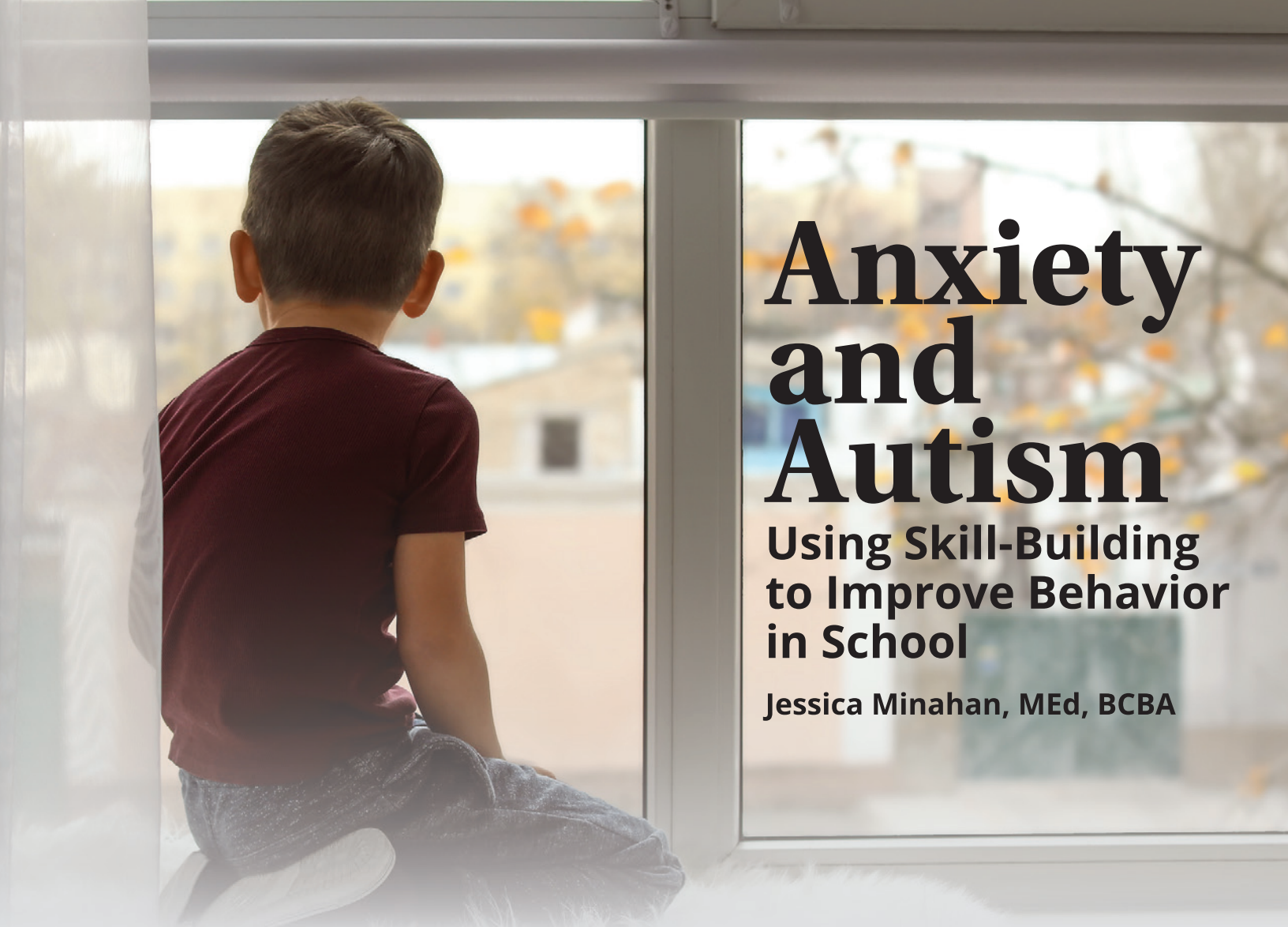

Anxiety and Autism

Using Skill-Building to Improve Behavior in School

Jessica Minahan, MEd, BCBA

Despite high rates of anxiety in people with autism, much of the programming and resources for children with autism spectrum disorder (ASD) does not address anxiety as an underlying factor in behavioral and social problems. Estimates of how many children with ASD have co-occurring anxiety disorders range from 42 to 79 percent.[1,2] During the pandemic and the subsequent changes to routines and interruption of needed services, students with autism have been at an elevated risk for psychiatric problems compared to the general population.[3,4] However, many students with autism have not received a formal diagnosis of generalized anxiety disorder, social anxiety disorder or obsessive-compulsive disorder.[5] This leaves school personnel unprepared to address anxiety in their work with these students.

In fact, many of the clinical approaches used with autistic students in schools do not typically treat student anxiety. For example, Applied Behavior Analysis (ABA), which is considered the most evidence-based treatment methodology for students with ASD, has historically not incorporated anxiety into the analysis of behavior. Also, ABA providers often do not incorporate known mental health interventions in treatment.[6] There have been some specific exceptions in recent years, such as behavioral activation and acceptance and commitment therapy.[7] Evidence-based treatments used in the general population, such as Cognitive Behavioral Therapy (CBT), are not commonly used with students with autism despite emerging evidence of efficacy in autistic students with high cognition or with intellectual disabilities.[8,9] In addition, traditional school-based behavior approaches focus on incentives and neglect to teach students the skills they need to combat anxiety and behave adaptively. As we emerge from the pandemic, incorporating anxiety-reducing and skill-building interventions in programming for students with autism is paramount. By teaching behavioral skills and anxiety reducing strategies, we will see long-term improvement in behavior and social emotional skills. The following steps can help make that goal a reality.

As we emerge from the pandemic, incorporating anxiety-reducing and skill-building interventions in programming for students with autism is paramount.

1. Identify Underdeveloped Skills

In general, students behave well if they are able to. If a student is not behaving, it is due to an underdeveloped social, emotional or behavioral skill.[10] When a student is misbehaving, our focus should be on determining what skill the student is lacking and using interventions to build the requisite skills. It is known that students with autism have certain underdeveloped skills, such as emotional regulation, social skills, and executive functioning. These skill deficits can contribute to challenging behavior.[9,11] Once anxiety is identified and focused on, we can look for additional underdeveloped skills. The most common skills impaired by anxiety relate to self-regulation; social thinking, or perspective-taking; flexible thinking; executive functioning; and accurate thinking. Analyzing which underdeveloped skills are contributing to the misbehavior is the first step. Unfortunately, typical Functional Behavior Assessments (FBA) and other behavior assessments do not include an analysis of underdeveloped skills. However, incorporating such an analysis will uncover the root of the student's struggles. For example, if we find that a student has poor self-regulation skills and is particularly weak in waiting and delaying gratification, it will come as no surprise that the student is pushing and grabbing peers in line while the class waits for the dismissal bell. Discovering the specific underdeveloped skills can be accomplished by reviewing recent special education or psychological testing, school assessments, data collection, and personal observation.

2. Build Skills and Teach Anxiety Management

After the underdeveloped skills are analyzed, the behavior intervention plan can focus on building these skills, as well as using targeted strategies to reduce anxiety. Students with ASD are known to have intense interests. School behavior intervention plans often use incentives as they are particularly motivating to students with ASD, especially when these precious restrictive interests are used as the "carrot." While these tried-and-true traditional behavior intervention plans can be effective, they lack skill-building and anxiety-related interventions that are crucial for improving challenging behavior.[9,11]

Schools can go from managing behavior to teaching behavior skills, and this begins with shifting the emphasis of those incentive-based behavior plans to a skill-building approach. Use of a traditional token chart for students with autism requires them to demonstrate a targeted appropriate behavior in order to gain a certain number of tokens and earn a reward. This overreliance on incentivizing the students by using their restrictive interest misses an opportunity to teach the students the skills they need to improve their behavior in the long term. Simply put: incentives do not teach skills. Explicit instruction on skills and strategies can accompany any behavioral or social student goal. Replacement behaviors and functional communication teach students more adaptive ways of meeting their needs. While this approach can be helpful, it does not necessarily address the source of the behavior issue. For many students with autism, the source is anxiety. Teaching anxiety management skills that help students learn how to self-soothe and cope with their anxiety can yield effective long-term behavior change.

3. Make Sure Strategies are Anxiety-Reducing

One of the hallmarks of anxiety is rumination, or repetitive negative thinking. Time to ruminate perpetuates anxiety in many students — and yet some go-to strategies for dysregulated students can allow room for rumination. Once we identify that anxiety is the root cause of a student's dysregulation, we can ensure we are using self-regulation strategies that reduce or interrupt rumination.

For example, one of the most popular accommodations in Individualized Education Plans (IEPs) is "frequent movement breaks." Movement breaks, and even many unstructured sensory breaks, occupy the student's body but can leave mental space for them to ruminate while going for a walk, jumping on a trampoline, or using a fidget toy. Sensory breaks can be effective for students with autism who have sensory dysfunction.[12] However, it is vital to differentiate between dysregulation that is due to sensory dysfunction and that which is due to anxiety or a combination of the two. Many sensory strategies, like fidget toys and playing with sand, can also allow the student time to ruminate.

It is helpful to teach students to take a cognitive distraction break in which they choose an activity that is incompatible with rumination.[13] When adults feel anxious and can't sleep at night, they often read or watch something on a screen to distract them from the anxiety-producing thought so they can go back to sleep. Cognitive distraction breaks use the same strategy. Some examples of cognitive distractions that students can use include hidden picture activities, short videos, audio books, trivia, or challenging mazes or puzzles. Keeping track of the effectiveness of various break activities with data is imperative to ensure we are using the correct types of break strategy. Teaching the use of this type of "regulation break" can help with lifelong anxiety management.

4. Teach Self-Monitoring

You cannot change your behavior unless you are aware of it! Without the often-overlooked skill of self-monitoring, students remain reliant on adults to monitor and manage their behavior.

A shift in our traditional behavior systems can support self-monitoring. In addition to teaching strategies for each goal, give students the opportunity to reflect on their behavior in each class period. A behavior chart can help in this regard (see Figure 1). Under each goal on the behavior chart, include both a student column and a teacher column. After each period, have the student and then the teacher rate and reflect on the student's behavior.[13] They can then discuss any discrepancies between the ratings. Over time, the student's awareness and rating of his or her behavior will become more accurate. This will lead students to have the skills to self-monitor and "catch themselves" before acting inappropriately.

5. Putting It All Together

How do we shift behavior plans to focus on skill-building rather than behavior management? First, teach the student one to three strategies and skills for any behavior/social/emotional goal (see Figure 1). Then, shift the emphasis toward skill-building.[13] When the student uses a strategy — with or without prompting — or practices a skill, there should be a reward. It is less important that the student meet the goal of "Complete your work" than it is that the student use a strategy. If you are using a behavior chart, write or represent one to three strategies on the chart for each goal. When we catch students using a strategy, we need to reinforce it. Shifting the emphasis to reinforcing the use of strategies and building of skills will lead to an increase in the student's skills and appropriate behavior and a subsequent reduction in challenging behavior.

Self-Monitoring Sheet

Name: **Date:**

1 Not demonstrated	2 Somewhat demonstrated	3 Consistently demonstrated	Strategies 1. 2. 3. 4.

Schedule	Expected Behavior 1		Expected Behavior 2		Expected Behavior 3		Strategy point
	Student	Teacher	Student	Teacher	Student	Teacher	
Homeroom							
Music							
Math							
Science							
Lunch							
Lang. Arts							
History							
P.E.							
							Total Strategy points:

Figure 1. Self-Monitoring Sheet. This chart is adapted from an earlier version of a table that was published in *The Behavior Code Companion*, Harvard Education Press.

The best way to help students with autism, especially in these challenging times, is to move past the quick fix of incentives to a thoughtful, anxiety-informed, skill-building approach to behavior intervention. Once we have identified anxiety and underdeveloped skills, we can then tackle the root cause of challenging behavior, develop needed skills, use anxiety-management strategies, and increase the ability to self-monitor. By teaching students needed skills, we can promote behavior change that is both positive and long-lasting.

References

1. Kent, R., & Simonoff, E. (2017). Prevalence of Anxiety in Autism Spectrum Disorders. In *Anxiety in Children and Adolescents with Autism Spectrum Disorder: Evidence-Based Assessment and Treatment* (pp. 5-32). Elsevier Inc.. https://doi.org/10.1016/B978-0-12-805122-1.00002-8

2. Lai, M. C., Kassee, C., Besney, R., Bonato, S., Hull, L., Mandy, W., ... & Ameis, S. H. (2019). Prevalence of co-occurring mental health diagnoses in the autism population: a systematic review and meta-analysis. *The Lancet Psychiatry,* 6(10), 819-829.

3. Corbett, B. A., Muscatello, R. A., Klemencic, M. E., & Schwartzman, J. M. (2021). The impact of COVID-19 on stress, anxiety, and coping in youth with and without autism and their parents. *Autism Research*, 14(7), 1496-1511.

4. Vasa, R. A., Singh, V., Holingue, C., Kalb, L. G., Jang, Y., & Keefer, A. (2021). Psychiatric problems during the COVID-19 pandemic in children with autism spectrum disorder. *Autism Research*, 14(10), 2113-2119.

5. Johnco, C., & Storch, E. A. (2015). Anxiety in youth with autism spectrum disorders: implications for treatment. *Expert Review of Neurotherapeutics*, 15(11), 1343–1352.

6. Friman, P. C., Hayes, S. C., & Wilson, K. G. (1998). Why behavior analysts should study emotion: The example of anxiety. *Journal of Applied Behavior Analysis*, 31(1), 137-156.

7. Twohig, M. P., & Levin, M. E. (2017). Acceptance and commitment therapy as a treatment for anxiety and depression: A review. *Psychiatric Clinics*, 40(4), 751-770.

8. Moskowitz, L. J., Walsh, C. E., Mulder, E., McLaughlin, D. M., Hajcak, G., Carr, E. G., & Zarcone, J. R. (2017). Intervention for anxiety and problem behavior in children with autism spectrum disorder and intellectual disability. *Journal of Autism and Developmental Disorders*, 47(12), 3930–3948.

9. Walters, S., Loades, M., & Russell, A. (2016). A systematic review of effective modifications to cognitive behavioural therapy for young people with autism spectrum disorders. *Review Journal of Autism and Developmental Disorders*, 3(2), 137-153.

10. Greene, R. W., & Ablon, J. S. (2005). *Treating explosive kids: The collaborative problem-solving approach*. Guilford Press. New York, NY.

11. Maddox, B. B., Cleary, P., Kuschner, E. S., Miller, J. S., Armour, A. C., Guy, L., Kenworthy, L., Schultz, R. T., & Yerys, B. E. (2018). Lagging skills contribute to challenging behaviors in children with autism spectrum disorder without intellectual disability. *Autism: The International Journal of Research and Practice*, 22(8), 898–906.

12. Dahl, M. J. (2017). *Meeting the sensory needs of students with autism in the classroom*. (*Doctoral dissertation, University of Wisconsin-Stout*).

13. Minahan, J. (2014). *The Behavior Code Companion: Strategies, Tools, and Interventions for Supporting Students with Anxiety-Related or Oppositional Behaviors*. Cambridge MA: Harvard Education Press.

Jessica Minahan, MEd, BCBA, is a licensed and board-certified behavior analyst, special educator, as well as a consultant to schools internationally (www.jessicaminahan.com). Jessica has over seventeen years of experience supporting students who exhibit challenging behavior in urban public-school systems. She is the co-author of *The Behavior Code: A Practical Guide to Understanding and Teaching the Most Challenging Students* (Harvard Education Press, 2012) and author of *The Behavior Code Companion: Strategies, Tools, and Interventions for Supporting Students with Anxiety-Related or Oppositional Behaviors* (Harvard Education Press, 2014).