



Gender-specific pathways mediate the risk of substance use in adolescents with ADHD

By Jessica K. Edwards

Data suggest that children with attention-deficit/hyperactivity disorder (ADHD) are more likely to start smoking tobacco and/or marijuana earlier in childhood than unaffected children, and then escalate use during adolescence^{1,2}. Now, a study by researchers at the University of Minnesota has examined the mediating pathways underlying this association between childhood ADHD and later substance-abuse problems. The study involved two large twin cohorts comprising 2,164 individuals who were prospectively assessed from 11 years-of-age³. Longitudinal structural equation models were developed to examine whether peer impairment (assessed at age 14 years), internalizing behaviours and/or adolescent ADHD symptoms mediate later problems with tobacco and/or marijuana use. In girls, they found evidence for direct effects of childhood ADHD on tobacco/marijuana use in late adolescence and indirect effects through adolescent ADHD symptoms. In boys, however, they found that peer impairment predominantly mediated the ADHD effects on marijuana problems. Notably, they found that early substance problems prospectively mediated the relationship between ADHD and later problems in both boys and girls. Understanding the factors that mediate the associations between ADHD and substances such as tobacco and marijuana, and whether they differ by gender, could help develop effective interventions. Based on these data, the researchers recommend that girls might benefit from targeted coping strategies for ADHD symptoms while boys might benefit from increasing opportunities to affiliate with prosocial peers, to reduce the subsequent risk for substance problems.

Referring to:

Elkins, I.J., Saunders, G.R.B., Malone, S.M., Wilson, S., McGue, M. & Iacono, W.G. (2018), Mediating pathways from childhood ADHD to adolescent tobacco and marijuana problems: roles of peer impairment, internalizing, adolescent ADHD symptoms and gender. *J. Child Psychol. Psychiatr.* 59: 1083-1093. doi: 10.1111/jcpp.12977.

References:

¹Sibley, M.H. et al. (2014), The role of early childhood ADHD and subsequent CD in the initiation and escalation of adolescent cigarette, alcohol, and marijuana use. *J. Abnorm. Psychol.* 123: 362-374. doi: 10.1037/a0036585.

²Molina, B.S.G. et al. (2018), Substance use through adolescence into early adulthood after childhood-diagnosed ADHD: Findings from the MTA longitudinal study. *J. Child Psychol. Psychiatr.* 59: 692-702. doi: 10.1111/jcpp.12855.

³Iacono, W.G. et al. (1999), Behavioural disinhibition and the development of substance-use disorders: Findings from the Minnesota Twin Family Study. *Dev. Psychopathol.* 11: 869-900. doi: 10.1017/s0954579499002369