



ECHO

Environmental influences
on Child Health Outcomes

A program supported by the NIH

Study Summary

How has children's screen time changed during the COVID-19 pandemic?

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Who sponsored this study?

The Environmental influences on Child Health Outcomes (ECHO) Program, Office of The Director, National Institutes of Health supported this research.

What were the study results?

Total screen time among children ages 4 to 12 increased during the early stages of the COVID-19 pandemic as lockdowns and school closures were widespread. Screen time remained higher in the later pandemic, even after several restrictions had been lifted. The study found that children used screens an average of 1.75 hours/day more during the early pandemic (December 2020 – April 2021) compared to before the pandemic (July 2019 – March 2020). During the later pandemic (May 2021 – August 2021), screen time remained on average 1.11 hours/day higher than the pre-pandemic average. Both recreational and educational screen time increased during the COVID-19 pandemic.

Footnote: Results reported here are for a single study. Other or future studies may provide new information or different results. You should not make changes to your health without first consulting your healthcare professional.

What was the study's impact?

The study shows that increases in screen time among children persisted more than one year into the pandemic, after many COVID restrictions had been lifted. These findings can help inform clinical guidelines that could aid parents and their children in re-establishing healthy media use habits. Pediatricians can help parents reset family media use priorities and limits that may have changed during the early stages of the COVID-19 pandemic using tools like the [American Academy of Pediatrics Family Media Plan](#).

Why was this study needed?

Excessive screen time among children may be associated with obesity-promoting health behaviors and adverse mental health. The COVID-19 pandemic initially led to widespread school closures, shelter-in-place laws, closures of recreational facilities and cancellation of youth sports, increases in number of parents working from home, and social distancing recommendations, all of which may have impacted screen time among children. Prior studies have reported screen time levels during the pandemic but were unable to document changes in screen time because most lacked pre-pandemic assessments. This

study is among a handful of ECHO studies to include pre-pandemic assessments of screen use in order to document changes during the pandemic.

[Read more about ECHO's COVID-19 research.](#)

Who was involved?

The study included 228 parent-child pairs from three ECHO cohorts across the United States (Colorado, California, and South Dakota). Parents reported their children's screen time. The geographically, racially, and ethnically diverse participants ranged in age from 4 to 12 at the start of the study.

What happened during the study?

ECHO researchers surveyed parents about their children's media use before, during the early, and later periods of the pandemic. The study assessed total, educational (not including remote school), and recreational screen time and examined trends in screen use before and at two points during the pandemic.

What happens next?

Additional studies are needed to determine whether the increases in screen time among children during the pandemic impacted longer term obesity and mental health outcomes in children. Future studies can also clarify whether specific types of screen time adversely impacted children's health during the pandemic.

Where can I learn more?

Access the full journal article, titled "Trends in screen time use among children during the COVID pandemic, July 2019 through August 2021" in [JAMA Network Open](#).

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