

NEWS

# New video tool talks parents through autism screening

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A video-guided screening tool may boost the reliability of parent reports about autism-like behaviors, researchers reported yesterday at the **2016 International Meeting for Autism Research** in Baltimore. The online tool could improve the accuracy of home-based autism screening and educate families about age-appropriate behaviors.

The **Child Behavior Checklist** and the **Modified Checklist for Autism in Toddlers** (M-CHAT) are fast and easy screening tools for autism. But the efficiency of these parent questionnaires

**comes at the cost of accuracy.** These tests incorrectly flag as much as 88 percent of children who have conditions other than autism.

One source of inaccuracy comes from asking parents to judge their child's behavior using vague or subjective measures. For example, a question asks whether the child 'wants a lot of attention' but does not explain what 'a lot' might mean for a child of that age. Some screening tests, including the M-CHAT, also require yes-or-no answers instead of graded responses.

A new screening tool, called the Early Video-Guided Autism Screener, is designed to boost the accuracy of parent reports by prefacing each set of questions in its checklist with two narrated video clips. One of the clips shows the relevant behaviors of a typical child, and the other shows those of a child with autism.

"This video-guided narration orients parents to the behaviors they're looking for. Then parents are immediately asked to rate their own child's behavior," says **Jason Neely**, a child therapist at Kennedy Krieger Institute in Baltimore and lead researcher on the study.

Parents can pull up the screener on their smartphone or other device and work their way through its questionnaire within minutes. The screener guides parents through items that assess five types of autism-related behavior, including imagination and play, flexibility with play and routines, ability to share enjoyment with others, communication using facial expressions and gestures, and repetitive body movements.

## Powerful predictions:

The checklist prompts parents to rate each type of behavior on a scale of 1 to 4, rather than choose a yes-or-no response. The researchers say this may increase the accuracy of parent reports by allowing for uncertainty about a child's behavior.

Researchers validated the tool in 334 children 18 to 48 months old who were referred to an autism specialty center for testing. They tested the children using the Autism Diagnostic Observation Schedule (ADOS), a gold-standard instrument for diagnosing autism.

The new tool missed about 18 percent of the children who later met the ADOS cutoff for autism. But almost all of the children flagged by the new tool ended up with an autism diagnosis, which far exceeds the **predictive value of other mobile screeners**.

The video screener is far from perfect, however. About 3 of every 10 children with negative results turned out to have autism.

"That's not bad for a screening test," says **Catherine Lord**, director of the Center for Autism and the Developing Brain at New York-Presbyterian Hospital, who was not involved in the work.

The new tool is self-scoring and part of an interactive platform that can guide parents to the next steps if their child is flagged for follow-up. Researchers still need to validate the video screener in a larger clinical sample, but eventually they hope to load it into a mobile app that can be used for **remote autism screening**.

*For more reports from the 2016 International Meeting for Autism Research, please **[click here](#)**.*