



Study Summary

Shortened Social Responsiveness Scale (SRS) Observed to be Comparable to Full SRS in Autism Risk Factor Estimation

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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 Social Responsiveness Scale (SRS) is a questionnaire used to measure social communication and autism spectrum disorder (ASD)-related traits. Researchers have developed a shortened version of the SRS, which included only 16 questions out of the original 65. This shortened version is intended to provide a very similar summary of behaviors and traits as the longer version but takes less time to complete.

As a new tool, the short SRS has been previously tested to ensure that it measures autism spectrum-related traits. However, it was not clear prior to this study if the short SRS can measure associations in epidemiologic analyses of autism spectrum risk factors in the same way as the full SRS so that research findings can be comparable across studies using both versions. In other words, do scores from both the short and long versions suggest the same associations? Or does shortening the SRS reduce our ability to detect risk factors due to differences in measurement? In this study, the authors tested associations with an established risk factor for autism diagnosis, preterm birth, or gestational age, to see if patterns were consistent across versions.

What were the study results?

Younger gestational age and preterm birth were associated with higher full SRS scores. The same associations were seen with short SRS scores. These associations are also consistent with associations seen for autism diagnosis, suggesting the ability of both the full and short SRS to detect risk factor associations.

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?

Gathering meaningful information for research studies can be a lengthy and time-consuming process for participants. This study shows that in some studies information collected using shorter assessments can be as useful as that captured using longer assessments, helping to reduce the time participants spend answering questionnaires.

Who was involved?

The study included 2,760 child-parent pairs from 11 different research sites within the ECHO Program. Participating children were between 2.5 and 18 years in age. The study sample included participants from research sites drawn from the general population, pre-term birth research sites, and familial-autism research sites, the last consisting of participants with a child diagnosed with autism.

What happened during the study?

Researchers collected caregiver-reported responses from both the full and shortened SRS. Information on gestational age and pre-term birth were collected from maternal reports on standardized questionnaires and from medical records.

What happens next?

Future studies are needed to investigate how comparable estimates are between the full and short SRS using other types of risk factors, such as genetic factors, and in other study populations. Researchers may also consider using the short SRS in future studies as an efficient measure of social behaviors.

Where can I learn more?

Access the full journal article, titled “A Comparative Analysis of the Full and Short Versions of the Social Responsiveness Scale in Estimating an Established Autism Risk Factor Association in ECHO: Do we Get the Same Estimates?” in the [Journal of Autism and Developmental Disorders](#).

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