

Anxiety in students

A hidden culprit in behavior issues

Identifying the triggers for inappropriate behaviors and teaching children more desirable responses can be part of intervention plans in any classroom.

By Jessica Minahan and Nancy Rappaport



Traditional behavioral plans for children with Asperger syndrome often neglect what they need to learn to manage their anxiety and the underdeveloped skills that contribute to their anxiety. School personnel often identify a desirable target behavior and try to reinforce it through rewards (stickers, praise, etc.), which usually doesn't work. When educators don't recognize how anxiety prompts some behaviors, such as meltdowns or withdrawal, their responses can unintentionally exacerbate the students' inappropriate behavior and their anxiety. If students with Asperger are to succeed in school, they need a prescribed behavioral intervention plan that addresses anxiety, explicit instruction in underdeveloped skills leading to anxiety, which helps them learn alternative, more appropriate responses to use when they're flooded with anxiety, and includes accommodations that teachers can use while students learn their new skills.

According to the National Institute of Neurological Disorders and Stroke, between two and six of every 1,000 children have Asperger syndrome (2012). There's no consensus on how many children with Asperger have intense anxiety, although one study reported that 42% of students with Asperger also have anxiety disorders (Mattila et al., 2010). When a child with Asperger behaves inappropriately in class, we recommend that educators consider whether the student has underlying anxiety and whether it's being adequately addressed.

Consider Stephanie, a 4th grader with Asperger syndrome and intense anxiety symptoms, who struggles with writing. When given a writing assignment, she'll whine, ask to go to the nurse, or even cry. When asked to stop doing a preferred activity, like art or a computer game, she may scream, "You're always picking on me! I hate school!" She can have outbursts even when engaged in her favorite activity, which is why the teacher describes her behavior as sometimes coming "out of the blue!"

The effect of anxiety

A student with high anxiety can fall behind academically because he or she is distracted and has impaired verbal working memory skills when anxious (Hopko et al., 2005). One study showed that 1st graders who were the most anxious in the fall were much more likely to have lower math and reading achievement in the spring (Ialongo

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& Edelsohn, 1994). Anxious children often have to exert more effort to perform well because they're trying to manage their anxiety while executing a task (Owens et al., 2008). If untreated, anxiety can persist for years (Mychailyszyn, Mendez, & Kendall, 2010), but proper interventions can decrease anxiety and improve learning (Ozsivadjian, Knott, & Magiati, 2012).

Behavioral attributes

Some students with anxiety can show consistent and recognizable signs (flushed cheeks, tense muscles). Often, however, we don't know a student is feeling anxious until we see behavioral signs. Some students with anxiety can be hard to identify, and it is useful for teachers to recognize and understand these signs. Their behavior — yelling, kicking, crying, leaving the classroom, for example — can appear similar to other students with low frustration tolerance or chronically oppositional profiles (Barrett & Heubeck, 2000; Garland & Garland, 2001). What sets them apart is the underlying cause of their oppositional behavior. Fortunately, there are some standard behavioral symptoms that help us recognize underlying anxiety. (See Table 1.)

According to Meena Dasari, a psychologist from the New York University Child Study Center Insti-

tute for Anxiety and Mood Disorders, some anxiety symptoms may be unique to children with Asperger:

- Increased insistence on routines and sameness;
- Increased preference for rules and rigidity;
- Increased repetitive behavior;
- Increase in special interest;
- Becoming easily explosive (e.g. anger outbursts); and
- Demonstrating “silly” behavior (2012).

Inconsistent patterns of behavior

Anxiety can be understood as a hidden disability. For teachers, the inconsistent and erratic nature of anxiety-related behavior can be baffling. Stephanie breaks her pencil on Monday and calmly asks the teacher for another. On Tuesday, she breaks her pencil and sharpens it. On Wednesday, she breaks her pencil and screams, cries, and runs out of the room. This outburst had little to do with the broken pencil. Unbeknownst to the teacher, her level of anxiety was extremely high when her pencil broke on Wednesday. Fluctuating anxiety can lead to behavior that has inconsistent patterns or seems to come “out of the blue.”

Let's use the analogy of a shaken soda can. Unless you see it happen, you have no way of knowing a soda can was shaken just by looking at it. You find

If a student can't behave, it's often because they haven't developed the necessary skills.

TABLE 1.
Behavioral attributes of anxiety in schools

Classic attributes

Easily frustrated
Complains of physical pains, such as stomach aches and headaches; has trouble breathing
Exhibits fear
Seems on the lookout for danger
Upset easily by mistakes (perfectionism)
Cries
Startles easily
Blushes, trembles
Expresses worry frequently

Less-obvious attributes

Has difficulty completing work
Acts irritable
Acts angry
Doesn't follow school rules
Has inconsistent patterns in antecedents
Exhibits ritualistic or repetitive behavior
Is inflexible
Acts out spontaneously; seems over-reactive

out when you open the can and it explodes. The same thing is true with students who have anxiety-related behavior — many times, the student looks fine and then inexplicably explodes.

In addition to these behavior fluctuations, performance can also fluctuate due to anxiety's effects on working memory, attention, and other abilities. Unfortunately, when teachers observe a student writing two beautiful paragraphs one day only to struggle to write a single sentence the next day, they may come to the erroneous conclusion that the student is lazy or unmotivated.

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Avoidant behavior

Understanding the function of the behavior is key. A student's anxiety-related behavior is often motivated by escape or avoidance. Most teachers recognize that when a student like Stephanie asks to go to the nurse before a writing assignment that this may be avoidant behavior, but sometimes it's less obvious. The student may start swearing or put his head down on the desk when the teacher gives the math test. If the teacher responds with a time-out or sends the student to the office, this may accidentally reinforce the avoidant behavior because the student is able to delay the writing assignment.

Why traditional behavior plans don't work

Traditional behavior plans, like sticker charts, point systems, and level systems, are based on rewards and consequences. For instance, "If you don't interrupt in math class, you'll earn five points toward your computer time." Conversely, "If you interrupt in math class, you'll lose two minutes of recess." Typically, the criteria for behavior are set and inflexible, based on the student's abilities when she is calm and not taking into account her fluctuating level of anxiety or variable ability to behave and perform (Minahan & Rappaport, 2012).

For example, in math class, Stephanie could achieve the expectation of being quiet and attentive. During reading, however, when the class has to pick partners, she may become anxious and start to act out. She isn't able to meet the behavioral criteria due to trouble with self-regulation, impulse control, and flexible thinking when anxious.

Students with anxiety may show minimal or no behavioral improvement with a traditional behavioral plan. This can lead to their resentment as these students fail to meet expectations and receive negative feedback on their behavior.

Behavior as a result of underdeveloped skills

Students would behave if they could (Greene, 1998). If a student can't behave, it's often because he or she hasn't developed the necessary skills. Students with anxiety may have the following underdeveloped skills:

- **Self-regulation** — The ability to calm self and manage frustration.
- **Thought stopping/thought interruption** — The ability to short circuit the cycle of negative thinking by refocusing attention on a replacement thought.
- **Thinking traps** — The ability to recognize common patterns of thoughts that can increase anxiety and learn how to manage these thoughts.
- **Social skills** — The ability to take another person's perspective and conversation skills.
- **Executive functioning** — The ability to think before acting and to follow sequential steps to complete a task efficiently.
- **Flexible thinking** — When anxious, flexibility of thought can help avoid episodes of becoming upset when things don't turn out as expected.

These skills must be explicitly taught if the student is to change his or her behavior over the long term. Sadly, many behavior plans/programs don't address these skills.

Prevention

When reflecting on a behavior incident, teachers should learn how to identify what happens just before the inappropriate behavior (antecedents) and how peers and the teacher responded. This is more important than focusing on the specific details of the incident.

Although students with anxiety can have inconsistent behavior, some antecedents routinely emerge as problematic. These include:

- Unstructured times, such as lunch and recess;
- Transitions;
- Writing demands;
- Social demands; and
- Novel events/unexpected change.

Ninety percent of every behavior plan should be dedicated to antecedent management (Minahan & Rappaport, 2012). If a teacher accommodates the anxiety-provoking situations/activities, it's crucial to help a student reduce or eliminate inappropriate behavior. Students will continue to require accommodations until they develop the skills to cope and can succeed without them.

Accommodations

Teachers should have anxiety management in place throughout the day in order to avoid overwhelming a student and provoking a behavioral incident. Implementing anxiety-reducing breaks consistently throughout the day helps to settle students and keep them calm. Students should not have to earn breaks nor should breaks be withheld because of behavior. A good starting point is two breaks a day for 10 minutes each. This allows teachers to learn more about what helps individual students.

Make sure the break doesn't include anxiety-producing stimuli. For example, Stephanie finds social interaction stressful, so taking a friend on her break isn't calming. If the student has to work hard to process language, the break should be conversation-free. When possible, the break should involve movement. If teachers are concerned that the student overuses breaks as an escape, she can assign a maximum number of "break cards" and teach the student how to budget them.

We know unstructured times such as lunch and recess may be anxiety-provoking. Lunch in the cafeteria can provoke anxiety due to the required social skills (deciding where to sit and what to talk about), executive functioning skills (planning and organizing getting lunch and managing materials), and self-regulation skills (staying calm in a noisy, congested area). An alternative lunch (Minahan & Rappaport, 2012) can keep the student from becoming anxious. A teacher can facilitate a successful social interaction between the student and two peers in a small quiet space. This may allow the student to be more settled for the remainder of the day.

Recess, which typically has 70 or 80 kids running around and screaming and involves many social demands, can also be anxiety provoking. An alternative recess can include taking the student and two peers to a separate location, such as the front or side of the school building, an occupational therapy room, or the gym. Abandoning recess altogether isn't a helpful solution since students need exercise and movement breaks.

Transitions throughout the day can be difficult. Students require a good amount of flexibility to stop an activity and then executive functioning skills to organize and plan for the next activity. Students need

adequate transition supports during these times (Minahan & Rappaport, 2012).

Academic accommodations

Students with Asperger and anxiety also require academic accommodations. The teacher can begin by presenting only a few items to do at a time. Students also are more responsive if directions are broken down into small, achievable steps. Teachers can preview all of the student's least favorite activities in the morning by explaining the assignment and actually showing the work. For example, the teacher can show Stephanie the math worksheet and start the first problem with her. Later that day, when the teacher hands out the math sheet, Stephanie will be less likely to become anxious and will be able to initiate the task.

Writing activities can also cause anxiety. Teachers can help students who try to avoid writing by using technology accommodations that allow them to access the curriculum and perform writing activities. If a student with anxiety has a tendency toward perfectionism, spelling is tough. Providing a chart with commonly misspelled words or allowing the student to ask the teacher for the correct spelling or to use spell check may reduce anxiety.

Students with anxiety about specific writing assignments can ultimately develop generalized anxiety toward all aspects of writing. When a student learns to self-monitor, he begins to recognize what he's good at and what he's struggling with, instead of making global negative comments about writing. We prefer to have a student say, "I'm not a great speller, but I have a strategy" rather than, "I hate writing," or "I'm a horrible writer." One method is for students to keep a chart of those aspects of writing assignments they find challenging along with a list of available coping strategies to use when they are stuck. (For example, when a student can't expand on an idea, the chart tells him he can search images on the computer.) After a while, the chart may help the student realize he needs to use these strategies less than he had originally assumed.





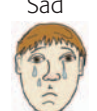


We used a similar chart with Stephanie during writing activities in the fall, and, by the spring, she was independently initiating writing strategies and stopped all inappropriate behaviors, except for whining. By the fall of 5th grade, she no longer used the chart and identified herself as "a good writer, but a poor speller."

Self-regulation

Students with anxiety benefit from learning self-regulation. Cognitive behavioral therapy and self-monitoring techniques are an integral part of teaching self-regulation. Many students lack skills to identify

their emotions and don't understand that emotions start small and grow larger — from calm to explosive in a split second. Once students understand this, they can learn to catch themselves at the frustration point and practice a coping strategy to regulate themselves before becoming explosive or shutting down. An “emotional thermometer” is a great tool for teachers to use to illustrate the fluctuation in emotions by labeling the child's emotions/arousal state throughout the day: “I notice you're calm and happy right now.” Adding corresponding self-regulation strategies on the emotional thermometer (see Table 2) is helpful for cueing the student: “I think you're getting frustrated. What strategy are you going to use?”

TABLE 2.
Emotional Thermometer

Feeling	Strategies
Angry 	Take a break; deep breaths
Frustrated 	Get a drink; use my calming box
Excited 	Take deep breaths
Anxious 	Use my calming box
Sad 	Use my words; use my calming box
Content 	Use my words
Happy 	Use my words; smile or laugh

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“Body checks” are another way to educate students on their emotions and arousal state (Minahan & Rappaport, 2012). Narrating the behavior clues for students while indicating their feelings can help them understand what an emotion “feels” and “looks” like for them. The teacher may say, “I notice your face is scrunched, your shoulders are up near your ears, and your fist is clenched. You're frustrated right now.” Or “Your voice is very high-pitched and loud, you're talking fast, and you're moving around in your chair. You seem anxious.” In time, students will learn to identify the emotion they're feeling, which is the first step in learning to regulate it.

Many of our students don't know how to self-calm, so explicit instruction and practice in self-calming skills is important. The student can benefit from practicing as often as twice a day, especially in the place where he may be taken if he becomes upset (guidance office, quiet corner of the classroom). This can help the child access and apply the skills when he or she is in that space during an actual behavior incident.

“Calming boxes” contain small items the student can keep in a box in the desk for use in times of stress (Minahan & Rappaport, 2012). A calming box might include putty, a good luck charm, or noise-reducing headphones. As with anything else, the student needs to learn when and where to use the items to self-regulate. Stephanie learned to carry a “lucky penny” that helped her remain calm during transitions in the building, as well as during loud assemblies and whole-school presentations.

Catch it early

The best way to bypass a surprising emotional outburst from a student is to intervene early. A safe observable definition of anxiety teachers can use is: “any sudden change in behavior” on the part of the student (Crisis Prevention Institute, 2008). Obviously, a sudden change in behavior can be for many reasons other than anxiety — pinching your finger or having to go the bathroom, for example — but when a student has chronic emotional outbursts, it's a good rule of thumb to consider that anxiety might be the culprit. When a teacher observes such a behavior change, for instance when a student who was calmly working starts to argue, then she has the opportunity for a check-in. (“How's it going?” “Need a drink of water?” “Anything bothering you?”) This can stop the anxiety from magnifying and overwhelming the student and, most important, prevent the student from losing time on learning because of off-task behavior.

Reinforcement

Without using punishment and rewards for ap-

appropriate behavior, many teachers may be unclear on how to reinforce a student with Asperger and anxiety — or any student with anxiety for that matter. Taking time to build relationships with students helps create a supportive and safe classroom environment. Non-contingent reinforcement is very powerful (Cooper, Heron, & Heward, 2007). This is a teacher's random acts of kindness, such as giving Stephanie a cool pencil "just because I like you," showing that she's not

Help students with Asperger learn alternative, more appropriate responses to use when they're flooded with anxiety.

only appreciated when she's behaving, but that the teacher really likes her as a person.

Assigning positive reinforcement, such as points or tokens for practicing social or self-regulation skills, as well as for using a strategy in difficult moments promotes student learning. This reinforces the practice and application of the underdeveloped skills the students are working on.

Stephanie learned to take deep breaths, identify when she was anxious in some situations, and use her writing strategies checklist and calming box. Understanding Stephanie's behavior, her teacher helped her learn to take breaks, use prescribed accommodations, and gave her explicit instruction in executive functioning, flexible thinking, and taking perspective. Stephanie learned to use self-regulation strategies by earning bonus points whenever she used a strategy or when she agreed to practice self-calming during the day.

Conclusion

For students with Asperger syndrome, there is a statistically high prevalence of diagnosed anxiety. Traditional behavior plans often don't meet the needs of students with anxiety and may even exacerbate inappropriate behavior. Understanding the role anxiety plays in a student's behavior is crucial, as is analyzing how their environment may unintentionally reinforce negative behavior. An effective behavior plan needs to avoid reward- and punishment-based consequences and focus instead on teaching the student to cope and to use alternative responses. Incorporating preventive strategies and self-monitoring systems, as part of an overall anxiety management

approach to behavior intervention, is practical for school-based settings. ■

References

- Barrett, S. & Heubeck, B.G. (2000). Relationships between school hassles and uplifts and anxiety and conduct problems in grades 3 and 4. *Journal of Applied Developmental Psychology, 21* (5), 537-554.
- Cooper, J.O., Heron, T.E., & Heward, W.L. (2007). *Applied behavior analysis*. Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.
- Crisis Prevention Institute. (2008). *Instructor manual for the Nonviolent Crisis Intervention® training program*. Milwaukee, WI: Author.
- Garland, E.J. & Garland, O.M. (2001). Correlation between anxiety and oppositionality in a children's mood and anxiety disorder clinic. *Canadian Journal of Psychiatry, 46* (10), 953.
- Greene, R.W. (1998). *The explosive child: A new approach for understanding and parenting easily frustrated, "chronically inflexible" children*. New York, NY: HarperCollins.
- Hopko, D.R., Crittendon, J.A., Grant, E., & Wilson, S.A. (2005). The impact of anxiety on performance IQ. *Anxiety, Stress, & Coping, 18* (1), 17-35.
- Ialongo, N. & Edelsohn, G. (1994). The significance of self-reported anxious symptoms in 1st-grade children. *Journal of Abnormal Child Psychology, 22* (4), 441.
- Mattila, M.L., Hurtig, T., Haapsamo, H., Jussila, K., Kuusikko-Gauffin, S., Kielinen, M., . . . Moilanen, I. (2010). Comorbid psychiatric disorders associated with Asperger syndrome/high-functioning autism: A community- and clinic-based study. *Journal of Autism & Developmental Disorders, 40* (9), 1080-1093.
- Minahan, J. & Rappaport, N. (2012). *The behavior code: A practical guide to understanding and teaching the most challenging students*. Cambridge, MA: Harvard Education Press.
- Mychailyszyn, M.P., Mendez, J.L., & Kendall, P.C. (2010). School functioning in youth with and without anxiety disorders: Comparisons by diagnosis and comorbidity. *School Psychology Review, 39* (1), 106-121.
- National Institute of Neurological Disorders and Stroke. (2012). Asperger syndrome fact sheet. www.ninds.nih.gov/disorders/asperger/detail_asperger.htm
- Owens, M., Stevenson, J., Norgate, R., & Hadwin, J.A. (2008). Processing efficiency theory in children: Working memory as a mediator between trait anxiety and academic performance. *Anxiety, Stress, & Coping, 21* (4), 417-430.
- Ozsivadjian, A., Knott, F., & Magiati, I. (2012). Parent and child perspectives on the nature of anxiety in children and young people with autism spectrum disorders: A focus group study. *Autism: The International Journal of Research & Practice, 16* (2), 107-121.