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Assessing adult ADHD: New research and perspectives

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It is our pleasure to introduce this special issue of the Journal of Clinical and Experimental Neuropsychology on the assessment of adult ADHD. We present a mix of empirical and review articles covering different aspects of the topic, all of them trying to offer useful guidance to practicing neuropsychologists, while also stimulating further research. Assessing ADHD in adults is challenging, requiring skills and techniques that clinicians may not routinely use when assessing other disorders or age groups (Lovett & Davis, 2017). Not all clinicians agree on how to conduct such assessments, and a substantial proportion report a lack of confidence in their ability to reach accurate diagnostic judgments (e.g., Schneider et al., 2019). Furthermore, clinicians who undertake such assessments rarely ensure that all the DSM-5 diagnostic criteria are verified prior to making this diagnosis, at least in young adults (Nelson & Lovett, 2019; Weis et al., 2019)

In this introductory article, we briefly review what the empirical literature has shown about selected issues regarding adult ADHD assessment. We then turn to the highlights of each of the remaining articles in the special issue, discussing how they add to our knowledge base. Finally, we turn to questions raised by the extant literature (including this issue's articles) that we believe require more attention from researchers.

What do we know about adult ADHD? ADHD exists in adults, but...

The syndrome now known as ADHD was originally conceptualized as a childhood disorder, and various terms were used to describe it (Barkley, 2015). By the late 1970s, studies following children with the syndrome into adulthood were beginning to be published (Conrad & Potter, 2000). Researchers noted that although many children "outgrew" their symptoms, others did not. This led to changes in the *Diagnostic and Statistical Manual*

(DSM) that acknowledged this potential long-term course of the syndrome, and in the 1990s, the idea of adults with ADHD flourished, even though the research base was comparatively quite small. Popular books such as Hallowell and Ratey's (1994) Driven to Distraction sold well, but many clinicians understandably remained skeptical. It did not help that many of the adults described as having ADHD were not substantially impaired (they had done well in life without accommodations or treatment), and the books recommended screening methods that would make virtually anyone think that they might have ADHD. (Hallowell & Ratey's suggested signs of adult ADHD included a love of travel, eagerness to try new things, and being "a maverick.")

Today, a large empirical literature on adults with ADHD exists, and the most recent edition of the DSM has been modified to explicitly include how symptoms initially written to describe childhood behaviors may manifest in adults with this condition. The manual even reports that "about 2.5% of adults" have ADHD and that "a substantial proportion of children with ADHD remain relatively impaired into adulthood" (American Psychiatric Association, 2013, pp. 61–62). That said, we must note two important caveats. First, persistence of symptoms into adulthood should not be assumed. While studies differ in the rate of persistence found, and this is likely related to how persistence is defined and measured (e.g., who is asked to report symptoms, how initial diagnosis was made, etc.), studies agree that many children with ADHD are no longer clinically symptomatic as adults. Often, ADHD is found to persist in fewer than 50% of adults who had the disorder as children (see Caye et al., 2016, for review).

The second caveat is that "Adult ADHD" refers to adults who have the same disorder, "ADHD," that children do; it is not a distinct disorder. Although the symptoms may cause impairment in different settings or even present somewhat differently in adults than in children, the diagnostic criteria for adults are essentially the same as those for children. (Only five clinical symptoms are needed in a domain, rather than six, but this is a minor adjustment.) Especially important is that the childhood onset of the disorder remains a key diagnostic criterion. Despite excitement about the possibility of "adult-onset ADHD" several years ago (e.g., Moffitt et al., 2015), there is no such established disorder, and the studies that initially appeared to find such a syndrome did not address differential diagnosis concerns. Since ADHD symptoms, particularly inattention, can be caused by virtually all disorders, the fact that an adult presents with such symptoms for the first time in their lives should not necessarily suggest ADHD, but more likely a different problem. Indeed, longitudinal research that carefully tracked the course of different symptoms in previously asymptomatic children suggests that adult onset of ADHD symptoms is typically accompanied or preceded by other disorders that can cause inattention and related behaviors (Sibley et al., 2018). Sibley et al. (2018) conducted one such analysis and concluded that "Individuals seeking treatment for late onset ADHD may be valid cases: however, more commonly, symptoms represent non-impairing cognitive fluctuations, a comorbid disorder, or the cognitive effects of substance use. False positive late onset ADHD cases are common without careful assessment. Clinicians should carefully assess impairment, psychiatric history, and substance use before treating potential late onset cases" (p. 140).

ADHD is vulnerable to being overdiagnosed in adults

We have already alluded to two of the reasons why some adults without actual ADHD may be wrongly diagnosed: insufficient attention to childhood onset and differential diagnosis. However, there are additional, arguably more important mechanisms of overdiagnosis, and some of them relate to adults deliberately seeking diagnoses. People seek ADHD diagnoses for many reasons, and only some of those reasons would be related to conscious exaggeration of symptoms. Still, conscious exaggeration is a key problem. Why would it occur? Two incentives for exaggeration are (a) access to medication and (b) access to disability accommodations. The stimulant medication prescribed for ADHD is widely used for recreational and performance enhancement purposes (e.g., Cook et al., 2021; Weyandt et al., 2016) by those with and without ADHD. Indeed, prescribed medication is often diverted (sold, traded, or gifted) to individuals without a prescription. In one interesting study, most college freshmen with prescribed stimulants reported being unable to adhere to a complete medication regimen due to substantial pressure to share the drugs (Schaefer et al., 2017), whereas another study found hundreds of thousands of messages about the drug Adderall on the social media platform Twitter, with tweets peaking around final exam periods (Hanson et al., 2013). Disability accommodations, such as additional time on tests in educational settings, flexible work schedules, and even financial payment through welfare programs can also accrue from an ADHD diagnosis (Gordon et al., 2015; Harrison, 2017). Since these are desirable perks for many individuals with or without substantial psychopathology, they provide ample motivation to obtain a diagnosis.

Conscious exaggeration of symptoms and impairment can be detected through careful assessment, including the use of specialized formal measures of effort, motivation, and honesty. As Suhr and Berry (2017) noted, such measures must be considered a key element of ADHD assessment in adults. Unfortunately, research suggests that although a substantial minority of adults being assessed for ADHD do exaggerate their problems (e.g., Nelson & Lovett, 2019; Sullivan et al., 2007), almost no clinicians formally evaluate performance or symptom validity in such assessments (e.g., Joy et al., 2010; Nelson & Lovett, 2019). In addition to specialized tests and scales, exaggeration can be detected through the use of sources of data other than the client; symptom ratings from and interviews with third-party informants can be very helpful, as can review of historical records.

Apart from conscious exaggeration of symptoms and impairment, there is a second, subtle type of motivation for seeking an ADHD diagnosis: once obtained, the bearer can explain any past and future life difficulties by referencing the disorder. Less empirical research is available on this phenomenon, but clients who first receive a diagnosis of ADHD in adulthood report an experience of relief, of finally having found the reason why various life problems were present (Fleischmann & Miller, 2013). Since no one's life is free of problems, ADHD is an attractive explanation for a myriad of complaints. Indeed, one of the popular books on adult ADHD is entitled You Mean I'm Not Lazy, Stupid, or Crazy?! (Kelly & Ramundo, 1993). Suhr and Wei (2017) described the process by which exposure to popular information about ADHD can make people wonder if they have the disorder. Once the possibility is entertained, people begin to focus more on their (entirely normal) experiences of inattention or memory lapses, and their emotional distress over the possibility of having the disorder can in turn cause more such experiences to occur. These factors combine with the desire to attribute life problems to ADHD, and people become more and more convinced that they have the disorder before ever going for a formal evaluation. At the evaluation, people are likely to (honestly but inaccurately) report high levels of symptoms (which they have often researched ahead of time, out of sincere concern), and get the desired diagnosis. Since many

clinicians fail to understand that self-report ADHD questionnaires have a very high false positive rate (e.g., A.G. Harrison et al., 2019), they may not understand that high levels of self-reported symptoms alone are not sufficient to verify the presence of adult ADHD. This lack of awareness may explain why so many clinicians ignore all of the DSM-5 diagnostic guidelines for ADHD and inappropriately rely instead on self-report alone (e.g., Nelson & Lovett, 2019; Weis et al., 2019).

In sum, ADHD in adults is a very real and impairing disorder, but assessing it presents substantial difficulties, and without caution and care, the disorder is easy to overdiagnose. We hope that the articles in this issue help to navigate this complex clinical territory.

The special issue contributions

This issue contains seven papers representing substantial diversity in style and perspective. Some of the articles in this special issue synthesize findings from the empirical literature and offer direct guidance to practitioners. Sibley (this issue) uses empirical research to develop a sevenstep process for evaluating the presence of ADHD in adults who have no prior diagnosis. Her process is deeply sensitive to the dual problems of false positives and false negatives in ADHD diagnosis, and she argues cogently that the risks of these errors can be effectively balanced. For instance, she proposes that false negatives be avoided through a liberal "or" rule to tabulating symptoms, where individual symptoms endorsed by either a client or a collateral informant be summed to yield a symptom total, but that the resulting risks of false positive diagnoses be addressed through careful measurement of functional impairment and effective differential diagnosis.

Lefler et al. (this issue) focus in on one population of adults: college students. College is a place where many young people are diagnosed with ADHD for the first time, and the setting complicates the diagnostic process in myriad ways. There is a large research base on college students, perhaps due to their convenience as a sample to university-based researchers, and Lefler et al. deftly sift through that research. At times, they raise provocative ideas, such as questioning the value of the traditional DSM symptom area distinctions in college samples. These scholars also address issues related to the gender of clients, a continual necessity when considering a disorder that was initially defined primarily around male samples. Lefler et al. also repeatedly acknowledge areas in need of more empirical work, given that provocative findings require replication and extension, and often raise more questions than answers.

Finally, Weis et al. (this issue) zoom in even further, offering information and guidance on how to make

decisions about when students in higher education settings being evaluated for ADHD may need educational accommodations. Too often, lists of recommended accommodations are "boilerplate," offered reflexively to any student with an ADHD diagnosis. Weis et al. show how to seek objective evidence that is so helpful in individualized decision making. More provocatively, these scholars note the discrepancy between common practices in college disability services offices and the results from careful empirical research. Above all, Weis et al.'s paper reminds us that even when a diagnosis of ADHD is well-documented, the needed accommodations (if any) remain an open question, requiring separate and specific evidence.

Other papers that follow present new empirical work. Butzbach et al. (this issue) report on an interesting study of the relationship between ADHD, other psychopathology symptoms, and metacognitive skills in adults. These investigators measured metacognition both through subjective reports and through a fascinating "objective" procedure where participants completed various cognitive tasks and were asked to indicate how well they thought they had performed, relative to most other people. The need for some such procedure seems compelling, since individuals who have metacognitive deficits might, by definition, be unaware of those deficits when asked directly. Butzbach et al.'s study involved adults both with and without ADHD diagnoses, and used both self- and informant-reports to measure functional impairment, yielding many relationships of interest.

Speaking of functional impairment, Johnson and Suhr (this issue) explore the correlates of self-reports of such impairment in college students. Functional impairment is a key construct in the definition of ADHD, since symptoms of inattention and impulsiveness can hardly constitute a disorder in someone who is not impaired by them. Although individual students who experience functional impairment may at times have unique insight and awareness of their problems, Johnson and Suhr note that selfreports of functional impairment have expected disadvantages as well, in terms of their validity. These investigators used validity indices embedded in an ADHD symptom self-report scale to detect potential noncredible responders, and examined how noncredible responding (as well as other traits) relates to self-reported functional impairment. Their results help us to understand that, like all other data sources, clients themselves can generate untrustworthy or inaccurate information.

Embedded validity indicators are also the focus of Pollock et al.'s (this issue) study on the Test of Variables of Attention (TOVA), a continuous performance test commonly administered when assessing ADHD (including in adult populations). Continuous performance tests often have crude "validity checks" built into them, but

research has suggested that very low scores on a continuous performance test's primary indices can themselves be a red flag for noncredible data. Pollock et al. found that this holds true for the TOVA as well. These investigators used cluster analysis to identify different common profiles of TOVA scores, and found that a group of adults with very low TOVA scores also failed established validity measures. This suggests that the TOVA may be able to serve "double duty" in ADHD evaluations, measuring attention/self-control as well as honesty/effort.

Finally, Potts et al. (this issue) introduces a new scale for measuring ADHD symptoms, functional impairment, and symptom validity. These investigators' Multidimensional ADHD Rating Sale (MARS) includes all three constructs, and their data suggests initial psychometric adequacy. Like other embedded validity indices, the MARS does not require that a separate measure be given to assess symptom validity. However, like standalone measures, the MARS was explicitly developed to assess honesty (along with actual symptoms and impairment). It may be that some clinicians' apparent reluctance to formally consider symptom validity stems from not wanting to purchase and use a separate measure for that purpose; if so, the MARS could be a more attractive tool.

Together, these seven articles show the practical implications that can be drawn from literature already published, as well as exciting developments in the interpretation of existing assessment tools and the creation of new ones.

Topics requiring more research

We conclude this commentary by noting briefly a few of the continuing challenges related to the assessment of ADHD in adults, issues on which we would encourage more research that could better guide neuropsychologists' practice.

The diagnostic value of formal neuropsychological tests

Neuropsychologists use a wide variety of assessment techniques, including record review, clinical observations, and interviews of clients and collateral informants. However, neuropsychological assessment is most often associated with the administration and interpretation of formal tests of cognitive functioning. Although these formal tests can be very helpful in documenting deficits in various areas of cognitive functioning, the diagnostic value of these tests in determining whether a patient has ADHD is not clear, and has been questioned (e.g., Barkley, 2019; Pettersson et al.,

2018). More research is needed to examine this topic, particularly because the results from formal neuropsychological tests often diverge from those obtained from rating scales of the same traits (Maricle et al., 2010; Toplak et al., 2013), leaving clinicians to choose between measures that are objective but artificial, and those that are ecologically valid but far more subjective.

The documentation of functional impairment

A second, related topic is how to best obtain evidence of functional impairment in real-world settings. The DSM-5 criteria state that in ADHD, symptoms must interfere with or reduce the quality of functioning in such settings. Self-reports of functional impairment are helpful to obtain, but these are vulnerable to deliberate exaggeration (Fuermaier et al., 2018; Suhr et al., 2020). In the assessment of ADHD in children, collateral informant reports of impairment are common, but the evidence base on collateral reports of ADHD-related impairment in adults is comparatively small. Clinicians are welladvised to use objective historical records of impairment (e.g., teacher narrative report cards from childhood, work performance records), but it is challenging to research such materials in a standardized way. Future studies might determine the validity of collateral reports of impairment, and establish base rates of (for instance) teacher comments relating to inattention, to determine what types of comments are unusual.

Distress, lifestyle behaviors, and ADHD symptoms

Young adults who are stressed, anxious, or depressed are more prone to endorsing a wide variety of ADHD symptoms (e.g., A. G. Harrison et al., 2013). A number of largescale studies have documented rising rates of anxiety and depression in adolescents and young adults in recent years (e.g., Goodwin et al., 2020; Keyes et al., 2019). The COVID-19 pandemic appears to have only exacerbated these kinds of mental health problems, and it has certainly served as a stressor for many people. More research is needed on how to differentiate between true ADHD and symptoms that are secondary to stress/distress experiences in adults, as well as research on the mechanisms by which stressors lead to apparent ADHD symptoms. Additionally, research has suggested that excessive use of electronic devices may cause never-before diagnosed teenagers to now report experiencing more symptoms of ADHD (Ra et al., 2018). Lifestyle behaviors such as ubiquitous cellphone use are increasing in young adults, and more research is needed to determine the reason why ADHDtype symptoms emerge in those who interact frequently with electronic media. We expect that in the coming years,



more and more young adults will present for ADHD assessment with such nonspecific symptoms, and even though these people should generally not be diagnosed with ADHD, an appropriate clinical response must be coordinated, including effective assessment feedback and psychoeducation.

Summary of recommendations

Based on the literature reviewed above and the findings of the papers included in this special issue, clinicians may find the following guidelines helpful:

- (1) Think horses, not zebras when undertaking an ADHD assessment with a never before diagnosed adult. In other words, when an adult who has no prior ADHD diagnosis comes for an evaluation and reports symptoms of inattention or impulsiveness, consider the myriad common problems such as anxiety, depression, stress, and lifestyle behaviors (e.g., sleep problems, substance use) that could cause such symptoms. Although it is possible that a diagnosis of ADHD was missed or overlooked in childhood, new symptoms are generally not caused by ADHD. Sibley et al. (2018) showed that most often, late onset ADHD symptoms were due to other conditions such as substance abuse, mental health issues, or other comorbid conditions. As such, clinicians should ensure that other conditions that cause symptoms that mimic ADHD are evaluated formally prior to making an ADHD diagnosis.
- (2) Symptoms of ADHD are nonspecific and do not confirm functional impairment. Because symptoms of ADHD are common to a wide variety of disorders, clinicians should not rely on self-report alone as these measures have a high false positive rate, are poorly correlated with real-world functional impairment, and are easily manipulated.
- (3) Always obtain third-party information. Clinicians should always obtain information from knowledgeable third-party informants regarding ADHD symptoms they observe in the examinee currently, and whenever possible, obtain reports from parents/guardians and other objective sources regarding whether several ADHD symptoms were prior to age 12. While potentially useful, retrospective recall of symptoms (either by the client or by parents) is inferior to objective historical records such as teacher narrative comments in school report cards.
- (4) Always include appropriate symptom and performance validity measures. Regardless of reasons for symptom exaggeration, research shows

- that clinicians do not recognize when clients are reporting or performing non-credibly. The research shared in this special issue shows clearly the negative effect that symptom and performance exaggeration can have on obtained scores, potentially leading to an inaccurate diagnosis. In line with current recommendations (e.g., Sherman et al., 2020) clinicians should therefore include multiple measures shown to be sensitive to non-credible presentation of ADHD (such as the MARS proposed by Potts et al. (this issue) or the validity measure included in the TOVA).
- (5) Make academic accommodation recommendations based on a combination of (a) objective data from the evaluation and (b) available empirical research on the effects of accommodations, rather than issuing a boilerplate list of ADHD accommodations or deferring to client preferences. Weis et al. (this issue) discuss clearly why specific and reasonable accommodations are required in order to provide appropriate and equitable services to students diagnosed with ADHD.

Conclusion

Key facts about the appropriate assessment of ADHD in adults have already been learned from careful empirical research. The articles in this special issue review that research and also add new empirical results to that body of literature. However, much important research remains to be done, and will help neuropsychologists respond to an increasingly common clinical concern that adult clients are referred for. We are, again, delighted to present the articles in this special issue, and we hope that they will serve as a stimulus to yet more research in the future.

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References

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5 ed.). American Psychiatric Publishing.



- Barkley, R. A. (2015). History of ADHD. In R. A. Barkley (Ed.), Attention-deficit hyperactivity disorder (4th ed ed., pp. 3-50). Guilford.
- Barkley, R. A. (2019). Neuropsychological testing is not useful in the diagnosis of ADHD: Stop it (or prove it)! The ADHD Report, 27(2), 1-8.
- Butzbach, M., Fuermaier, A. B. M., Aschenbrenner, S., Weisbrod, M., Tucha, L., & Tucha, O. (this issue). Metacognition, psychopathology and daily functioning in adult ADHD. Journal of Clinical and Experimental Neuropsychology.
- Caye, A., Swanson, J., Thapar, A., Sibley, M., Arseneault, L., Hechtman, L., Arnold, L. E., Niclasen, J., Moffitt, T., & Rohde, L. A. (2016). Life span studies of ADHD-conceptual challenges and predictors of persistence and outcome. Current Psychiatry Reports, 18(12), 111.
- Conrad, P., & Potter, D. (2000). From hyperactive children to ADHD adults: Observations on the expansion of medical categories. Social Problems, 47(4), 559-582. https://doi.org/ 10.2307/3097135
- Cook, C., Kurtz-Costes, B., & Burnett, M. (2021). Nonprescription stimulant use at a public university: Students' motives, experiences, and guilt. Journal of Drug Issues, 51(2), 376-390. https://doi.org/10.1177/ 0022042620988107
- Fleischmann, A., & Miller, E. C. (2013). Online narratives by adults with ADHD who were diagnosed in adulthood. Learning Disability Quarterly, 36(1), 47-60. https://doi. org/10.1177/0731948712461448
- Fuermaier, A. B., Tucha, O., Koerts, J., Butzbach, M., Weisbrod, M., Aschenbrenner, S., & Tucha, L. (2018). Susceptibility of functional impairment scales to noncredible responses in the clinical evaluation of adult ADHD. The Clinical Neuropsychologist, 32(4), 671-680. https://doi. org/10.1080/13854046.2017.1406143
- Goodwin, R. D., Weinberger, A. H., Kim, J. H., Wu, M., & Galea, S. (2020). Trends in anxiety among adults in the United States, 2008-2018: Rapid increases among young adults. Journal of Psychiatric Research, 130, 441-446. https://doi.org/10.1016/j.jpsychires.2020.08.014
- Gordon, M., Lewandowski, L. J., & Lovett, B. J. (2015). Assessment and management of ADHD in educational and workplace settings in the context of ADA accommodations. In R. A. Barkley (Ed.), Attention-deficit hyperactivity disorder: A handbook for diagnosis and treatment (4th ed., pp. 774-794). Guilford.
- Hallowell, E. M., & Ratey, J. J. (1994). Driven to distraction. Pantheon.
- Hanson, C. L., Burton, S. H., Giraud-Carrier, C., West, J. H., Barnes, M. D., & Hansen, B. (2013). Tweaking and tweeting: Exploring Twitter for nonmedical use of a psychostimulant drug (Adderall) among college students. Journal of Medical Internet Research, 15(4), e62. https://doi.org/10.2196/jmir.
- Harrison, A. G. (2017). Clinical, ethical, and forensic implications of a flexible threshold for LD and ADHD in postsecondary settings. Psychological Injury and Law, 10(2), 138-150. https://doi.org/10.1007/s12207-017-9291-9
- Harrison, A. G., Alexander, S. J., & Armstrong, I. T. (2013). Higher reported levels of depression, stress, and anxiety are associated with increased endorsement of ADHD symptoms by postsecondary students. Canadian Journal of

- School Psychology, 28(3), 243-260. https://doi.org/10.1177/ 0829573513480616
- Harrison, A. G., Nay, S., & Armstrong, I. T. (2019). Diagnostic accuracy of the Conners' adult ADHD rating scale in a postsecondary population. Journal of Attention Disorders, 23(14), 1829-1837. https://doi.org/10.1177/ 1087054715625299
- Johnson, E., & Suhr, J. A. (this issue). Self-reported functional impairment in college students: Relationship to noncredible reporting, ADHD, psychological disorders, and other psychological factors. Journal of Clinical and Experimental Neuropsychology.
- Joy, J. A., Julius, R. J., Akter, R., & Baron, D. A. (2010). Assessment of ADHD documentation from candidates requesting Americans With Disabilities Act (ADA) accommodations for the national board of osteopathic medical examiners COMLEX exam. Journal of Attention Disorders. 14(2), 104–108. https://doi.org/10.1177/1087054710365056
- Kelly, K., & Ramundo, P. (1993). You mean I'm not lazy, stupid, or crazy?! Tyrell & Jerem.
- Keyes, K. M., Gary, D., O'Malley, P. M., Hamilton, A., & Schulenberg, J. (2019). Recent increases in depressive symptoms among US adolescents: Trends from 1991 to 2018. Social Psychiatry and Psychiatric Epidemiology, 54 (8), 987–996. https://doi.org/10.1007/s00127-019-01697-8
- Lefler, E. K., Flory, K., Canu, W. H., Willcutt, E. G., & Hartung, C. M. (this issue). Unique considerations in the assessment of ADHD in college students. Journal of Clinical and Experimental Neuropsychology.
- Lovett, B. J., & Davis, K. M. (2017). Adult ADHD assessment: An integrated clinical-forensic perspective. Professional Psychology, Research and Practice, 48(6), 438-444. https:// doi.org/10.1037/pro0000159
- Maricle, D. E., Johnson, W., & Avirett, E. (2010). Assessing and intervening in children with executive function disorders. In D. C. Miller (Ed.), Best practices in school neuropsychology: Guidelines for effective practice, assessment, and evidence-based intervention (pp. 599-640). John Wiley & Sons Inc.
- Moffitt, T. E., Houts, R., Asherson, P., Belsky, D. W., Corcoran, D. L., Hammerle, M., Harrington, H., Hogan, S., Meier, M. H., Polanczyk, G. V., Poulton, R., Ramrakha, S., Sugden, K., Williams, B., Rohde, L. A., & Caspi, A. (2015). Is adult ADHD a childhood-onset neurodevelopmental disorder? Evidence from a four-decade longitudinal cohort study. American Journal of Psychiatry, 172(10), 967-977. https://doi. org/10.1176/appi.ajp.2015.14101266
- Nelson, J. M., & Lovett, B. J. (2019). Assessing ADHD in college students: Integrating multiple evidence sources with symptom and performance validity Psychological Assessment, 31(6), 793-804. https://doi.org/ 10.1037/pas0000702
- Pettersson, R., Söderström, S., & Nilsson, K. W. (2018). Diagnosing ADHD in adults: An examination of the discriminative validity of neuropsychological tests and diagnostic assessment instruments. Journal of Attention Disorders, 22(11), 1019-1031. https://doi.org/10.1177/ 1087054715618788
- Pollock, B., Harrison, A. G., & Armstrong, I. T. (this issue). What can we learn about performance validity from TOVA response profiles? Journal of Clinical and Experimental Neuropsychology.

- Potts, H. E., Lewandowski, L. J., & Lovett, B. J. (this issue). The multidimensional ADHD rating scale: A measure of symptoms, impairment, and symptom validity. Journal of Clinical and Experimental Neuropsychology.
- Ra, C. K., Cho, J., Stone, M. D., De La Cerda, J., Goldenson, N. I., Moroney, E., Tung, I., Lee, S. S., & Leventhal, A. M. (2018). Association of digital media use with subsequent symptoms of attention-deficit/hyperactivity disorder among adolescents. Journal of the American Medical Association, 320(3), 255-263. https://doi.org/10.1001/jama.2018.8931
- Schaefer, M. R., Rawlinson, A. R., Wagoner, S. T., Shapiro, S. K., Kavookjian, J., & Grav, W. N. (2017). Adherence to attention-deficit/hyperactivity disorder medication during the transition to college. Journal of Adolescent Health, 60(6), 706-713. https://doi.org/10. 1016/j.jadohealth.2016.12.011
- Schneider, B. C., Schöttle, D., Hottenrott, B., Gallinat, I., & Moritz, S. (2019). Assessment of adult ADHD in clinical practice: Four Letters-40 opinions. Journal of Attention Disorders, 108705471987949. https://doi.org/10.1177/ 1087054719879498
- Sherman, E. M. S., Slick, D. J., & Iverson, G. L. (2020). Multidimensional malingering criteria for neuropsychological assessment: A 20-year update of the malingered neuropsychological dysfunction criteria. Archives of Clinical Neuropsychology, 35(6), 735-764. https://doi.org/10.1093/arclin/acaa019.
- Sibley, M. H. (this issue). Empirically-informed guidelines for first-time adult ADHD diagnosis. Journal of Clinical and Experimental Neuropsychology.
- Sibley, M. H., Rohde, L. A., Swanson, J. M., Hechtman, L. T., Molina, B. S., Mitchell, J. T., Arnold, L. E., Caye, A., Kennedy, T. M., Roy, A., & Stehli, A., & Multimodal Treatment Study of Children with ADHD (MTA) Cooperative Group. (2018). Late-onset ADHD reconsidered with comprehensive repeated assessments between ages 10 and 25. American Journal of Psychiatry, 175(2), 140-149. https://doi.org/10.1176/appi.ajp.2017.17030298
- Suhr, J. A., & Wei, C. (2017). Attention deficit/hyperactivity disorder as an illness identity: Implications for neuropsychological

- practice. In K. B. Boone (Ed.), Neuropsychological evaluation of somatoform and other functional somatic conditions: Assessment primer (pp. 251–273). Oxford University Press.
- Suhr, J. A., & Berry, D. T. (2017). The importance of assessing for validity of symptom report and performance in attention deficit/hyperactivity disorder (ADHD): Introduction to the special section on noncredible presentation in ADHD. Psychological Assessment, 29(12), 1427-1428. https://doi.org/10.1037/pas0000535
- Suhr, J. A., Lee, G. J., & Harrison, A. G. (2020). Susceptibility of functional impairment ratings to noncredible reporting in postsecondary students undergoing screening for ADHD. The Clinical Neuropsychologist, 1–13.
- Sullivan, B. K., May, K., & Galbally, L. (2007). Symptom exaggeration by college adults in attention-deficit hyperactivity disorder and learning disorder assessments. Applied Neuropsychology, 14(3), 189-207. https://doi.org/10.1080/ 09084280701509083
- Toplak, M. E., West, R. F., & Stanovich, K. E. (2013). Practitioner review: Do performance-based measures and ratings of executive function assess the same construct? Journal of Child Psychology and Psychiatry, 54(2), 131-143. https://doi.org/10.1111/jcpp.12001
- Weis, R., Hombosky, M. L., Schafer, K. K., Shulman, D., & Tull, J. K. (this issue). Accommodation decision-making for postsecondary students with ADHD: Implications for neuropsychologists. Journal of Clinical and Experimental Neuropsychology.
- Weis, R., Till, C. H., & Erickson, C. P. (2019). ADHD assessment in college students: Psychologists' adherence to DSM-5 criteria and multi-method/multi-informant assessment. Journal of Psychoeducational Assessment, 37(2), 209-225. https://doi.org/10.1177/0734282917735152
- Weyandt, L. L., Oster, D. R., Marraccini, M. E., Gudmundsdottir, B. G., Munro, B. A., Rathkey, E. S., & McCallum, A. (2016). Prescription stimulant medication misuse: Where are we and where do we go from here? Experimental and Clinical Psychopharmacology, 24(5), 400-414. https://doi.org/10.1037/pha0000093