

Is your teen online a lot? Study finds mild link between ADHD and digital media use.

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SAN FRANCISCO – Teenagers who frequently use digital media are more likely to develop attention-deficit/hyperactivity disorder, according to a new study.

In 2014, scientists at the University of Southern California embarked on a two-year study to discover whether the amount and frequency of digital media usage among teens was associated with the occurrence of ADHD.

They found that teens who used digital media the most were twice as likely to develop new ADHD symptoms over two years than teens who used social media the least.

“This study raises concern whether the proliferation of high-performance digital media technologies may be putting a new generation of youth at risk for ADHD,” said Adam Leventhal, a professor of preventive medicine and psychology and director of the USC Health, Emotion and Addiction Laboratory at the Keck School of Medicine of USC, who led the study.

ADHD is a condition involving persistent difficulty sustaining attention, hyperactivity and impulsivity, according to the study. The Centers for Disease Control and Prevention (CDC) estimates 6.1 million, or nearly 1 in 10 children in the U.S., have ADHD.

Past research has looked at whether television and video games have an effect on ADHD occurrence, but new research was necessary with the advent of new digital media, which are “constantly available via mobile devices, and capable of providing rapid high-intensity stimulation,” the scientists wrote.

The results of the study have ramifications for parents, teachers, doctors and tech companies. A recent survey from Common Sense Media found that teens spend nearly nine hours per day using online media, and a separate survey published last month by the CDC found 43 percent of teens use digital media three or more hours a day.

Over a two-year period, the USC scientists studied 2,587 high school students ages 15 to 16 in Los Angeles County from schools of varied demographic and socioeconomic status. Only students who didn’t show ADHD symptoms were selected for the survey.

They found 9.5 percent of the 114 children who used half the digital media platforms frequently and 10.5 percent of the 51 kids who used all 14 platforms frequently showed new ADHD symptoms.

By contrast, 4.6 percent of the 495 students who were not frequent users of any digital activity showed ADHD symptoms, about the background rate of the disorder in the general population.

The results appeared Tuesday in a report published in the Journal of the American Medical Association. Researchers concluded that, "among adolescents followed up over 2 years, there was a statistically significant but modest association between higher frequency of digital media use and subsequent symptoms of ADHD."

It's not clear, however, whether digital media use causes ADHD or if teens who develop ADHD are using digital media more than those without ADHD.

"Further research is needed to determine whether this association is causal," they wrote.

Scientists surveyed the eligible students in the fall of 2014 for a baseline of results, then conducted follow-up surveys every six months over a 24-month period, hoping to discover whether digital media use in 10th grade was associated with ADHD symptoms tracked through 12th grade.

Students were asked how often they use 14 popular digital media platforms including social media, streaming video, text messaging, music downloads and online chatrooms, among others. They were also asked questions related to common ADHD symptoms.