Fewer females may be diagnosed with autism due to gender bias, new research suggests

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Fewer females may be diagnosed with autism due to misconceptions that autism is a male condition, new research has found.

Researchers at Edge Hill University found that a lack of understanding and recognition of how females experience autism, and a predisposition to associate autistic traits with males, may hinder the identification of autistic females.

Dr. Gray Atherton, Rae Brickhill, Dr. Andrea Piovesan and Dr. Liam Cross carried out a study which tested implicit and explicit associations between autism and binary gender. The results have been published in the journal *PLOS ONE*.

Dr. Cross said, "Males are three times more likely to be diagnosed with autism than females; females have a higher average age of diagnosis than males and are more likely to be diagnosed in adulthood rather than childhood.

"These factors can contribute to the misconception that autism is a male condition which can lead to systematic discrimination against females who are autistic, leaving them at greater risk of remaining undiagnosed."

Dr. Atherton added, "Members of the autistic community, such as women who have been diagnosed later in life and parents of autistic female children, have raised concerns about the impact on women and girls' well-being and their ability to 'fit in.'

"The systems we use to identify, diagnose and support women and girls with autism need to change and we hope studies like ours will help highlight that need."

The study aimed to measure how gender colors the perception of autism subconsciously. Of the 300 participants, 149 were male and 151 female, they were all aged between 18 and 72, and 14 had a medical diagnosis of autism.

Participants were set a series of tasks including an Implicit Association Test (IAT) which asked them to categorize autistic traits with either male or female names, and a task which asked them to rate either a female or male character described in a vignette or account, in relation to certain statements taken from the Autism Quotient (AQ)—an assessment of autistic traits—such as "I prefer to do things with others rather than on my own."

For the IAT, response times were used to determine the level of subconscious bias between autism and gender; participants were significantly faster when autistic traits were being categorized with male names compared to female names, indicating that participants were faster to associate autistic words with male names. This suggested a stronger implicit association between these categories.

For the AQ, when participants rated a hypothetical female, they were less likely to rate them as highly on certain traits than when rating a hypothetical male, despite both vignettes containing identical information apart from pro-nouns and names.

Participants were asked about their knowledge of autism but this did not appear to affect responses.

More information: Rae Brickhill et al, Autism, thy name is man: Exploring implicit and explicit gender bias in autism perceptions, *PLOS ONE* (2023). DOI: 10.1371/journal.pone.0284013

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https://medicalxpress.com/news/2023-08-females-autism-due-gender-bias.html