Performance-based measures and behavioral ratings of executive function in diagnosing attention-deficit/hyperactivity disorder in children.

Tan A, Delgaty I, Steward K, Bunner M.


Abstract

Deficits in real-world executive functioning (EF) are a frequent characteristic of attention-deficit/hyperactivity disorder (ADHD). However, the predictive value of using performance-based and behavioral rating measures of EF when diagnosing ADHD remains unclear. The current study investigates the use of performance-based EF measures and a parent-report questionnaire with established ecological validity and clinical utility when diagnosing ADHD. Participants included 21 healthy controls, 21 ADHD-primary inattentive, and 21 ADHD-combined type subjects aged 6-15 years. A brief neuropsychological battery was administered to each subject including common EF assessment measures. Significant differences were not found between groups on most performance-based EF measures, whereas significant differences (p < 0.05) were found on most parent-report behavioral rating scales. Furthermore, performance-based measures did not predict group membership above chance levels. Results further support differences in predictive value of EF performance-based measures compared to parent-report questionnaires when diagnosing ADHD. Further research must investigate the relationship between performance-based and behavioral rating measures when assessing EF in ADHD.