



Study Summary

Toddler Emotional and Behavioral Problems Decreased Slightly During Pandemic, ECHO Study Finds

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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.

Why was this study needed?

The COVID-19 pandemic disrupted family patterns and children's environments, both of which play a role in early brain development. Early childhood is a period of rapid brain growth and increased sensitivity to environmental influences, making the early social environment important for children's health and well-being. Previous research raised concerns about the development of infants born during the pandemic, but there is limited evidence on how the pandemic affected the behavioral and emotional well-being of toddlers. In this study, researchers wanted to look at the association between growing up during the pandemic and behavioral outcomes in toddler-aged children.

What were the study results?

The study found that children who experienced the pandemic had fewer emotional and behavioral problems compared to children born and assessed before the onset of the pandemic, based on results from the Preschool Child Behavior Checklist (CBCL). Specifically, their scores for internalizing problems, such as anxiety or sadness, were about 1.5 to 2 points lower, and their scores for externalizing problems, such as aggression or hyperactivity, were about 1.7 to 3.2 points lower than those born and assessed before the pandemic.

Although these differences were small, researchers report that they were consistent. The study also found that these links between growing up during the pandemic and lower emotional and behavioral problems were significantly stronger for children whose mothers did not have a bachelor's degree.

What was the study's impact?

The study suggests that toddler-age children may have shown resilience despite the disruptions of the pandemic. These findings could help identify potential protective factors that could have buffered the impact of the pandemic on child behavior and inform future interventions to support children's well-being during and after global crises.

Who was involved?

The study included 3,438 toddlers (average age of 2 years) across the U.S. and Puerto Rico. Researchers grouped children based on when they were born and when they were assessed: before the pandemic, born before but assessed after March 2020, or both born and assessed during the pandemic.

What happened during the study?

During the study, researchers compared young children's behavior and emotions before and during the pandemic using data from the ECHO Cohort collected between September 2009 and July 2023. Parents filled out the Preschool CBCL, a commonly used tool to assess the child's emotions and behaviors, like anxiety, sadness, or hyperactivity. Researchers then analyzed these results to see how the pandemic may have affected children's emotional and behavioral well-being.

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 happens next?

Further research could help researchers identify potential protective factors that may have promoted resilience among children whose daily life was disrupted by the COVID-19 pandemic.

Where can I learn more?

Access the full journal article, titled "COVID-19 pandemic exposure and toddler behavioral health in the ECHO Program," in [JAMA Network Open](#).

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