

Abstract

Effect of Screen Time on Behavior of Preschoolers in Islamabad: Descriptive Cross-sectional Study

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Abstract

Background: The early years of childhood form the basis of intelligence, personality, social behavior, and the capacity to learn and nurture oneself as an adult. It is increasingly recognized that early and longer exposure to screens has adverse effects on the development of children. This research was significant in finding out the effects of screen time on the behavior of preschoolers, which could provide scientific grounds to the control of digital screen time.

Objective: We aimed to determine the effect of electronic exposure on the behavior, emotional development, and sleep quality of preschoolers and determine the average number of hours preschoolers spend with electronic devices in Islamabad.

Methods: A cross-sectional survey was conducted in 4 private preschools of Islamabad. A sample of 200 children aged 3 to 5 years was selected through multistage random sampling. The sociodemographic characteristics and screen time of the children were acquired by using parental questionnaires. Children were grouped based on a daily screen time of ≤ 60 minutes or > 60 minutes. An analysis was conducted based on the results of the Child Behavior Checklist for children aged 1.5 to 5 years. The Cronbach α coefficient was found to be .925. It was analyzed by using SPSS version 22 (IBM Corporation). A chi-square test, an independent sample t test, and multilinear regression were applied to determine the associations and significance levels between the variables.

Results: The study results indicate that increased screen time was found to be statistically significant with regard to a child's age, their education level, and the employment status of mothers. It was observed that preschoolers with a screen time of > 60 minutes (mean 11.94, SD 3.91; $P=.01$) tend to more commonly experience withdrawn syndrome than those with a screen time of ≤ 60 minutes (mean 10.72, SD 3.01). Similarly, sleep problems were also more commonly observed in preschoolers with a screen time of > 60 minutes (mean 10.97, SD 3.20; $P=.01$) when compared to those with a screen time ≤ 60 minutes (mean 9.90, SD 2.59). It was also observed that increased screen time had an association with autism spectrum problems among preschoolers with a screen time of > 60 minutes (mean 17.66, SD 5.89; $P=.047$) when compared to those among preschoolers with a screen time of ≤ 60 minutes (mean 16.17, SD 4.58). The strongest predictor of the outcome variable was found to be mothers' education level ($\beta=21.53$).

Conclusions: The findings reveal that excessive screen time is a deleterious factor associated with the behavioral problems of preschoolers. Parents must also think about their child's screen time. This requires parents' active engagement and constant attention, so that the development and growth of their children are not affected adversely.

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KEYWORDS

preschoolers; screen time; withdrawn syndrome; autism spectrum problems; Child Behavior Checklist

Multimedia Appendix 1

Effect of Screen Time on Behavior of Preschoolers in Islamabad: Descriptive Cross-sectional Study.

[PDF File (Adobe PDF File), 386 KB-Multimedia Appendix 1]

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