A Network Analysis of Developmental Change in ADHD Symptom Structure From Preschool to Adulthood

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Abstract

Although there is substantial support for the validity of the diagnosis of attention-deficit/hyperactivity disorder (ADHD), there is considerable disagreement about how to best capture developmental changes in the expression of ADHD symptomatology. This article examines the associations among the 18 individual ADHD symptoms using a novel network analysis approach, from preschool to adulthood. The 1,420 participants were grouped into four age brackets: preschool (ages 3–6, n = 109), childhood (ages 6–12, n = 548), adolescence (ages 13–17, n = 357), and young adulthood (ages 18–36, n = 406). All participants completed a multistage, multi-informant diagnostic process, and self and informant symptom ratings were obtained. Network analysis indicated ADHD symptom structure became more differentiated over development. Two symptoms, often easily distracted and difficulty sustaining attention, appeared as central, or core, symptoms across all age groups. Thus, a small number of core symptoms may warrant extra weighting in future diagnostic systems.