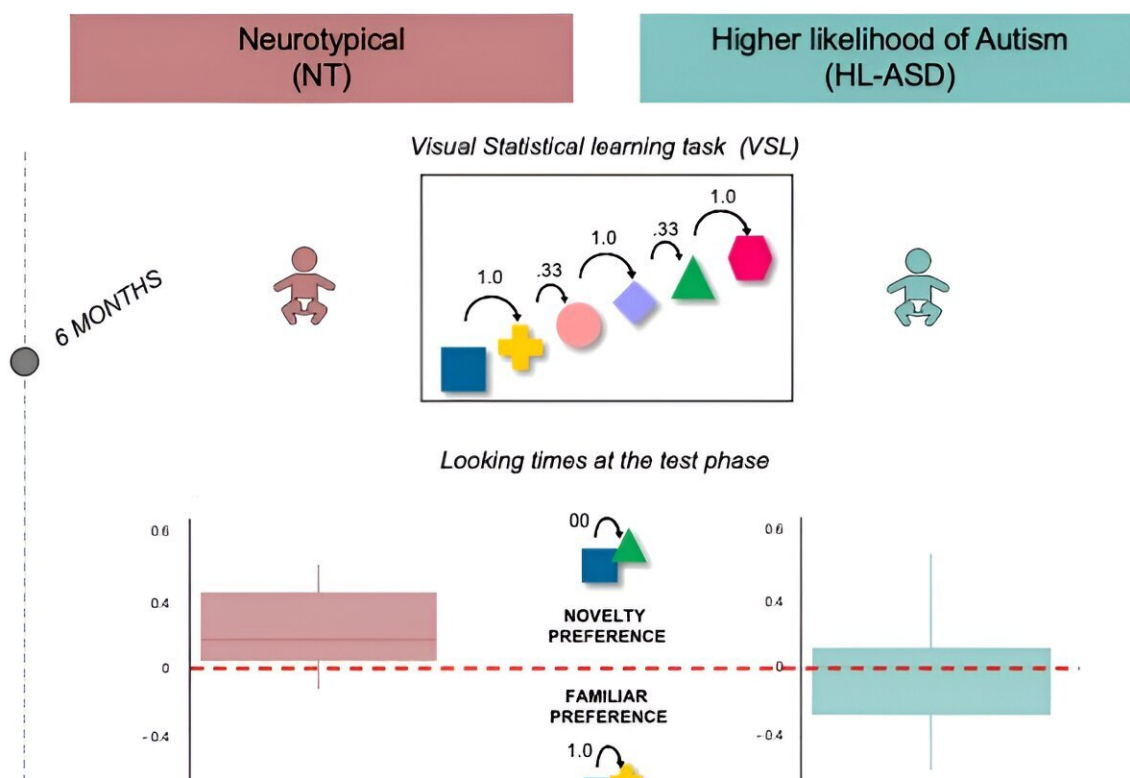


# Simple learning test may be used to diagnose autism at just six months of age

May 16 2024, by Bob Yirka



Credit: *PLOS ONE* (2024). DOI: 10.1371/journal.pone.0300274

A combined team of psychologists from the University of Milano-Bicocca and the Scientific Institute, IRCCS E. Medea, Child Psychopathology Unit, both in Italy, has discovered what might be a

marker for autism that could diagnose a child as young as 6 months.

In their [study](#), published in *PLOS ONE*, the group tested [infants](#) believed to be at risk of developing the disorder and compared their results with infants not at risk and then monitored them for two years to see if any of them developed autism.

Autism is believed to be a whole spectrum of social, mental and [emotional disorders](#), with symptoms including mutism, social problems and extreme egocentrism. Prior research has suggested that the earlier a person is diagnosed with the disorder, the more that can be done to alleviate symptoms as they age.

Currently, it is difficult to diagnose children under the age of 3 because of normal developmental issues—without communication skills, it is hard for them to answer questions. In this new study, the researchers believe they may have found a way to diagnose the disorder in infants as young as 6 months.

The researchers carried out a series of tests that involved showing an infant a picture and observing whether they responded to similar patterns in other pictures. This approach involves [statistical learning](#), which is currently used in different ways to diagnose [older children](#).

The research team recruited 19 infants (and their parents) under the age of 7 months. All babies had older siblings who were already diagnosed with autism. Prior research has shown that having an older sibling with the disorder is a high risk factor for the disorder.

They also recruited 19 infants (and their parents) who were not at risk of developing the disorder. All the infants were given statistical learning tests and monitored over the following two years to see if they developed autism.

The researchers found that most of the high-risk infants struggled with the tests—and all of those with the worst scores were more likely to develop autism as they grew older.

The research team acknowledges that their findings are preliminary, pointing out that much more work is required to confirm that statistical testing can be used to diagnose [autism](#) in infants.

**More information:** Roberta Bettoni et al, Visual statistical learning in preverbal infants at a higher likelihood of autism and its association with later social communication skills, *PLOS ONE* (2024). [DOI: 10.1371/journal.pone.0300274](#)

© 2024 Science X Network

Citation: Simple learning test may be used to diagnose autism at just six months of age (2024, May 16) retrieved 16 August 2024 from <https://medicalxpress.com/news/2024-05-simple-autism-months-age.html>

<p>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.</p>
--