

Name of Study: Autistic children's detection of facial expressions
Location: The University of Virginia, Charlottesville, Virginia
Eligibility Criteria: Children diagnosed with an autism spectrum disorder
Principal Investigator: Dr. Vanessa LoBue
Contact Information: The Child Study Center, (434) 243-5234

Dear Parent:

According to the theory of prepared learning, humans are prepared to detect the presence of certain classes of threats more quickly than objects that are harmless. Research with adults has already shown that they can detect the presence of threatening objects such as snakes and spiders or angry faces more quickly than various harmless objects. In our lab, we have found that 3-, 4-, and 5-year-olds also detect the presence of snakes more quickly than flowers, frogs, and caterpillars, and angry faces more quickly than happy ones.

We are currently seeking to extend our research on the detection of threatening objects to children with autism. Past research has demonstrated that both children and adults with autism process emotional facial expressions differently than children and adults without autism. This difference is especially important when processing negative facial expressions like anger or fear. Most research in this area has focused on high-functioning adult males with autism, and there has been very little research devoted to young children with autism. We would like to use our method to look at how children detect pictures of both snakes and negative facial expressions. This would both allow us to learn more about the detection of threat in individuals with autism and it give us the opportunity to contribute knowledge about a population of individuals with autism that is underrepresented in research. Understanding more about the differences in the way young children with and without autism process faces may also lend insight into the prevalence of impaired social interaction on the autistic spectrum.

The procedure is completely safe and fun for the children who participate. It involves presenting children with a touch-screen computer monitor. The children will be trained to touch several pictures of target objects on the screen. After several training trials, your child will be presented with 9 pictures on the screen. One of those pictures will be labeled as the target. Your child will then be instructed to find the target on the screen and simply touch it. The computer records how quickly you child touches the screen for each picture. We plan to present each child with 4 series of 24 picture sets, each series having a different kind of target object. Each series takes approximately 3 minutes and the 4 series can be completed all at once or across several different sittings. We have tested over 100 typically developing children on this procedure. It is presented as a game and most children find it fun and challenging to locate the "hidden" object as quickly as they can.

If you are interested in participating, please contact our lab, The Child Study Center, at (434) 243-5234 to schedule an appointment. Just tell them that you were recruited through IAN and they will schedule you to come in to the lab for a visit.

If you have any questions about anything in this letter, please feel free to contact us personally by email, we would be happy to speak to you personally regarding the procedure or rationale for the experiment. Thanks again for your consideration, and we hope that your child will be participating in our study.

Sincerely,
Dr. Vanessa LoBue
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Dr. Judy DeLoache
Director of Child Study Center
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