Cue-dependent inhibition in posttraumatic stress disorder and attention-deficit/hyperactivity disorder

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Abstract

Objective
Attention-deficit/hyperactivity disorder (ADHD) and posttraumatic stress disorder (PTSD) are common among military veterans, but the comorbidity of these two psychiatric disorders remains largely unstudied. Evaluating response inhibition and cue-dependent learning as behavioral and neurocognitive mechanisms underlying ADHD/PTSD can inform etiological models and development of tailored interventions.

Method
A cued go/no-go task evaluated response inhibition in 160 adult males. Participants were recruited from the community and a Veterans Administration medical center. Four diagnostic groups were identified: ADHD-only, PTSD-only, ADHD + PTSD, controls.

Results
Group differences were observed across most indices of inhibitory functioning, reaction time, and reaction time variability, whereby PTSD-only and ADHD + PTSD participants demonstrated deficits relative to controls. No cue dependency effects were observed.

Conclusion
Finding complement prior work on neurocognitive mechanisms underlying ADHD, PTSD, and ADHD + PTSD. Lack of expected group differences for the ADHD-only group may be due to limited power. Additional work is needed to better characterize distinctions among clinical groups, as well as to test effects among women and youth.