



Research Brief

A SUMMARY OF A PUBLISHED RESEARCH ARTICLE

The First Year Inventory: Retrospective Parent Responses to a Questionnaire Designed to Identify One-Year-Olds at Risk for Autism

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The First Year Inventory (FYI) is a parent questionnaire regarding behaviors in 12-month old children that is used to predict the likelihood of a child eventually being diagnosed with an autism spectrum disorder (ASD). The researchers behind this study sought to determine whether or not the FYI can accurately measure characteristics of twelve month olds who will later be diagnosed with ASD (*construct validity*). While research has not yet proven an optimal age for screening for autism, it does indicate that differences between infants with ASD, those with other developmental disabilities (DD), and typically developing (TD) infants can be seen as early as 9-12 months of age. Based on this finding, many screening tests have been developed to identify infants at risk for ASD, with the FYI being one of the most recent.

The FYI consists of a list of questions designed to assess characteristics of ASD that are identifiable in 12 month olds. Most questions have four answer options including "never", "seldom", "sometimes", and "often". Some questions have alternative answer options that are specific to the characteristic being assessed. There is one question that asks

the parent to indicate consonant sounds the infant produces, and two open ended questions in which the parent expresses their concerns and describes additional relevant characteristics of the child.

To examine the validity of the FYI, the researchers recruited three groups of preschoolers: 38 with ASD, 15 with a DD not classified as ASD, and 40 children with TD. Great care was taken to ensure that the children were accurately grouped and had no additional conditions that would interfere with data interpretation. All parents completed the FYI-Retrospective Version (FYI-R), which is the FYI rewritten into the past tense. Before completing the questionnaire, parents were encouraged to focus on what their child was like on his or her first birthday. They then answered questions such as "Did your baby seem to have trouble hearing?" (Revised from the FYI question "Does your baby seem to have trouble hearing?"). The open ended questions on the FYI were excluded from the FYI-R as well as the question regarding the child's consonant sounds.

The data from the FYI-R was

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collected and a FYI risk score was calculated for each child. The participants in the ASD group had significantly higher risk scores than those with DD and TD, respectively. This indicates that as a group, the participants with ASD showed more atypical behaviors at 12 months. Using the 90th percentile as a cutoff for ASD risk, 35 of the 38 children with autism would have been identified using the FYI, as well as 12 of the 15 children with DD, and no children with TD. This supports the validity of the FYI as a screening tool. While no optimal percentile cutoff for the FYI was proposed, the researchers did note that caregivers should be informed about the limits of screening measures and the potential for children with DD to be incorrectly identified as at risk for autism. They also concluded that it is better to potentially over-identify risk for ASD among children with other DD than to miss large numbers of children who are truly at risk for ASD.

