Is Increased Response Time Variability Related to Deficient Emotional Self-Regulation in Children With ADHD?


Abstract

OBJECTIVE:
Elevated response time intrasubject variability (RT-ISV) characterizes ADHD. Deficient emotional self-regulation (DESR), defined by summating Child Behavior Checklist Anxious/Depressed, Aggressive, and Attention subscale scores, has been associated with worse outcome in ADHD. To determine if DESR is differentially associated with elevated RT-ISV, we examined RT-ISV in children with ADHD with and without DESR and in typically developing children (TDC).

METHOD:
We contrasted RT-ISV during a 6-min Eriksen Flanker Task in 31 children with ADHD without DESR, 34 with ADHD with DESR, and 65 TDC.

RESULTS:
Regardless of DESR, children with ADHD showed significantly greater RT-ISV than TDC (p < .001). The ADHD subgroups, defined by presence or absence of DESR, did not differ from each other.

CONCLUSION:
Increased RT-ISV characterizes ADHD regardless of comorbid DESR. Alongside similar findings in children and adults with ADHD, these results suggest that RT-ISV is related to cognitive rather than emotional dysregulation in ADHD.