Sex differences in ADHD symptom severity.

Arnett, A. B., Pennington, B. F., Willcutt, E. G., DeFries, J. C. and Olson, R. K.
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Background
Males show higher rates of attention deficit hyperactivity disorder (ADHD) than do females. Potential explanations include genuine etiological differences or artifact.

Methods
2,332 twin and sibling youth participated in behavioral and cognitive testing. Partially competing models of symptom severity distribution differences, the mean difference, and variance difference models, were tested within a randomly selected subsample. The Delta method was used to test for mediation of sex differences in ADHD symptom severity by processing speed, inhibition and working memory.

Results
The combined mean difference and variance difference models fully explained the sex difference in ADHD symptom severity. Cognitive endophenotypes mediated 14% of the sex difference effect.

Conclusions
The sex difference in ADHD symptom severity is valid and may be due to differing genetic and cognitive liabilities between the sexes.