



Executive Function & ADHD: Evidence-Based Assessment with the BRIEF2

Questions & Answers

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Q: Can you address the enormous increase in both children and adults reporting problematic symptoms of ADHD as a result of the COVID-19 pandemic? Inattentiveness, distractibility, forgetfulness, and problems finishing things are all way up. Some people were struggling, but managing, pre-pandemic, but functioning went way down with e-learning, a lack of activities, absence of structure, etc. We don't yet know whether these changes in functioning will last beyond the pandemic. If the person is struggling with multiple EF now, especially working memory, but doesn't show a clinical level of impairment pre-pandemic, how do we diagnose now without simply saying "Re-evaluate for ADHD one year post-pandemic"?

A: Rates of referral to mental health providers and for special education teams have increased with the pandemic. Many parents are trying to support one or more children during remote learning while managing their own remote work and are seeing, for the first time, that their children have difficulty staying focused, sitting still, or managing impulsivity. At the same time, many children who were functioning in school adequately prior to the pandemic have not adjusted well to the extraordinary demands of "Zoom school" and show signs of restlessness, inattention, disorganization, etc.

Even we, as professionals, have experienced the exhausting and disorganizing demands of back-to-back web meetings for interviews, assessments, team meetings, and administrative meetings as well as needing to meet virtually with our own children or parents. Many have spent the year sitting down at 8 a.m. and not moving



until 6 p.m. or worse, going from meeting to meeting, yet feeling that nothing gets done and finding ourselves more disorganized and inefficient. So much for the benefits of remote work!

A recent review of studies on children's behavioral health during the pandemic found an increase in fear and anxiety with both short and longer term psychosocial and mental health implications ([Singh et al., 2020](#)). The impact on children and adolescents is influenced by factors such as age, education, pre-existing mental health conditions, economic status, and quarantine. For example, preschool children were more likely to show signs of fear and anxiety than school-aged children, though children showed increased irritability, disrupted sleep, reduced appetite, separation anxiety, and inattention across the age spectrum.

We also know that school-aged children are used to the daily routine of going to school. This disruption in routine and lack of peer interaction and extracurricular activity is associated with lower affect or depression, anxiety, and specific worries such as earning grades for college. The impact on children with educational disabilities may be even greater.

So, a large number of stressed, anxious, sad, and often isolated children whose normal and well-established routines have been disrupted are attending school 5, 4, 2, or 0 days per week and are expected to spend many hours per day focusing on video lessons and then working independently. We are not surprised that they are struggling with attention, planning, organization, restlessness, and/or impulsivity. We are also not surprised that parents, who are 1) seeing their children doing schoolwork all day for the first time, and 2) overly stressed themselves, are seeking help at higher rates. I live in an area with a plethora of mental health providers, and most are not even accepting referrals for their wait lists.

So how do we assess these students for possible ADHD? I am finding an evidence-based assessment model very helpful in these times. This includes five basic steps (Chelune, 2017):

1. Frame a clear question: "Does this student have ADHD and meet criteria for OHI?"
2. Gather relevant historical and current information
3. Evaluate the data in the context of best research
4. Develop assessment plan to answer the question



5. Use measures with known sensitivity, specificity, and predictive value for answering the question

In this model, we have a clear question: “Does this student exhibit characteristics of ADHD (or anxiety, etc.)?” The second step is essential here: a look at historical information may suggest that the current symptoms are new during the pandemic and were not present before. That should make us hesitate in suggesting an ADHD diagnosis.

When we look at the current best research, we see that complaints of attention problems, restlessness, and so on are much higher during the pandemic. Our evaluation might then suggest that, while the student has current symptoms consistent with an ADHD diagnosis, there is not a clear history of symptoms prior to the onset of the pandemic and are better explained by the current pandemic effects. An equal part of diagnosing ADHD is making sure that the symptoms are not due to something else. In this case, we would need to rule out “pandemic effects” in order to arrive at a clear diagnosis of ADHD, just as we would need to rule out poor sleep, poor nutrition, anxiety, mood problems, and so on.

Q: Can someone with only initiation deficits not have ADHD when this is a standalone weakness?

A: You describe a challenging situation. Initiation—getting started or getting going on tasks or activities—can have several causes that are important to consider. When we first developed the Initiate scale on the BRIEF, it was with children who had undergone CNS chemotherapy for acute lymphoblastic leukemia, as they showed consistent and unique problems initiating. We later learned that problems with initiating were common in children and adults who had undergone chemotherapy that was not introduced into their brain directly, who were treated with steroids (e.g., prednisone) for a variety of conditions, who were depressed, or, who, most commonly, had developmental patterns of low energy and/or low tone. Many, if not most, children with initiation deficits will also show problems sustaining attention and planning and organizing their work, often because they don’t get started in the first place. A few, however, mostly show poor initiation. This is often accompanied by slower speed of output (e.g., speed of processing tasks) and slower motor output (e.g., pegboard tasks) and low motor tone (e.g., check with the OT). This reflects a biological under-arousal or low energy state. While it may not meet criteria for



ADHD-I, it does meet criteria for “reduced vitality” within the OHI disability category. Many under-initiators barely meet criteria for a diagnosis of ADHD-Inattentive. This is, however, the most common diagnostic rubric for this group. They do not have ADHD in the normal sense, but it is typically the best fit in terms of diagnosis. This group is referred to in the literature as having “sluggish cognitive tempo.” The condition has been described in the literature over the past 40 years or so and has received much attention in the last decade, with prominent ADHD researchers such as Russ Barkley discussing the condition. See the [Becker et al. \(2014\)](#) review first as a good overview.

Q: I think I am outdated on my research, but when I was initially trained, the understanding was that unless there is some brain trauma, ADHD is something a person has from birth, not something that develops later on. For instance, the history of those behaviors is very important to consider. Is this still the way of thinking?

A: You are not outdated! I learned that history, observations, and testing (HOT) should go together to form a coherent picture. Otherwise, we need to do more work. In the evidence-based assessment model, after a question is framed (“is this ADHD?”), we then review the history. We know that the symptoms of ADHD morph over time, such that many children may be restless and overactive as preschoolers but are later primarily inattentive, and that impulsivity and restlessness take a different form in adulthood than in adolescence (e.g., other types of risk taking). Still, there should be some indication of executive function problems in an individual’s history.

How many problems, and to what extent, is unknown. The *DSM-V* changed its criteria from “present prior to age 6,” for which there was no evidence, to “several symptoms present prior to 12 years.” In other words, we don’t need evidence of a full set of symptoms in early childhood, but we *should* see some evidence by the end of middle school.

We know that many children who are quietly inattentive but well behaved and achievement-oriented, particularly girls, fly under the radar until middle or high



school. It is also possible for well-supported and motivated bright students to function adequately until they reach college, where demands exceed attentional ability, and we might diagnose ADHD appropriately at that time. Even in those cases, there are typically indicators of attention problems we can glean from a good history.

Q: What if the teacher example had impulsive scores in, say, the low 60s, but inattentive scores in the 80s? This could be interpreted as a combined-type profile, but would it be more appropriate to consider this as inattentive because all the scores have been "shifted" up?

A: You have a good eye for detail! In the example profile you mention, the teacher ratings are very high for the Initiate, Working Memory, and Plan/Organize scales but actually low for the Inhibit scale. This is consistent with ADHD-I. If, as you suggest, the Inhibit scale were barely elevated (e.g., $T = 65$) while the Initiate, WM, and Plan/Organize scales were extremely elevated ($T > 80$'s), I would agree with your interpretation. That is, the whole profile reflects an upward shift or a tendency to rate the student as having lots of problems, and perhaps the true story is a bit more moderate since the Inhibit scale was not prominent.

This raises the notion of profile interpretation as opposed to absolute score interpretation. In the BRIEF2 Professional Manual and in the BRIEF2 Interpretive Guide, we talk about focusing on profiles of peaks and valleys in the context of absolute elevations. That is, look for the peaks and interpret those first as reflecting prominent concerns. While a profile may be elevated overall, it is still helpful to look for the prominent peaks and interpret those—in this case, the Initiate, WM, and Plan/Organize scales—as reflecting a substantial problem. The other scales may be elevated but much lower, such as the Inhibit scale.

Q: Are there differential profiles for ADHD vs. ASD?

A: Yes, there are different profiles across BRIEF2 scales that we see for students diagnosed with ADHD-I, ADHD-C, and ASD. We first published a paper on profiles in children with developmental disorders in 2002 (Gioia et al., 2002) that shows clear,



visually, and statistically distinguishable patterns of scale elevations on the BRIEF in these groups as well as in children with learning disabilities.

Children with ADHD-I were characterized primarily by a substantial elevation on the Working Memory scale followed by Plan/Organize. Children with ADHD-C had the same cognitive regulation profile but with a substantial elevation on the Inhibit scale. Children with learning disabilities had profiles like those in ADHD-I but at a much lower level. And children with ASD were characterized by a peak on the Shift scale, along with elevations on Working Memory and Plan/Organize.

When developing the BRIEF2, we had a very large clinical data set that allowed us to examine every item to see if it contributed to understanding any clinical group. That allowed us to reduce the length of the BRIEF2 by removing items that weren't helpful in identifying clinical problems with any particular group. We looked at profiles of scale elevations and included a profile analysis, essentially a MANOVA with individual scale *T* scores as repeated measures, and clinical group (ADHD-I, ADHD-C, LD, ASD, typically developing) as the between-groups factor. We found that all tests were significant, meaning:

1. Elevations or scores from scale to scale were not level across diagnostic groups
2. Different diagnostic groups had different overall scale elevations, and, most importantly
3. Each clinical group had different patterns of scale elevations

Again, ASD was defined by a peak on the Shift scale, while ADHD-I and ADHD-C shared elevations on Working Memory, Initiate, and Plan/Organize but were differentiated by a peak on the Inhibit scale for ADHD-C. LD was like an ADHD-I profile, but milder.

You can see these profiles graphically in the BRIEF2 manual in Figures 3.1, 3.2, and 3.3 (pp. 40-41). We discuss how this adds to the body of evidence for valid interpretation later in the manual (beginning on p. 161). The Profile Analysis section ends a larger discussion of BRIEF2 findings in students with developmental disorders (e.g., ADHD, ASD, LD) and those with medical disorders including NF1, ALL, tumors, other cancers, epilepsy, and brain injury.

You can also find sensitivity and specificity as well as predictive values for using the Shift scale to help identify students with ASD in the BRIEF2 Professional Manual (beginning on p. 41). It turns out that elevated scores on the Shift scale are very predictive of an ASD



diagnosis if that is a question and if there are other appropriate measures that suggest an ASD diagnosis as well.

If you are specifically interested in how the BRIEF2 works in the context of an ASD evaluation, my coauthor Lauren Kenworthy has been studying ASD for the past 20 plus years and is one of the developers of the "[Unstuck and On Target!](#)" intervention for increasing flexibility in students who get "stuck." See Yers, et al (2009), Rosenthal, et al (2013), and Granader, et al (2014).

Q: What are the error bars on the ADHD ratings? For example, if I had a child that closely resembled the parent ADHD-I child but was slightly lower, how would I be able to tell whether that was or wasn't a good fit for ADHD from those results?

A: We considered including error bars on the BRIEF2 ADHD Form figures so that you could evaluate the normal variability around the ADHD-I and ADHD-C profiles, but they got pretty messy and hard to see. Perhaps we can look at this more over time and consider slight shading around the lines to indicate the range. We intended these profiles to help you visually inspect your students' profiles relative to profiles typically seen in students with ADHD-I or ADHD-C. Your profiles will certainly vary quite a bit from these average profiles. I use them to get a sense of whether my profile is like that in students with ADHD or is different in some way.

Meanwhile, you can find the 90% confidence intervals in Appendix A (parent form) and Appendix B (teacher form) in the BRIEF2 Professional Manual, or they are printed in the score table in the Interpretive Report on PARiConnect. A typical 90% CI range around the Working Memory and Inhibit Scale scores is +/- 5 to 7 *T* score points.

Q: When reviewing cases and data, are you and other researchers looking at disproportionality in terms of who is diagnosed with ADHD and who is not (e.g., looking at students who have experienced



trauma [complex or single events]; access to medical providers; students who have sleep difficulties/sleep apnea; socioeconomic status; and cultural/linguistic background)?

A: This is a complex, but important, question with many parts. The BRIEF instruments were intended to help measure everyday behaviors that reflect executive functions. As it turns out, because the clinical diagnosis of ADHD is based on deficits in those same everyday executive function behaviors (primarily working memory and/or inhibitory control), the BRIEF is pretty good at identifying students who meet criteria for the diagnosis.

As with any diagnostic formulation, whether a functional diagnosis (e.g., EF deficits), a clinical diagnosis (e.g., ADHD-I), or an educational diagnosis (e.g., OHI), there are rule ins and rule outs to consider. For example, we know that many children will exhibit working memory and/or inhibitory control problems and likely meet ADHD criteria and OHI criteria, but we have to consider all other possible factors that might result in the clinical picture but NOT be consistent with ADHD.

For example, you suggest trauma or sleep difficulties, both of which have been shown to result in elevations on the BRIEF instruments. One of the first studies was by a colleague who consulted with an OSA clinic, and he collected a lot of data in children with sleep disturbance that showed they look likely mild ADHD-I ([Beebe et al., 2002](#)). I studied a group of children with trauma histories in long-term foster care long ago and was surprised to see substantial elevations on the Shift scale along with Working Memory and, frequently, Inhibit elevations much like profiles seen in children with ASD, but these were due to trauma and not ASD or ADHD.

Similarly, there is substantial research to show that the BRIEF Working Memory scale is one of the most sensitive to persistent problems following pediatric brain injury (e.g., [Chevignard et al., 2012](#)). There are hundreds of studies in a wide range of conditions from the everyday developmental and acquired LD, ADHD, TS, OCD, etc., to rare conditions and syndromes.

As you suggest, it is also important to consider other factors that influence children's functioning, and, thus, ratings on measures like the BRIEF instruments. Examination of the normative data showed that there are no substantial or meaningful effects of race/ethnicity, parent education, or region on BRIEF scores. Some of my favorite researchers



on the topic of poverty and self-regulation, however, have shown that poverty and overcrowding are associated with executive functioning, behavior, and academics in children (e.g., Raver et al., [2012](#), 2017; [Finegood & Blair, 2017](#)).

So, we need to consider all of this best available research when interpreting scores on all measures.

Q: Often, my one-to-one testing of working memory using a working memory assessment or direct assessments of EF does not sync with the BRIEF2. Can you discuss this?

A: The relationships between our performance measures (i.e., tests) of executive function and ratings on the BRIEF instruments is one of my favorite topics, and I hope to do another webinar on this soon.

We first developed the BRIEF in response to our own clinical observations that how students performed on our performance tests was often at odds with parent and teacher reports of how they were functioning in the everyday home and school environments. Students would do great on tests but were described as dysregulated in school and at home, and vice-versa. That led us to start writing down what parents and teachers said, turning them into statements, and collecting data to examine the question of why our tests don't often match real-world behavior.

What we, and many others, have learned over the past 20 years is that tests and the BRIEF are likely tapping different aspects of executive functioning. In a paper that summarized 50 years of executive function research, Don Stuss and Paul Burgess (2017) noted that we cannot measure all cognitive abilities using the same approach (i.e., tests alone), and that measures that mimic naturalistic situations are more likely to capture problems with executive functions than are tests.

There are multiple lines of evidence supporting the accuracy (e.g., validity) of both the BRIEF instruments and performance measures. But if both have evidence of validity, why don't they correlate more directly? This question has been raised in numerous articles including by us (Gioia & Isquith, 2004) and others (e.g., McAuley et al., 2010; Toplak et al., 2008), entire books (e.g., Sbordone, 2008), and one of my favorite articles by Cheryl Silver (2000), generally reaching the conclusion that these two types of measures are assessing different aspects of executive functioning. Further, evidence is clear that



ratings on the BRIEF instruments are much more sensitive to problems and predictive of real-world functioning than are performance measures ([Chevignard et al., 2012](#), [Toplak et al., 2008](#)), leading some to suggest use of the BRIEF as a practice standard when executive function deficits are suspected ([Turkstra et al., 2005](#)).

Debbie Waber and colleagues offered an elegant way of understanding how these two types of measures work together. In an analysis of the NIH Normal Brain Development data, they showed that span tasks (e.g., digit span, spatial span) were associated with brain anatomy in the hippocampus while the BRIEF2 Working Memory scale was related to anatomy next to the hippocampus. They suggested that span tasks reflect the actual brain process of holding information in working memory while the BRIEF2 Working Memory scale reflected the implementation of that holding in the everyday real-world environment where there are multiple factors other than just “holding” at play.

Our colleagues at the University of Houston in Jack Fletcher’s lab did a nice study that speaks to the contribution of both tests and the BRIEF instruments to understanding students’ executive functions. They looked at correlations between the BRIEF2 scales and reading and math performance, and between tests of executive functions and the same reading and math measures. They found that both the BRIEF2 scales and corresponding EF performance measures correlated with academic scores between .3 and .5. That is, each of the types of EF measures contributed moderately to scores on reading and math tasks. However, the two types of EF measures only correlated modestly, about .20 to .25, with each other. This means that they both contribute different information to understanding students’ academic functioning.

There was once a conference where a few authors of different executive function measures gave presentations. The author of some performance measures suggested that tests were the best approach and that ratings of EF were like taking a vote. The author of a rating scale said that tests of executive function were not reasonably related to everyday functioning and were not useful in assessing conditions like ADHD. While I was not asked my thoughts at the time, my BRIEF colleagues and I have often said and written that both performance tests and the BRIEF scales are important and useful in developing a full understanding of a students’ executive functioning. They offer different, but complementary, views of the conductor.



Q: Is the BRIEF2 ADHD form available through PAR?

A: Yes. It is available in paper/pencil version and through [PARiConnect](#). You can either complete the single page form by hand or, if you use online scoring, you can select the ADHD report and the form will be completed for you. You can select one parent and one teacher protocol for comparison in the same multirater report.

You can find more information at parinc.com/BRIEF2_ADHD

Q: Is this version of BRIEF or any other available in Spanish?

A: The [BRIEF2](#) forms are published in Spanish (the Professional Manual is in English). You can use paper versions of the Spanish-language BRIEF2 forms or administer and score them via PARiConnect.

The BRIEF instruments are also available in numerous languages upon request from Afrikaans to Zulu. You can find a list of translations and adaptations for each BRIEF instrument at parinc.com/Permissions_licensing

Q: Are there forensic norms?

A: We have not pursued developing normative data for forensic groups. The BRIEF instruments are widely used in evaluations, including in the forensic context. We have written about this in Liz Sherman and Brian Brooks' (2012) *Pediatric Forensic Neuropsychology*.

Q: Will this supplemental analysis be extended to the Brief-Preschool version?

A: We have not examined specific profiles in the [BRIEF-Preschool](#) version. However, we have gathered hundreds of clinical cases over the years, often with follow-up BRIEF2 data when these children reach school age.

There are a substantial number of children in these data with well-defined ASD thanks to Lauren Kenworthy's program at Children's National, along with children with language impairments, suspected ADHD, and other conditions. A recent paper by Linda Ewing-



Cobbs' group at University of Houston described 3-year trajectories on the BRIEF-P in over 500 children with mild, moderate, or severe TBI. We will be taking a good look at the data, and more, soon.

Q: Will this assessment will be generalized to the adult population?

A: After developing the original BRIEF in the 1990s, we were challenged to develop a preschool version, and we produced the BRIEF-Preschool Version. Then, a well-known ADHD and EF researcher said that the last person you ask about their own EF is an adolescent, so we developed the BRIEF-Self Report to study that question. Finally, we applied our BRIEF methodology to adults, and published the [BRIEF-Adult Version](#) (BRIEF-A). It is the most widely used rating scale of EF in adults internationally, with hundreds of studies supporting valid interpretation.

Q: What would be different in this presentation if we were looking at the BRIEF-A?

A: Good question. I was just looking at BRIEF-A data in a clinical group of adults diagnosed with ADHD, and what we see is a large spike on the Working Memory scale consistent with that seen on the BRIEF2. The Inhibit scale is less frequently elevated, as clear signs of behavioral impulsivity are less common in adults. It is important, more so with adults, to rule out all kinds of other problems, as by the time we reach adulthood we have often collected other issues, such as trauma, sleep problems, anxiety, and so on, and these often show up as problems with working memory.

Q: Are you expecting an updated version (or norms) of the BRIEF-A soon?

A: We are always working on making our measures better. It is not an issue of new norms, as normative data for rating scales do not typically show a Flynn effect (i.e., change over time) like we see on academic or cognitive measures. Instead, we published the BRIEF2 because we had learned enough about how it behaves to offer substantial improvements. We are looking at ways to improve the BRIEF-Adult version,



though don't have a formal revision publication date in mind.

Q: When working with a college population and using the BRIEF2 with a battery of assessments, how might we be able to compare BRIEF2 results to other assessments? At our clinic, we've noticed a higher rate of ADHD referrals and high self-reported endorsements of symptoms on self-report assessments/inventories. Due to this, I'm seeking resources (in addition to differential diagnosis based on clinical interview with the client) to better identify a true positive of ADHD versus a false positive when conducting psychological evaluations?

A: This is common issue with college students who seek accommodations for a disability, often ADHD or a learning disability. It is important, as you suggest, to examine all relevant data. When I see college students, I'm interested in their own self-reports but also informant reports, primarily their parents' reports. I use the BRIEF-Adult version with college students, but also the Barkley Attention Scales (BAARS) as it has a form for current symptoms and childhood symptoms. I also like to interview a parent and the student, again looking for indications of attention (or learning) problems by at least high school.

It is important to assess symptom and performance validity with this population (as with many others). The BRIEF instruments offer embedded symptom validity scales, and there are published suggestions for other methods for examining BRIEF ratings for validity ([Erdodi et al, 2021](#)). In addition, stand-alone symptom validity indicators, such as the [Structured Inventory of Malingered Symptoms \(SIMS\)](#) can be useful, along with performance validity tests, both embedded, such the CVLT forced choice recognition, and standalone, such as Green's WMT or MSVT (and many others). Both symptom and performance validity indicators are especially important when students are seeking accommodations or medical treatment in college.



Q: Do you have data that would support the use of the BRIEF2 for counseling screeners? Many of the students I work with have very poor executive functioning, especially the emotional regulation.

A: The BRIEF instruments are often used in counseling as part of an assessment package to help understand a student’s functioning and needs. In my high school, students typically complete the BRIEF2 along with the [Personality Assessment Inventory for Adolescents \(PAI-A\)](#), while the academic evaluator does some career interest surveys (e.g., [Self-Directed Search](#)) and the counselor does a personality style measure, such as the [NEO](#). In this way, we get a look at personality style and any concerns, self-regulation, and interests, while our formal testing gives us some cognitive and academic information. All of this together provides a wealth of information to help define counseling goals.

Q: Where can I learn more about training on executive functions?

A: There are many resources to help learn more about executive function. My colleagues and I often present workshops at state and national conferences on executive function assessment and intervention as do many others such as Peg Dawson, Russ Barkley, and Cecil Reynolds. I am happy to present additional webinars via PAR if there is interest, though I prefer to focus webinars on “tight” topics to keep them within my attention span (i.e., 50 minutes).

Meanwhile, there are lots of resources that you can explore. I enjoy the [Center on the Developing Child at Harvard](#) and videos on [executive function \(and trauma\)](#). [Sara Ward](#) is well-known in EF intervention, and there are programs where you can learn to be an executive function coach, such as [Beyond Booksmart](#).

And some popular books on executive functions are:

Joyce Cooper Kahn and Laurie Deitzel’s *Late, Lost and Unprepared* and Peg Dawson and Dick Guare’s *Executive Skills in Children and Adolescents, 3rd Edition*.

If you are interested in interventions, take a look at Adele Diamond’s [website](#). She was the first to demonstrate, in the mid-1980s, that even infants have emerging executive functions. There are hundreds of her papers on her website, and you can access a lot of



them for free. Start with her most recent review of interventions (scroll down on the page to the “systematic mega review” by Diamond and Ling, 2019).

Q: Can you comment about self-report validity and reliability of the BRIEF2 in middle school and high school students?

A: I would be glad to do so. We could have a whole talk about adolescent self-reports of their own executive function. The first BRIEF was a parent and teacher rating scale only. Shortly after it was published, we were listening to a talk at a conference and the presenter said that the last person you ask about their own executive functions is the adolescent. We thought that was an interesting empirical question and set about developing an adolescent self-report form for the BRIEF. It turns out, adolescents do have something to say about their executive functioning, though it is perhaps less accurate than their parents’ or teachers’ observations.

First, adolescents’ ratings on the BRIEF in clinical samples tend to be less extreme than their parents’ or teachers’ ratings. For example, parent ratings on the BRIEF2 in clinical samples of ADHD-C on the Inhibit scale average about 72 and teacher ratings about 70; student ratings average about 60. At the same time, student ratings on the Working Memory scale are similar to parent and teacher ratings in groups with ADHD.

Second, parent and teacher ratings are highly correlated in typically developing samples ($r = .72$ overall) though less so in clinical samples ($r = .30$). Parent and self-report ratings are similar in typically developing samples ($r = .71$) but lower in clinical samples ($r = .25$). Teacher ratings agree less with student ratings in both groups ($r = .57$, $r = .13$) on the Global Executive Composite.

Clinically, it can be very helpful to collect BRIEF2 information from adolescents, keeping in mind that they tend to under-report in some areas but agree in others, and that they tend to agree more with parents than with teachers. However, three things can happen:

1. The student’s profile is close to parent/teacher profiles (the multirater form on PARiConnect is helpful in demonstrating agreement as to profile); with this, you can show the graph and say, “see, we are all in agreement. What do you want to do to make things better?”
2. The student’s profile is much lower than parent/teacher profiles; with this situation, we have some work to do to get the student on board with change/intervention, or



we need to manage behaviorally with interventions.

3. The student's profile is higher than parent/teacher profiles; this is a less common situation but one that deserves close and quick attention. It suggests that the student may be in distress, as they describe themselves as having greater problems than others see. I interview students when I see this to find out why they see themselves as so problematic, and often gather more information, such as on the PAI-A.

There are many studies of the BRIEF with adolescents that often show they have important perspectives on their own development. While we don't necessarily take their word for it, it is important to know how they see themselves and, perhaps more so, to value their input.

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