Examining the Overlap Between ADHD and Autism Spectrum Disorder (ASD) Using Candidate Endophenotypes of ADHD.


Abstract

OBJECTIVE:
Recent discussions of aetiological overlap between ADHD and Autism Spectrum Disorder (ASD) require comparative studying of these disorders.

METHOD:
We examined performance of ASD patients with (ASD+) and without (ASD-) comorbid ADHD, ADHD patients, and controls for selected putative endophenotypes of ADHD: Intrasubject Variability (ISV) of reaction times, working memory (WM), inhibition, and temporal processing.

RESULTS:
We found that patients with ADHD or ASD+, but not ASD-, had elevated ISV across the entire task battery and temporal processing deficits, and that none of the groups were impaired in WM or inhibition. High levels of ISV and generally poor performance in ASD+ patients were only partially due to additive effects of the pure disorders.

CONCLUSION:
Overall, we conclude that, within our limited but heterogeneous task battery, ISV and temporal processing deficits are most sensitive to ADHD symptomatology and that controlling for ADHD comorbidity is mandatory when assessing ISV in autism.