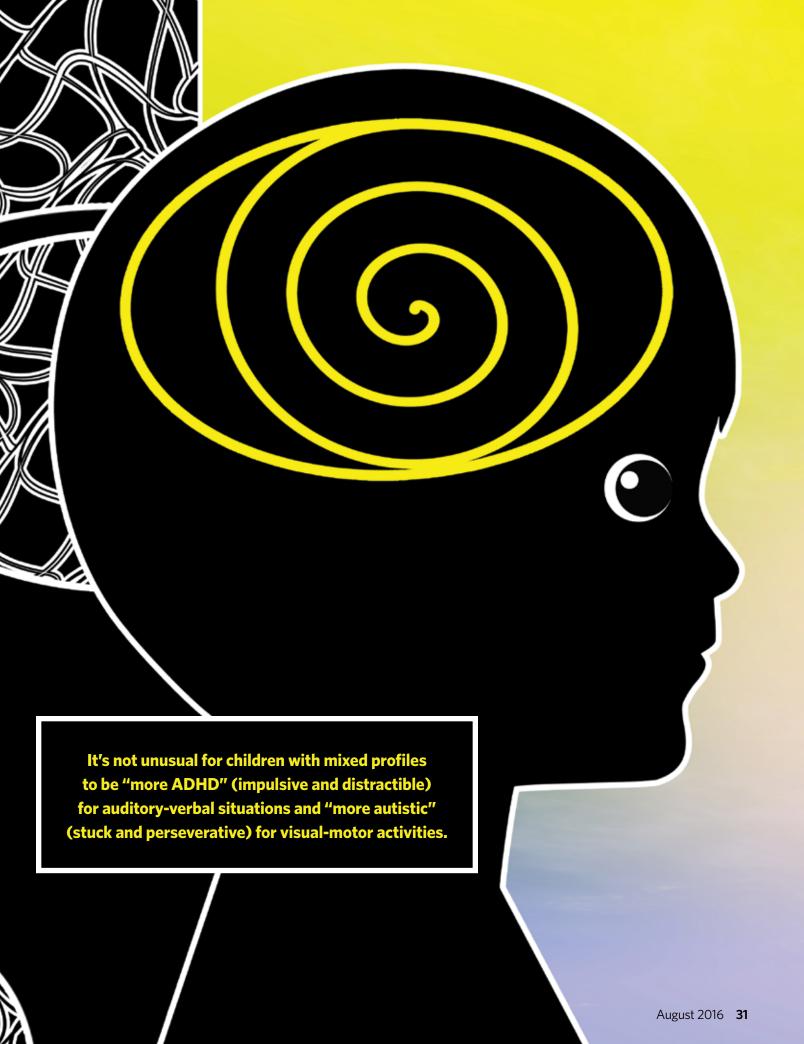
## **COEXISTING** ADHD, Autism, and Anxiety

Understanding and Treating Complicated Problems

## by Dan Shapiro, MD

N SOME WAYS, ADHD and autism are at opposite ends of a Self-Control and Attention Dysregulation Spectrum (SCADS). On one end of the spectrum and as explained further below, ADHD can be thought of as a disorder of underinhibition and distractibility. On the other end, autism can be viewed as a disorder of overinhibition and perseveration.





With publication of the DSM-5 in May 2013, there was acknowledgement that these contrasting conditions commonly coexist. Furthermore, both ADHD and autism frequently travel with anxiety disorders, which have an impact on behavior and focus as well. All of this diagnostic overlap complicates treatment. Even so, moving beyond DSM, more detailed description of these discordant yet intertwined developmental differences can lead to effective management for SCADS of children (pun intended).

## Opposite ends of the spectrum

Picture a horizontal SCADS line. On one end of the spectrum, ADHD is a disorder of inconsistent inhibition. It's like the brain's brakes are too loose and the gears shift too easily. These children (and adults) are impulsive. They often leap before they look. They shoot a hand up even if Simon doesn't say. They bore easily and crave novelty. They live too much in the moment; often acting with insufficient consideration of past experience and future consequences. This spontaneity can be fun, but it can also lead to inappropriate or unsafe behavior. Poor cognitive inhibition underlies their distractibility. Their attention span is too short. Their focus is too shallow and fleeting. People with ADHD often pay attention to too many things to the exclusion of one.

On the other end of the SCADS line, both autism and anxiety can be thought of as disorders of too much inhibition. With autism, it's hard to shift gears. With anxiety, the brakes are too tight. As a result, people with autism and/ or anxiety are often inflexible, avoidant, stuck, or even paralyzed. They take steps back when they should take steps forward. They keep their hand down even when Simon says to raise it up. When faced with unfamiliarity, they are predisposed to avoid. They too easily become overwhelmed or shut down. They have a narrow comfort zone; preferring repetition and ritual. They tend to fixate on past and future; not so much on the here and now. When they don't pay attention, it's because they perseverate or hyperfocus; that is, they get stuck on one thing to the exclusion of others.

Let's complicate things a bit more. Depending upon the task and setting, the same child may flip from one end of the SCADS line to the other. For example, it's not unusual for children with mixed profiles to be "more ADHD" (impulsive and distractible) for auditory-verbal situations and "more autistic" (stuck and perseverative) for visual-motor activities. Parents and professionals might wonder: "If he can sit there and play video games or Legos for hours, why can't he sit still and listen for more than five seconds?" Other children have very different patterns of activity-specific dysregulation. If these children could speak for themselves, they would explain: "Please don't be confused by my attention and self-control inconsistency. Just because I can attend appropriately to some things sometimes, does not mean that I can skillfully sustain and shift for all things all the time. My problem is with attention dysregulation; not across-the-board attention deficit."



Treatment of ADHD is like saying, "Use your brakes. Slow down. Stop and think. Don't live so much in the moment. Think about past experience. Consider future consequences. Don't be so chill. Be more cautious. Don't flip from one idea to another. Please, just be a little more autistic and anxious."

In contrast, treatment of autism and anxiety is like saying, "Take your foot off the brake. Let it roll. Don't stop and think so much. Don't worry about the past and future. Just live in the moment. Chill. Be more Zen. Don't stay stuck. Consider the full range of possible paths forward. Please, be a little more ADHD."

## When these disorders coexist

When ADHD, autism, and anxiety coexist, treatment is about finding the "golden mean" or "sweet spot" between not enough inhibition and too much. There is no effective medication for the core symptoms of autism; namely, social disability and repetitive, restricted and ritualized thoughts and behavior. However, there is very effective medication for coexisting problems with ADHD and anxiety.

With medication management of ADHD, you want just enough stimulant (methylphenidates or dextroamphetamines) to fix impulsivity and distractibility (brakes too loose) but not so much that you amplify autism or anxiety (brakes too tight). With medication management of anxiety in autism, you want to give just enough SSRI (selective serotonin re-uptake inhibitor; such as fluoxetine) to fix rigidity and distress (brakes too tight) but not amplify ADHD (brakes too loose). It's all too easy to mute tendencies on one end of the self-control and attention dysregulation spectrum while amplifying opposing proclivities on the other end.

Especially in this population, the most common side effects of stimulants for ADHD are irritability, inflexibility and social withdrawal; that is, magnification of anxiety and autism. The most common side effects of SSRIs for anxiety are disinhibition and overactivation; that is, intensification of ADHD. When ADHD, autism and anxiety coexist, there is a greater predisposition to side effects and a narrower therapeutic window; that is, side effects kick in at relatively low doses (too often, before benefits).

By the way, for nonpharmacologic interventions, the same dilemma holds sway. For example, with cognitive-behavioral strategies for ADHD, we teach children to stop and think, slow down, and focus, but not get too stuck. For autism and anxiety, we encourage children to loosen up, consider alternative solutions



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and perspectives but not get too scattered. Although the same principles apply, the complexities of cognitive-behavioral therapy for these children is an article for another day. So, let's shift back and refocus on medication.

Just because medication management of co-occurring conditions is tricky does not mean it's impossible. In fact, meds can be a huge help for many. For pharmacologic treatment of SCADS of children with coexisting ADHD, autism, and anxiety, here are a few suggestions.

- 1. Find a doc with lots of experience treating these coexisting conditions. As you can see, this stuff is not simple. Find a child psychiatrist or developmentalbehavioral pediatrician with deep expertise, good communication skills, and reliable responsiveness. For many, this might be the biggest stumbling block. The decision to treat—and what to treat—should only be made after a careful and comprehensive assessment. You might end up targeting ADHD, anxiety, or both.
- 2. Set up a sufficiently nuanced treatment trial with a team of educated observers. Target one thing at a time. Using detailed rating scales, it's important to collect baseline and follow-up data for the different types of inattention and self-control. For example, scales should be explicit regarding the difference between distractible and perseverative types of inattention; likewise, for the difference between impulsive and inflexible types of behavior. Observers should understand that meds often make some aspects of attention and behavior better; others worse. Multiple observers—parents, teachers and therapists—should report task and setting-specific differences in medication response. (For free medication trial scales, go to parentchildjourney.com/.
- **3.** Dose for singles; not homeruns. As discussed, children with coexisting ADHD, autism, and anxiety are notoriously prone to side effects. Start with extremely low doses of medication. Titrate up in small increments. Find the sweet spot where benefits appear before side effects. If there's 25-50 percent improvement in ADHD and similarly modest gains in anxiety, try tuning up a bit more to see if you can do better. But if higher doses cause side effects, you might decide that partial response is still much

better than no medication at all. Homeruns are nice. But singles can still score runs and make a big difference.

- **4.** Do not chase your tail. Once people understand the idea of balance between underinhibition and overinhibition, they might fall into the trap of trying to treat the side effects of one medicine with the other. This usually doesn't work. For each medication, it's better to find the minimum dose that's sufficiently effective or the maximum dose that avoids side effects. Then, decide if that's good enough. For example, if a stimulant helps ADHD but causes more anxious perseveration, don't try to offset by increasing the SSRI. Rather, decrease the stimulant, try another stimulant, or try a nonstimulant (such as guanfacine, clonidine or atomoxetine). If an SSRI causes overactivation, don't try to offset by increasing the stimulant; rather, decrease the SSRI, try another SSRI or try a non-SSRI (such as duloxetine or buspirone).
- **5.** Remember, it's not all about medication. Although stimulant medication is a mainstay of treatment for ADHD, behavioral therapies should be front and center for anxiety and autism. Moreover, children with ADHD, autism, and anxiety usually have other co-occurring differences. Commonly accompanying problems with learning, language, and sensory-motor function, plus family and other environmental stresses, all combine to further affect self-control and attention. Although medication may be an important part of a comprehensive management plan, it is never the whole answer. For children with ADHD, autism, and anxiety, even the most expert medication management in the world does not take the place of educational, cognitive-behavioral, family, and other nonpharmacologic supports. 4

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