

# Which neuropsychological functions predict various processing speed components in children with and without attention-deficit/hyperactivity disorder?

Vadnais SA, Kibby MY, Jagger-Rickels AC.

Dev Neuropsychol. 2018 May 2:1-16.  
doi: 10.1080/87565641.2018.1469135.

## Abstract

We identified statistical predictors of four processing speed (PS) components in a sample of 151 children with and without attention-deficit/hyperactivity disorder (ADHD). Performance on perceptual speed was predicted by visual attention/short-term memory, whereas incidental learning/psychomotor speed was predicted by verbal working memory. Rapid naming was predictive of each PS component assessed, and inhibition predicted all but one task, suggesting a shared need to identify/retrieve stimuli rapidly and inhibit incorrect responding across PS components. Hence, we found both shared and unique predictors of perceptual, cognitive, and output speed, suggesting more specific terminology should be used in future research on PS in ADHD.