

Eye tracking young children with autism

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Though the prevalence of autism spectrum disorder (ASD) has been steadily climbing— from 6 in 1,000 children in 2002, to nearly 10 in 1,000 children in 2006, according to the Centers for Disease Control and Prevention— little is known about the disorder. But, research with young kids can lead to important insights in how children with developmental abnormalities view the world. This month in the *Journal of Visualized Experiments*, researchers demonstrate how to use eye-tracking in very young children with autism.

"Generally, individuals new to this method often struggle, as eye-tracking [young children](#) with autism involves unique challenges that are not present when tracking typically-developing older children or adult population," said paper-author Dr. Noah Sasson.

Eye-tracking is one of the few quantifiable ways to study children with [autism spectrum disorder](#). It requires that children look at pictures on a screen— in this study, objects and faces— and the eye-tracking technology can record where a child is looking, when.

Dr. Sasson explains that though researchers have known for a long time about the social impairment that comes with autism, they are not sure if young children with autism are actually looking at faces differently, or ignoring faces all together.

To help other scientists who are interested in answering this question, Dr. Sasson published his methodology in *JoVE*, the only peer reviewed, PubMed-indexed science journal to publish all of its content in both text

and video format.

"This article addresses an important topic," said *JoVE* Editor, Leiam Colbert. "There are challenges with research of this kind— both from the methodological and clinical perspectives. Less experienced researchers may or may not be aware of the difficulties inherent in eye-tracking children with [autism](#). The need for standardisation of this type is great, to prevent the publication of spurious results, or wasting scarce research funds and participant time."

The video-article shows how Dr. Sasson sets up the lab with few distractions, so the children participating are more likely to focus on the eye-tracking screen and how cartoons and moving images with sounds are useful ways to get children to refocus their attention on the screen.

"I think visually seeing the lab, visually seeing the child and how to conduct the test is important," said Dr. Sasson. "I think this will be a very helpful resource."

More information: To watch the full video-article, please follow the link: [www.jove.com/video/3675/eye-tr ... children-with-autism](http://www.jove.com/video/3675/eye-tracking-young-children-with-autism)

Provided by The Journal of Visualized Experiments

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