



ECHO

Environmental influences
on Child Health Outcomes

A program supported by the NIH

Study Summary

Black Children and Especially Black Girls May Be Less Likely to Receive an Autism Diagnosis

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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?

Research suggests that autism spectrum disorder is diagnosed less often in minority groups, possibly due to limited access to healthcare, potential biases, and delays in diagnosis. This study explored how sociodemographic factors like race, ethnicity, and education relate to autism diagnoses and parent-reported autism-related behaviors. Researchers wanted to learn whether these factors showed similar patterns in diagnosis and behavior scores and whether they might help explain why some children are less frequently diagnosed.

What were the study results?

The study found that non-Hispanic Black children had lower odds of receiving an autism diagnosis compared to non-Hispanic White children, despite similar levels of autism-related traits. Additionally, Black girls were less likely to be diagnosed with autism but more likely to have high SRS scores, indicating potential under-recognition of autism in this group. Separately, higher maternal education was also associated with reduced odds of both autism diagnosis and autism-related traits, as measured by the Social Responsiveness Scale (SRS).

What was the study's impact?

The study highlighted potential differences in how autism is recognized in children, particularly among non-Hispanic Black children. The results suggest a need to address clinical inequalities and consider ways to ensure accurate identification of autism across all sociodemographic groups.

Who was involved?

The study included 8,224 children from diverse backgrounds, with data gathered from 46 ECHO sites across the United States.

What happened during the study?

The study used data from the ECHO Cohort to examine relationships between demographic factors, autism diagnoses, and parent-reported autism-related traits. Researchers focused on two main

outcomes—autism diagnoses and scores on the Social Responsiveness Scale (SRS), a parent-report questionnaire capturing autism-related traits. They used statistical methods to compare associations between sociodemographic characteristics and the likelihood of autism diagnosis and high SRS scores. The goal was to understand whether these factors influenced the two outcomes differently.

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?

Additional research could address strategies to reduce barriers to diagnosis and consider increased screening for minority and low-education groups. Efforts to help doctors and healthcare providers better recognize autism in underserved communities and ensure equitable access to diagnostic resources may improve early diagnosis and reduce disparities in care.

Where can I learn more?

Access the full journal article, titled “Demographic Correlates of Autism: How Do Associations Compare Between Diagnosis and a Quantitative Trait Measure?,” in [Autism Research](#).

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