Identifying potentially marker symptoms of attention-deficit/hyperactivity disorder

Arias VB, Esnaola I, Rodríguez-Medina J.


Abstract

BACKGROUND:
For the diagnosis of attention-deficit/hyperactivity disorder (ADHD), the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) proposes that adherence to six symptoms in either group (inattention and hyperactivity/impulsivity) will lead to the diagnosis of one of three presentations of the disorder. Underlying this diagnostic algorithm is the assumption that the 18 symptoms have equal relevance for the diagnosis of ADHD, all are equally severe, and all have the same power to detect the presence of the disorder in all its degrees of severity, without considering the possibility of using marker symptoms. However, several studies have suggested that ADHD symptoms differ in both their power to discriminate the presence of the disorder and the degree of severity they represent. The aim of the present study was to replicate the results of previous research by evaluating the discriminative capacity and relative severity of ADHD symptoms, as well as to extend the investigation of this topic to Spanish-speaking Latin American samples.

METHODS:
The properties of ADHD symptoms rated by the parents of 474 Chilean children were analyzed. Symptom parameters were estimated using the graded response model.

RESULTS:
The results suggest that symptoms of ADHD differ substantially in both the accuracy with which they reflect the presence of the disorder, and their relative severity. Symptoms "easily distracted by extraneous stimuli" and "have difficulty sustaining attention in tasks" (inattention) and "is on the go, acting as if driven by motor" (hyperactivity/impulsivity) were the most informative, and those with relatively lower severity thresholds.

DISCUSSION:
The fact that symptoms differ substantially in the probability of being observed conditionally to the trait level suggests the need to refine the diagnostic process by weighting the severity of the symptom, and even to assess the possibility of defining ADHD marker symptoms, as has been done in other disorders.