Association Between Auditory and Visual Continuous Performance Tests in Students With ADHD

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Abstract

Objective:
Continuous Performance Tests (CPTs) are known to measure inattention and impulsivity in students with ADHD. Many CPTs utilize a visual format. It is accepted that auditory tasks reflect attentional demand more closely in the classroom. Thus, the association between deficits found by auditory and visual CPTs needs to be studied. We hypothesized that impulsivity would be dependent on sensory modality and inattention would be a unitary cross-modal construct.

Method:
Forty-four students with ADHD performed two CPTs (visual and auditory). We analyzed correlations between the variables examined by the two tasks.

Results:
There were strong correlations between variables measuring inattention. Correlations between auditory and visual measures of impulsivity were weak.

Conclusion:
Inattention is partially independent of modality. In contrast, response inhibition is modality-specific. Although ADHD is defined regardless of modality, hyperactive students may exhibit deficits in the auditory modality but not in the visual modality or vice versa.