

NEWS

Some autism traits may show up later in girls than in boys

BY NICHOLETTE ZELIADT

18 JUNE 2018



Girls with autism traits have fewer problems with social communication than boys do early on, but their skills worsen by adolescence, a new study suggests¹.

The researchers looked at social traits of autism in the general population, rather than in children diagnosed with autism. Girls have fewer of these social issues than boys at age 7, but their social skills match those of boys by age 16.

The findings may help explain why **girls often receive an autism diagnosis later** than boys do.

“There’s a group of girls who may not be presenting to clinics with clinically important social difficulties until adolescence,” says lead investigator **William Mandy**, senior lecturer in clinical psychology at University College London.

It is unclear why these difficulties spike during adolescence. Mandy and others say the timing may relate to the increasing complexity of girls’ social environment at that age.

“This might be an example of social demands around the adolescent years exceeding capacity, especially for females,” says **Stelios Georgiades**, assistant professor of psychiatry and behavioral neurosciences at McMaster University in Ontario, Canada, who was not involved in the work.

However, some experts question whether the uptick in social difficulties in teenage girls is real.

“I was really surprised by these findings,” says **Tony Charman**, chair of clinical child psychology at King’s College London, who was not involved in the study. “One would feel much more confident about the likely truthfulness and generalizability of that increase in female adolescents’ traits if you could see it replicated in other samples, with other measures.”

Tracking traits:

Mandy and his colleagues analyzed data from 9,744 children in the **Avon Longitudinal Study of Parents and Children**. The study tracks the development of children born in southwest England between April 1991 and December 1992.

When the children were 7, 10, 13 and 16 years old, their parents completed the Social Communication Disorders Checklist, a screening tool. High scores on this questionnaire indicate possible autism.

The researchers plotted each child’s scores by age, and then compared the average trajectory of boys to that of girls. They reported the findings 19 April in the *Journal of Child Psychology and Psychiatry*.

Overall, the average score for both boys and girls shows a slight drop from age 7 to 10 years, and an increase from ages 10 to 16. But girls score lower than boys at age 7, and their average score increases more during adolescence.

The same pattern holds when the researchers restrict their analysis to children with the highest level of autism traits, based on their scores on the checklist. The sex differences do not vary by level of intelligence.

If children with autism follow the same paths, clinicians may need to assess some girls for autism multiple times, says **So Hyun “Sophy” Kim**, assistant professor of psychology in clinical psychiatry at Weill Cornell Medicine in New York, who was not involved in the study. “Repeat assessments during adolescence might be important for girls who have subclinical symptoms early on,” she says.

Transition points:

The findings jibe with unpublished evidence from Georgiades showing that the **severity of autism features increases** in some children with the condition once they start school. The results come from a Canadian study called Pathways in Autism Spectrum Disorders, in which researchers have **followed children with the condition** to age 11 so far.

“The trajectories of social traits are not linear,” Georgiades says. “There are potentially important transition points — for example, into the school system around age 6 and into the adolescent years around age 11 to 12.”

Still, skeptics say the apparent increase in autism traits in adolescent girls may reflect common issues such as **anxiety and depression** that occur more often in girls of that age than in boys.

“Social behavior is a complex organism in and of itself, and it reflects a lot of things,” says **Elise Robinson**, assistant professor of epidemiology at Harvard University, who was not involved in the study. “It’s difficult to guess what changing spheres of influence it might have as we age.”

A 2017 study by Mandy’s team runs against the idea that high levels of anxiety explain the new results, however. In that study, the researchers found that **autism traits predict social anxiety**, but not the reverse.

Mandy and his colleagues plan to examine the features of girls without autism who show a stark increase in social communication difficulties during adolescence, with the goal of identifying signs of social problems.

REFERENCES:

1. Mandy W. *et al. J. Child Psychol. Psychiatry* Epub ahead of print (2018) [PubMed](#)