

Babies' non-verbal communication skills can help predict outcomes in children at high risk of developing autism

October 1 2012

Approximately 19 percent of children with a sibling diagnosed with Autism Spectrum Disorder (ASD) will develop Autism due to shared genetic and environmental vulnerabilities, according to previous studies. For that reason, University of Miami (UM) psychologists are developing ways to predict the occurrence of ASD in high-risk children, early in life, in hopes that early intervention will lead to better outcomes in the future. Their findings are published in the journal *Infancy*.

The study is one of the first to show that measures of non-verbal communication in [children](#), as young as eight months of age, predict [autism](#) symptoms that become evident by the third year of life. The results suggest that identifying children, who are having difficulties early enough, can enhance the effects of interventions.

"For children at risk of developing an [ASD](#), specific communication-oriented interventions during the first years of life can lessen the severity of autism's impact," says Daniel Messinger, professor of Psychology in the College of Arts and Sciences at UM and principal investigator of the study. Before children learn to talk, they communicate non-verbally by using eye contact and gestures. These abilities are called referential communication and are in development by eight months of age. However, "impairments in non-verbal referential communication are characteristic of older children with ASD," says Caroline Grantz a [doctoral candidate](#) in the Department of Psychology at UM and co-

author of the paper.

In the study, a team of researchers tested two groups of children. One group was at high-risk for ASD and the second group was at low-risk. The evaluations took place during 15 to 20 minutes sessions, at 8, 10, 12, 15 and 18 months of life. The team measured the development of three forms of non-verbal communication:

- Initiating Joint Attention (IJA) - the way an infant shows interest in an object or event to a partner. For example, making eye contact and pointing to show a toy.
- Initiating Behavioral Requests (IBR)-the manner in which an infant requests help from a partner, by making [eye contact](#) to request a toy, reaching toward, pointing to, or giving the examiner a desired toy.
- Responding to Joint Attention (RJA)-the way infants respond and follow the behavior of a partner. For example, when the examiner points to something and the child follows the experimenter's gaze to look at that an object. The results show that lower levels of IJA and IBR growth between eight and 18 months predicted the severity of ASD symptoms for children that had a sibling with Autism.

"Overall, infants with the lowest rates of IJA at eight months showed lower social engagement with an examiner at 30 months of age," says Lisa Ibañez, research scientist at the University of Washington Autism Center and first author of the paper. Ibañez conducted the study as part of her dissertation research in the Department of Psychology at UM.

These results are important enough that the research team is following up the study with collaborator Wendy Stone, Professor of Psychology and Director of the University of Washington Autism Center.

The study is titled "The Development of Referential Communication and Autism Symptomatology in High-Risk Infants." The project was funded by the National Institute of Child Health and Human Development.

Provided by University of Miami

Citation: Babies' non-verbal communication skills can help predict outcomes in children at high risk of developing autism (2012, October 1) retrieved 25 April 2024 from <https://medicalxpress.com/news/2012-10-babies-non-verbal-skills-outcomes-children.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.