Psychometric Properties of ADHD Symptoms in Toddlers

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Abstract

The purpose of this study is to examine the psychometric properties of the 18 Diagnostic and Statistical Manual of Mental Disorders (DSM) symptoms of attention deficit/hyperactivity disorder (ADHD) in 2-year-old children. ADHD is typically diagnosed in elementary school, but research suggests that many children with ADHD first show symptoms during the toddler years. An important first step in identifying toddlers who are at high risk for developing ADHD is to better understand the properties of DSM symptoms of ADHD in young children. Parents of 2-year-old children (N = 434; 240 boys, 194 girls; M = 29.07 months, SD = 3.42) across the United States were recruited online through Amazon's Mechanical Turk to complete surveys about their children's ADHD symptoms and temperament. Confirmatory factor analysis showed that 2- and 3-factor models fit well. All but one verbal hyperactive/impulsive symptom loaded highly on their respective factors. Relations between ADHD symptoms and temperament traits provided some support for convergent and divergent validity of the symptoms. Finally, item response theory analyses showed that items showed moderate to high levels of discrimination between toddlers with high and low levels of ADHD symptoms. Psychometric properties in 2-year-old children were generally comparable to those in older children, with similar factor structure, good reliability and validity, and good though somewhat lower discrimination, particularly for verbal symptoms. The study provides support for conducting prospective studies to determine whether these symptoms have utility for identifying at-risk toddlers.