

Is motor activity during cognitive assessment an indicator for feigned attention-deficit/hyperactivity disorder (ADHD) in adults?

Fuermaier ABM, Tucha O, Koerts J, Send TS, Weisbrod M, Aschenbrenner S, Tucha L.

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Abstract

OBJECTIVES:

Several approaches, ranging from self-ratings of symptoms and impairments to objective neuropsychological testing, have been utilized during clinical evaluation in order to assess symptom and performance validity of individuals with attention-deficit/hyperactivity disorder (ADHD) in adulthood. Motor activity has not been considered yet in this context, which is surprising given that hyperactivity is a prominent characteristic of ADHD. Hence, the goal of the present study was to explore the incremental value of motor activity when assessing the credibility of individuals with adult ADHD at clinical evaluation.

METHOD:

Forty-six patients diagnosed with ADHD took part in the study. A simulation design was performed, in which 152 healthy individuals were allocated to either a control condition ($n = 36$) or one of three simulation conditions ($n = 116$), the latter requesting participants to feign ADHD. All participants completed a self-rating scale of cognitive functioning and performed a computerized test for vigilance. Body movements were recorded during vigilance testing via a motion tracker attached to the back of the participant's chair.

RESULTS:

Patients with ADHD reported significantly more pronounced cognitive complaints and performed significantly poorer on the vigilance test than control participants. Simulators of ADHD, as compared to genuine patients, showed excessively low performance on the vigilance test. However, neither self-ratings of cognitive functioning nor measures of motor activity were suitable to distinguish genuine from feigned ADHD. A hierarchical logistic regression model showed that motor activity had no incremental value in detecting feigned ADHD when vigilance test performance has already been considered.

CONCLUSIONS:

Standard neuropsychological tests of vigilance may be useful to measure both performance and credibility of individuals with adult ADHD at clinical evaluation. In contrast, self-reports of symptoms and impairments, as well as measures of body movements, may not support the assessment of credibility in this context.