

Allyson G. Harrison, Ph. D., C.Psych. & Melanie Edwards Ph. D.
Regional Assessment and Resource Centre, Queen's University, Kingston Ontario

Learning Objectives:

To identify and analyze all studies validating rating scales or interview-based screeners commonly used to evaluate ADHD in adults

Statement of Problem:

Many clinicians rely on self-report screening tests or semi-structured interviews when evaluating ADHD in persons over age 18. While these are a time- and cost-saving first step in determining who may require a more comprehensive evaluation, clinicians may put more faith in the results of these screening tests than is warranted. The present study is a systematic review of the literature to evaluate diagnostic accuracy, including sensitivity, specificity, positive and negative predictive values of each measure at various expected population base rates.

Method:

A systematic literature search was undertaken using three major databases. The full texts of 51/1812 identified articles were reviewed, with bibliographies and citations also scrutinized for potentially relevant references.

Results:

Only 20 published studies or test manuals provided data regarding the sensitivity and specificity of the ADHD self-report measures or semi-structured interviews when tasked with differentiating between those with and without ADHD. Results show clearly that, while all screening measures have excellent ability to correctly classify non-ADHD individuals (negative predictive values at 97% or higher), false positive rates were high, especially when used in assessment-seeking samples. At best, positive predictive values in clinical samples reached 34%, with most falling below 20%.

Test	Reference	Sample	# Scale items used	Cut score used	Sensitivity	Specificity	Estimated rate of ADHD			
							5%		10%	
							PPV	NPV	PPV	NPV
ASRS	Brevik et al. 2020	646 ADHD (34y) vs. 908 controls (28y)	18 (A+B)	Total ≥ 16	98	22	6	100	12	99
BAARS-IV	Dvorsky et al. 2016	59 ADHD diagnosed using CAADID interview (20y) 27 without ADHD (21y)	9 items	3+ symptoms endorsed as often or very often on current Inattentive Subscale	89	30	6	98	12	96
BADDS	Brown 1996	143 controls, 142 High IQ ADHD adults (18-44y)	40	T ≥ 50 on Total score	96	89	31	100	49	100
WURS-25	McCann et al. 2000	68 ADHD (34y) and 73 non ADHD (38y)	25	≥ 46	72	58	8	98	16	95

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							PPV	NPV	PPV	NPV
ASRS	Pettersson et al. 2018	60 ADHD patients (28y), 48 Tx seeking controls (33y)	6 (Part A)	Total score ≥ 14	92	27	6	98	12	97
CAARS-S:L	Luty et al. 2009	37 ADHD, 59 Non ADHD (38y) getting Tx for substance abuse	66	Cut score 91+ out of maximum of 198	97	83	60	41	57	44
CAARS-S:L	VanVoorhees et al. 2011	184 ADHD, 85 other or no dx	66	ADHD Index ≥ 65 DSM-IV ADHD Symptom ≥ 65	91	27	6	98	12	96
WURS-25	Ward et al. 1993	81 ADHD, 70 patients with depression	25/61	≥ 46	86	81	19	99	33	98

Complete list of all papers reviewed can be found in Harrison, A. G., & Edwards, M. J. (2023). The Ability of Self-Report Methods to Accurately Diagnose Attention Deficit Hyperactivity Disorder: A Systematic Review. *Journal of Attention Disorders*, 0(0).

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Conclusion:

Clinicians cannot rely on these scales to diagnose ADHD and must instead undertake more rigorous evaluations of clients with positive screening scores. Furthermore, researchers and test developers must include relevant classification statistics in any publications to help clinicians make more statistically defensible diagnostic decisions. Otherwise, clinicians run the risk of inappropriately diagnosing and treating patients for ADHD.