

The Digital Era's Effect on Neurodivergent Children and Adolescents: Correlating Smartphone Problematic use and ADHD in a Saudi Clinical Sample

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ABSTRACT

Smartphones have become indispensable for most people's lives worldwide. They are beneficial in communication, education, treatment, and entertainment. Unfortunately, smartphone addiction has proved to be associated with various physical, mental, and psychiatric disorders. This study aimed to assess the prevalence of smartphone addiction and the associated attention deficit hyperactivity and other psychiatric disorders. A cross-sectional study was conducted at King Saud University Medical City, Saudi Arabia, from July 2023 to August 2024. The data was gathered through a self-administered questionnaire through Google Forms, completed by caregivers of children aged 6-12 with ADHD, and face-to-face interviews. The validated Problematic Use of Mobile Phones (PUMP) scale was used. The Vanderbilt scale was used to evaluate the degree of the patient's ADHD. Chi-square, Non-parametric Spearman's rho correlation, and linear regression tests were applied to statistically analyze the relationship between the PUMP scale, the sociodemographic, and Vanderbilt variables. There was a statistically significant difference ($p < 0.05$) and correlation between smartphone use duration over the years, hours of smartphone use per day, with the ADHD patient's educational level, duration of parent marriage, refusal to follow instructions, avoidance of mentally demanding activities, difficulty playing quietly, waiting for their turns, interrupting the talk of others, refusal to obey adult requests or laws, being sensitive and easy to harass by others, and have previously broken into someone else's home, workplace or car. Control of children's use of smartphones is crucial, especially for those suffering from ADHD.

Keywords: ADHD; Children; Smartphones; King Saud University; Saudi Arabia, Vanderbilt scale

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