Shared genetic risk underlies the co-occurrence of ADHD and other psychiatric symptoms

By Dr. Jessica Edwards

Data from twin studies suggest that the co-occurrence of ADHD with other psychiatric disorders is due, in part, to shared genetic risks.[1] Now researchers from Sweden, the USA and the UK have compiled a systematic review and meta-analysis for the Journal of Child Psychology and Psychiatry on the strength of this genetic risk. Anneli Andersson and colleagues identified 31 twin studies in the published literature from which they extracted information on the genetic correlations between ADHD and externalizing, internalizing and neurodevelopmental symptoms. The pooled genetic correlations suggested a moderate level of genetic overlap between ADHD and other psychiatric symptoms. Furthermore, these pooled estimates were similar in magnitude across different types of psychiatric symptoms, age groups and methods of assessment. Going forward, Andersson et al. explain that further twin studies investigating similar phenotypes using the same methodology are needed to address the heterogeneity found between individual studies in this meta-analysis. They also posit that large studies harnessing molecular data will improve our understanding of the shared and specific genetic effects related to ADHD and other psychopathologies.

Referring to:

Anderson, A., Tuvblad, C., Chen, Q., Du Rietz, E., Cortese, S., Kuja-Halkola, R. & Larsson, H. (2020), Research Review: The strength of the genetic overlap between ADHD and other psychiatric symptoms – a systematic review and meta-analysis. J. Child Psychol. Psychiatr. doi: 10.111/jcpp.13233.

References:

[1] Faraone, S.V. et al. (2019), Genetics of attention deficit hyperactivity disorder. Mol.Psychiatry. 24: 562-575. doi: 10.1038/s41380-018-0070-0.