



# Do sex differences affect ASD symptom severity scores?

By Dr. Jessica Edwards

Researchers in the USA have investigated whether standard diagnostic assessments for autism spectrum disorder (ASD) are biased against girls. Aaron Kaat and colleagues compiled the largest sample of girls with clinical ASD diagnoses to date, obtaining data from 27 different sites, including nearly 9,000 children, 16% of whom were female. After accounting for age, IQ and language level, they found that indeed, girls received less severe scores than boys on clinician-observed and parent-reported measures of restrictive and repetitive behaviours (ADOS and ADI-R). By contrast, girls received more severe scores than boys on a parent-report questionnaire of restrictive and repetitive behaviours and social communication difficulties (SRS). However, the effect sizes for these differences were small and thus unlikely to have clinical significance.

Although these findings do not readily support the need for sex-specific scoring of these instruments among children already diagnosed with ASD, the researchers explain that it is still possible that some girls will exhibit different ASD-related difficulties to boys. They thus propose that future work should examine the content validity of diagnostic instruments that potentially lack sensitivity to detect certain ASD symptoms.

## Referring to:

Kaat, A.J., Shui, A.M., Ghods, S.S., Farmer, C.A., Esler, A.N., Thurm, A., Georgiades, S., Kanne, S.M., Lord, C., Shin Kim, Y. & Bishop, S.L. (2020), *Sex differences in scores on standardized measures of autism symptoms: a multisite integrative data analysis*. *J. Child Psychol. Psychiatr.* doi: 10.1111/jcpp.13242.

## Glossary:

**Restrictive and repetitive behaviours:** children with ASD often exhibit restricted behaviours that are expressed through repeated movements, thought processes, or preferences. For example, some children might repeatedly flap their hands or utter the same phrase, and some may show an intense interest in a certain subject. Restriction is evidenced by apparent inflexibility with regards to such repetitive behaviours, including being averse to changing routines.

**Social communication difficulties:** children with ASD often exhibit communication difficulties when engaging with others in social situations. For example, some children find it hard to use and understand non-verbal communication such as eye contact and facial expressions, while others might show a tendency towards speaking excessively about their interests without adhering to social rules like taking turns in conversations.