

NEWS

Social problems common in autism raise risk of suicidal behavior

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Teenagers who have trouble with social communication are twice as likely as their peers to harm themselves with suicidal intentions, according to new research¹.

The work is among the first to explore the relationship between autism traits and suicidal behavior.

The findings also suggest that social-communication problems precipitate depression, which can ultimately lead to suicidal thoughts or behaviors.

“It’s well known that depression is associated with suicidality,” says **Dheeraj Rai**, lead investigator and senior lecturer in psychiatry at the University of Bristol in the United Kingdom. “The surprise for me was it explains only so much of the association, so there are definitely other potential mediators out there.” For example, factors such as bullying and poor emotional control can also contribute to the high risk of suicidal behavior in teens with social problems.

The study did not find a direct association between suicidal behavior and autism; the sample included only 42 teenagers with autism — too few to draw significant conclusions.

Still, it bolsters work showing suicide and **self-harm are alarmingly common** in people with the condition². People on the spectrum may have few social-support networks and may struggle to connect with others, exacerbating their risk of suicide.

“This is quite an important study in the sense that it highlights the impact that social-communication difficulties can have,” says **Jacqui Rodgers**, senior lecturer in clinical psychology at Newcastle University in the U.K., who was not involved in the research. “It again reinforces the potential relationship between autism characteristics and mental-health issues.”

The “big message” from the study is a need for suicide and depression screening among people with autism, says **Jeremy Veenstra-VanderWeele**, professor of psychiatry at Columbia University, who was not involved in the research. “It looks like autism makes those difficulties [in adolescence] more frequent.”

‘Worrying finding’:

Rai and his colleagues analyzed questionnaires filled out by the parents of 5,031 children enrolled in the **Avon Longitudinal Study of Parents and Children**. This study follows thousands of women and their children in the U.K. to investigate genetic and environmental influences on development.

When the children were 7, their parents completed a questionnaire that assesses social communication. Parents also answered questions on three other autism traits — impaired social skills when the children were 3, **repetitive behavior** when they children were 5 and verbal communication when they were 9.

The researchers flagged the 10 percent of children with the most impairment in each of these autism traits as being in a ‘high-risk’ group for autism. They considered the remaining 90 percent

to be 'low risk.'

When the children were 12, they completed a depression survey. And at age 16, they answered questions about suicidality, such as whether they self-harmed with the intent to kill themselves.

When the researchers looked at self-harm without suicidal intent, they found that an equal proportion of children in the low- and high-risk groups for social-communication difficulties — roughly 11 percent — had engaged in such behavior. However, 12.5 percent of those in the high-risk group reported self-harm with suicidal intent, compared with about 6 percent of the low-risk group.

"It's quite a worrying finding, really," says **Emily Taylor**, lecturer in clinical psychology at the University of Edinburgh in Scotland, who was not involved in the research.

People with autistic traits may only harm themselves if they have suicidal intentions, Taylor says. "There isn't that intermediate step," of self-harm without suicidal intent, she says. "It is more about an active attempt to die."

The study found no association between other autism traits and suicidal thoughts, plans or self-harming behaviors. The findings were published in May in the *Journal of the American Academy of Child & Adolescent Psychiatry*.

A new tool identifies suicidal behaviors from medical records, rather than relying on clinicians to manually code the records. The algorithm accurately identifies suicidal intentions or behaviors in 85 percent of individuals, according to a study published in April³.

The algorithm may help clinicians estimate the number of people with autism who have suicidal thoughts and behaviors, says co-lead investigator **Johnny Downs**, clinical research fellow at King's College London. It may also eventually help researchers pinpoint risk factors for suicide in people with autism.

REFERENCES:

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