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TITLE: Exploring ABCD phenotypes for future Behavioral Genetic analysis: Screen time is associated with mental health, academic outcomes, and peer relationships

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ABSTRACT:

We are using screens more than ever. The high rate of electronic media use among children and adolescents begs the question: is screen time harming our youth? The current study draws from a nationwide sample of 11,875 participants, aged 9 to 10 years, from the Adolescent Brain Cognitive Development (ABCD) study. We investigate relationships between screen time and mental health, behavioral problems, academic performance, sleep habits, and peer relationships, by conducting a series of correlation and regression analyses, controlling for SES and race/ethnicity. We find that more screen time is associated with worse mental health, increased behavioral problems, lower academic performance, and poorer sleep, but heightened quality of peer relationships. However, effect sizes associated with screen time and the various outcomes were small; SES was more strongly associated with each outcome measure. The initial exploration of screen time, mental health, behavioral problems, academic performance, and sleep habits in the ABCD study has laid groundwork for future analyses utilizing co-twin control

designs and biometrical modeling to examine genetic and environmental contributions to those phenotypes over time.

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