

# Stop-signal task may aid assessment of adult ADHD

June 16 2023, by Lori Solomon

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The stop-signal task may be valuable for assessing inhibitory control

deficits in adult attention-deficit/hyperactivity disorder (ADHD), according to a systematic review and meta-analysis published online June 10 in *Neuropsychology Review*.

Daniel Senkowski, Ph.D., from Charité-Universitätsmedizin Berlin, and colleagues conducted a systematic literature review to understand neurocognitive deficits underlying adult ADHD. Analysis included 26 publications examining the stop-signal task in 883 adults with ADHD and 916 controls.

The researchers found reliable inhibitory control deficits expressed in prolonged stop-signal task response times, with a moderate effect size  $g = 0.51$ . Study quality, sample characteristics, or clinical parameters did not moderate these deficits, suggesting that they may be a phenotype in this disorder. Greater stop-signal task omission errors and reduced go accuracy in patients, indicative of altered [sustained attention](#), were detected in secondary outcome measure analysis, although not all studies were available for these measures (only 10 studies available).

"Our review and meta-analysis suggest that the stop-signal task in conjunction with other neurocognitive tests and clinical questionnaires, could become an important tool for the assessment of inhibitory control deficits in adult ADHD," the authors write.

**More information:** Daniel Senkowski et al, Assessing Inhibitory Control Deficits in Adult ADHD: A Systematic Review and Meta-analysis of the Stop-signal Task, *Neuropsychology Review* (2023). [DOI: 10.1007/s11065-023-09592-5](https://doi.org/10.1007/s11065-023-09592-5)

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