Usage – A Systematic Review

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## Abstract:

Children aged from 3 to 5, also known as preschool children, are in a developmental stage, where abilities like cognitive, social, emotional, etc., will be developed. This study aims to reveal the impact of smartphone usage on the preschool children's behavior. In recent years it is noticed that usage of smartphones is increasing at a rapid speed in every age group, including the preschool age group. Due to excess use, children are becoming hyperactive, attention deficient, and irritable, and factors like parental phone usage, lack of supervision, and lack of limitation are providing fuel to this. Various research provides knowledge on the problems that are seen in the development of preschool children due to smartphone usage.

From this perspective the current review study mostly focuses on the studies that revealed the behavioral problem that is seen among preschool children due to smartphone use. Studies revealed that higher screen time is associated with language delays, behavioral problems, and poor sleep in the preschool children. Parental interaction also contributed to the problematic use of children. These findings reinforced the importance of consistent parental monitoring and a controlled digital habit.

**Key words:** Preschool Children, Behavioral Problem, Smart phone usage

## Introduction

Preschool children, typically aged 3 to 5 years (UNICEF, 2019), are in a crucial stage of early childhood development where rapid physical, cognitive, social and emotional growth takes place. This is the period when children begin to explore their environment more independently, develop language skills and form basic social interactions. Their behavior is often characterized by curiosity, high energy levels, short attention spans and a desire to imitate adults or peers.

Behavioral problem is a pattern of disruptive behavior that generally falls within social norms and does not seriously impair a person's functioning (APA, 2018). During the preschool years, children are learning to manage emotions, follow rules and interact with others. Sometimes they show behaviors such as frequent tantrums, difficulty in sharing or refusal to follow instructions. Recognizing and addressing these behaviors early helps in supporting a child's emotional and social development. In recent research, link between media exposure and behavioral issues in preschool children has shown. Study provides evidence that there is a significant correlation between screen time and behavioral problems such as hyperactivity, anxiety, conduct issues and learning difficulties. It also highlighted the need to limit media use to support healthier behavioral development in early childhood (Zoromba. M. *et al.*, 2023).

In recent years, the widespread integration of digital media into early childhood routines has raised concerns about its developmental consequences. Preschool aged children are increasingly exposed to screens often through smartphones during critical periods of emotional and cognitive growth. Emerging evidence from low- and middle-income regions, such as urban areas reveals a troubling association between prolonged screen time and behavioral disturbances, including heightened irritability, reduced attention span and disrupted sleep patterns. These findings underscore the need to examine how smartphone usage may contribute to behavioral challenges in young children and to promote informed caregiving practices that prioritize healthy media habits during early development (Rana. M. *et al.*, 2025)

### Aim and methodology

The aim of the study is to review the existing literature of present studies that examined the behavioral problem of preschool children due to smart phone usage. For this study, literature was searched using Google Scholar browser, ResearchGate and Mendeley. English language studies are mainly searched. A total of 17 research papers from different parts of the world were reviewed to examine behavioral problems in preschool children related to smartphone use. All articles were screened by its title and studies were evaluated based on their features, quality and relevance to the topic. Summaries of each study were first checked and those not meeting the inclusion criteria were excluded. The full texts of the selected papers were then reviewed and only studies specifically addressing behavioral problems in preschool children due to smartphone use were included.

### Results

S.N	TITLE OF THE STUDY	AUTHORS	SAMPLE	RESEARCH DESIGN	RESULT AND DISCUSSION
1.	Relationship Between Screen Time Duration and Sleep Duration with Emotional Behavioral Problems in Preschool Children in Kindergartens In Denpasar City.	Prameswari. P. <i>et al.</i> Denpasar, Indonesia	Sample size was 476 preschool children who were selected by cluster sampling method from 7 kindergarten school of Denpasar City.	The study used a cross-sectional design with an analytical approach to examine the relationship between screen time, sleep duration and emotional behavioral problems in preschool-aged children. Researcher used Kuesioner Masalah Perilaku Emosional /KMPE which is an Emotional Behavioral Problems Questionnaire.	The result shown that children with screen time over 1 hour and sleep duration under 11 hours were significantly more likely to exhibit behavioral problems. Bivariate analysis showed screen time increased risk by 2.25 times and short sleep by 2.66 times and both were statistically significant.
2.	Assessment of Risk of Behavioral Problems in Children Below Five Years in	Manisha Ghosh Roy <i>et al.</i> , Bhopal, India.	Total 300 children participated for the study.	This was an observational cross-sectional study conducted over 12 months.	Longer screen exposure, use of multiple devices and limited parent-child interaction were

	Relation to Screen Time: A Cross-Sectional Study			Data were collected through structured interviews with parents by the help of preschool pediatric symptom checklist and also used IAP guidelines to define excessive screen time.	linked to higher behavioral risk (59.4%). The odds of problems increased with screen time duration, highlighting the need for parental involvement and screen regulation.
3.	Screen-time is associated with inattention problems in preschoolers: Results from the CHILD birth cohort study	Tamana. S., <i>et al.</i>	The author has used longitudinal cohort sampling procedure to collect 2427 samples from which 2322 children are related with screen time and the data was collected from the Canadian Healthy Longitudinal Development Study.	The study used a quantitative longitudinal design. Multiple linear regression analysis was used to examine the association between screen time and the external behavior by using child behavior checklist. Multiple logistic regression was also conducted to determine the risk of clinically significant behavioral problems.	More screen timing was related to higher inattention and ADHD type of symptoms though there was not much link with aggression.
4.	Effect of screen time on behavior of preschoolers in Islamabad	Suleman. M. <i>et al.</i>	The sample consisted of 200 preschool children and the sampling procedure was multistage random sampling procedure. The data was collected from 4 private school	A cross-sectional survey design was used for this study. Data was collected through parental questionnaire and the behavior was assessed through child	Children with screen time of more than 60 minutes per day showed higher levels of sleep problems, autism spectrum related issues. Maternal education was the strongest predictor of behavioral

			in Islamabad, Pakistan.	behavior checklist.	outcomes. The study shows a negative relation between screen time and behavioral problems in preschool children.
5.	Smart phone use patterns and problematic smartphone use among preschool children.	Parl. J. and Park. M.	The sample included 1378 preschool children. The data were obtained from a nationwide survey on smartphone overdependence conducted by South Korea government.	A cross-sectional design was used and the data were analyzed by using binomial logistic regression to identify smartphone use patterns associated with problematic smartphone use.	The study shows that excessive and frequent smart phone use especially for watching videos and entertainment is linked to problematic smartphone use among preschool children. This indicates a risk of negative behavioral patterns related to overdependence.
6.	Screen time in primary school children and its associations: a cross-sectional study.	Priya P. R. and Veena Kumari M Kerala, India	The study included 1200 children aged 4 to 12 years from primary schools in Kannur district, Kerala. Parents provided data on screen use, behavior, and language development.	This was a cross-sectional study conducted over six months. Researchers used structured questionnaires, the Strength and Difficulty Questionnaire (SDQ), and the Language Evaluation and Screening Tool (LEST) to assess behavioral and language outcomes.	Most children (69.4%) had daily screen time between 2–4 hours. Boys, children from joint families, and those with less-educated parents had higher screen exposure. Increased screen time was significantly linked to behavioral issues, delayed language development, and visual problems. The findings highlight the need to limit screen use and improve content quality to

## Conclusion

These review studies show rising concerns of increasing behavioral problems due to smart phone usage among preschool children. The literature of this research topic contains studies with similar results demonstrating that preschool children are facing behavioral problem mainly due to the excess use of smart phone during their early stage of development where they should achieve different milestones of development like cognitive ability, language ability, fine motor ability, gross motor ability etc. Different studies from different regions shows evidence that extended screen exposure like more than one to two hours have high risk effect on the sleeping pattern, behavioral pattern, temper tantrum etc. For example, research of Rana, Imad and Komal *et al.* showed that excess screen time have major impact on the attention deficits, irritability and sleep disturbances and suggest limited screen exposure would be better for the overall development of the child. It is noticed that when parents are keeping limits for using smart phone, the behavioral problem among the preschool children is also reducing. Positive parenting is having a significant role in the self-control of the child. Strict restriction as well as positive involvement of parents will play a major role in controlling this problematic use of smart phone and regulating the behavioral problem among preschool children.

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