

How Mindfulness Strategies Can Support Social and Emotional Learning Skill Development for Elementary Grade Students With Emotional and Behavioral Disorders

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Abstract

The best social and emotional learning (SEL) curriculum can be difficult to implement when students with or at risk for emotional and behavioral disorders (EBD) are unregulated and unprepared to engage in instruction. Daily mindfulness practices can help students with and at risk for EBD regulate their emotions and behaviors and be prepared for instruction. In this article, we provide examples and models of how informal mindfulness strategies can be incorporated into the elementary classroom to support student SEL growth. We also address how SEL instruction can be intensified using explicit mindfulness intervention programs to help meet the needs of students with EBD.

Keywords

emotional and behavioral disorders, mindfulness, social and emotional learning, elementary

Students who display disruptive behaviors in the classroom often lack the necessary strategies to self-regulate (Lane et al., 2015). This is especially true for students who have or are at risk for emotional and behavioral disorders (EBD). These challenging behaviors can be exacerbated in the general education classroom for many reasons including students having demands placed on them, sensory dysregulation, or trouble adequately communicating their needs (Kam et al., 2004). In this discussion article, we describe some of the difficulties faced by elementary school students with EBD, including the added challenges encountered as a result of the COVID-19 pandemic. We illustrate how educators can use mindfulness strategies with elementary-age students with EBD in educational settings to address these struggles. Practical research- or evidence-based mindful awareness strategies and intervention programs are explored.

Contextual Background: Emotional and Behavioral Disorders and Comorbid Conditions in the Inclusive Classroom

Students who have or are at risk for EBD frequently have comorbid diagnoses that may include, but are not limited to,

emotional disturbance, autism spectrum disorder (ASD), attention-deficit/hyperactivity disorder (ADHD), and anxiety disorder. Often, these co-occurring conditions exist because students have difficulties with self-regulation, which can result in disruptive behaviors (Bearss et al., 2013). Qualifying for special education services under any of the 13 categories of disability defined by the Individuals with Disabilities Education Improvement Act (IDEA, 2004) requires that students meet a set criterion, which includes documentation that the disability has an adverse impact on a child's educational performance.

During the 2020–2021 school year, it was reported that 15% of all public school students received special education services. While 27% of those students qualified for special education services under the categories of autism or other health impairment (OHI), an additional 5% qualified under the category of emotional disturbance (National

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Center for Education Statistics, 2022). As outlined by IDEA (2004), emotional disturbance occurs when an individual displays one or more of the following characteristics over an extensive period of time: (a) an inability to learn that cannot be explained by intellectual, sensory, or health factors; (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) inappropriate types of behavior or feelings under normal circumstances; (d) a general pervasive mood of unhappiness or depression; or (e) a tendency to develop physical symptoms or fears associated with personal or school problems. Emotional disturbance encompasses mental health conditions such as bipolar disorder, schizophrenia, and anxiety. Students who qualify for services under this category experience the highest rate of disciplinary removals in public school settings (U.S. Department of Education, 2021).

Over the last 20 years, the prevalence of ASD has continued to rise. While in the year 2000 it was reported that 1 in 150 children were identified as having been diagnosed with ASD, current prevalence rates are now as high as 1 in 44 children (Centers for Disease Control and Prevention [CDC], 2021b). According to IDEA (2004),

Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, that adversely affects a child's educational performance. Other characteristics associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences.

In addition, students diagnosed with ASD may have deficits in communication, difficulties adjusting behavior to fit various situations, inflexibility with thinking and routines, and difficulties with peer relations (CDC, 2021b). Throughout the school day, students are faced with schedule changes, social interactions, and situations that require reciprocal communication with peers and teachers. For a student with ASD, this can be extremely difficult and cause undue anxiety and stress, which can result in dysregulation and a display of disruptive behaviors.

The category of OHI encompasses a variety of health problems including, but not limited to, ADHD, and anxiety disorder. Other health impairment is defined as "having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment" (IDEA, 2004). Students who have been diagnosed with ADHD are at an increased risk for having comorbid diagnoses of anxiety and behavioral disorders. According to the CDC (2021a), 2.4 million students ages 6 to 11 years were diagnosed with ADHD in 2016. Of those children, 52% were also reported to also have a behavior or conduct problem, while 33% experienced an anxiety disorder (CDC, 2021a). Unfortunately, the prevalence of anxiety disorders

has continued to rise over the past decade and are expected to continue to increase. Therefore, it is vital that teachers be equipped with tools to help give these children strategies to help navigate these complex mental health issues.

When disruptive behaviors are displayed in the classroom, there are a myriad of effects. In addition to disrupting other students in the classroom, the student displaying the problem behaviors is at risk of being separated socially from their peers and receiving disciplinary action from the teacher (Achilles et al., 2007; U.S. Department of Education, 2021). Historically, it was common for students with EBD to be placed in separate classroom settings to reduce the disruption on typically developing students (Martin et al., 1996). However, federal law requires school districts to ensure that students with disabilities receive their education in the least restrictive environment (LRE). This means that students with disabilities are to spend the maximum amount of time appropriate with typically developing peers in the general education setting (IDEA, 2004). In the United States, 64.8% of all students who qualify for special education services spend a minimum of 80% of their day inside the general education classroom. An additional 17.4% spend between 40% and 79% of their day inside the general education classroom (U.S. Department of Education, 2021). Hence, it is critical that all teachers be aware of research- or evidence-based strategies that can help these students succeed in school.

Mindfulness

Based on the current and historical challenges students with EBD face in the classroom, it is necessary to implement strategies to provide these students with the tools they need to adequately engage in instruction. Teaching students with EBD to use mindfulness strategies is one way to help prepare them to better deal with school circumstances. This practice is especially beneficial for helping students with EBD regulate their emotions and engage in appropriate classroom behavior (Zolkoski & Lewis-Chiu, 2019). This can then translate into regulation across many sectors including helping their behavior.

In its most basic definition, mindfulness involves purposefully paying attention and reacting non-judgmentally to the unfolding of experiences in the present moment (Kabat-Zinn, 2003). Mindfulness attempts to teach the skills of utilizing both one's breath and mind to lead a fulfilling, happy, and healthy life. Mindfulness consists of self-regulation with acceptance, openness, and curiosity (Lassander et al., 2020). There are three fundamental aspects to mindfulness: intention, attention, and attitude (Shapiro et al., 2006).

In the past several years, mindfulness has gained popularity as a strategy to treat a multitude of conditions and symptoms. For example, mindfulness has been used to treat anxiety that negatively impacts an individual's ability to function (Meiklejohn et al., 2012). In the aftermath of the COVID-19 pandemic, many teachers have experienced

a significant spike in their anxiety levels and ability to function in a classroom setting. This is especially true in the case of teachers responsible for managing the complexity and implementation of virtual instruction, a significant trend during the pandemic (Pressley et al., 2021). The result of this impactful and significant stress has led to the continual encouragement of mental health resources in schools to mitigate the effects of increasing anxiety (Minkos & Gelbar, 2021).

Incorporation of mental health resources in the classroom environment was a key part of the American Rescue Plan's Elementary and Secondary School Emergency Relief program, where funds could be utilized to contribute to social, emotional, and behavioral health interventions in schools (Office of Elementary and Secondary Education & U.S. Department of Education, 2021). A classroom environment negatively impacted by student behavior is a factor of education that significantly contributes to teacher stress and anxiety (Bottiani et al., 2019). A promising solution for reducing teacher stress and improving the climate of classroom is through mindfulness-based intervention (MBI).

Mindfulness Research

Research on the practical applications of MBIs has taken different forms, but studies on the benefits of its incorporation in the classroom have begun to emerge (Schonert-Reichl & Roeser, 2016). However, there is a need for additional studies to identify the full benefits of the practice in educational settings (Greenberg & Harris, 2012; Van Dam et al., 2018). Since 2009, there has been a gradual increase in the number of peer-reviewed research articles discussing MBI in education. Mindfulness-based interventions have been linked to promising outcomes for students. Emerging research on mindfulness has been linked to the reduction of stress and increased prosocial behavior in elementary school students (Schonert-Reichl et al., 2015). Mindfulness practices can result in "reduced stress, anxiety, and depression" (Sibinga et al., 2014, p. 180). These practices have also been linked to improvements in students' behavior, mental health, and classroom management (Mendelson et al., 2010; Saltzman, 2011). Vidair et al. (2014) evaluated a study that examined the effects of a mindfulness intervention that incorporated yoga and breathing exercises for students in fourth and fifth grade. These mindfulness interventions "evidenced statistically significant improvements" in "rumination, intrusive thoughts and emotional arousal" for those who participated (Zolkoski & Lewis-Chiu, 2019, p. 47).

However, additional research on teacher mindfulness is needed, particularly regarding how MBI impacts their effectiveness within the classroom. In an analysis of the peer-reviewed articles on mindfulness in education, only

6% of the papers published between 2000 and 2014 were focused directly on educator mindfulness (Schonert-Reichl & Roeser, 2016). While teacher mindfulness research continues to grow, the literature suggests that teacher MBI can enable educators to positively impact their classroom environment and encourage students to prepare for academic instruction and reflect on their classroom engagement.

Teachers often struggle with the social and emotional demands of the classroom environment (Zolkoski & Lewis-Chiu, 2019). The purpose of training teachers in mindfulness is not only so they can teach these skills to their students, but also to help them be a better instructor (Hwang et al., 2019). The compounding effects of the pandemic and stress it has placed on educators has led to a sharp up-tick in individuals looking to leave the profession altogether (National Education Association [NEA], 2022). We believe that encouraging and teaching mindfulness can help reduce the stress that leads to burnout and career change contemplation. Mindfulness-based intervention encourages teachers to reflect on their day, prepare their emotional state for instruction, and encourage their students to do the same.

Implementing Mindfulness in the Classroom

Mindfulness researchers are cognizant of the reality that this practice takes significant dedication and being honest with one's true thoughts and feelings helps to bring the focus back to the true root cause (Brensilver, n.d.). Integrating mindfulness into a classroom environment cannot be done effectively without teacher confidence in mindfulness instruction (Meiklejohn et al., 2012). Recently, there have been increased efforts to integrate MBI into the classroom curriculum, especially within the context of social and emotional learning (SEL). Lawlor's (2016) work on mindfulness and SEL provides some contextual suggestions for best practice.

Mindfulness relates to two core SEL components: self-awareness and self-management (Collaborative for Academic, Social, and Emotional Learning; CASEL; Brensilver, n.d.). By developing a greater sense of self-awareness, students are able to recognize and identify their feelings, no matter what those feelings may be. Then with stronger self-management (or regulation), students are able to regulate their emotions if and when their self-awareness presents negative thoughts or feelings. As Lantieri and Zakrzewski (2015) state, "By helping students become aware of and then embody their emotions, thoughts, and bodily sensations, students are better able to regulate their emotions, which then impacts things such as their behavior, stress levels, relationships, and ability to focus" (p. 1).

The direct link between mindfulness and CASEL competencies is an important connection for educators to utilize in the classroom setting. This can be done through basic, everyday strategies that can be used in a multitude of settings to improve students' self-management and self-calming, develop emotional awareness, and increase relationship building skills (Jackman et al., 2019). Many mindfulness activities can be implemented without extensive training, formal curricula, or materials. It is important for educators to learn about these low-cost, easily implemented strategies in order to increase accessibility for using mindfulness as an intervention.

The main goal of implementing mindfulness in the classroom is to teach children that we all experience a range of feelings and emotions, and not to shy away from acknowledging that these are present. By teaching children to acknowledge their feelings and view them without judgment or need to take immediate action, we are able to lead them toward a more mindful state. This can be as simple as drawing attention to the mind (e.g., visual imagery activity), body (e.g., body scan or simple yoga), and breath (e.g., breathing activity).

Many of these low-intensity strategies and activities can be easily adapted to fit individual students' needs and interests. For example, a structured breathing activity can become more engaging for young students by incorporating an element of visual imagery. Asking students to pretend to "blow out a birthday candle" or "blow up a balloon" allows them to connect the physical act of breathing with a visual image of engaging in an exciting activity. For blowing out the birthday candle strategy, begin by explaining to the child that breathing can help us feel calm and happy. Consider following a script like the following:

Even when we feel upset, worried, or afraid, we can calm ourselves down by taking deep breaths. Pretend you have a delicious birthday cake in front of you. Breathe in through your nose to smell the cake. Take a deep breath in and count 1, 2, 3, 4, 5. Breathe out through your mouth to blow out the candles! Blow and count 1, 2, 3, 4, 5.

Have students repeat the breathing until they have calmed themselves down.

For the balloon strategy, begin by explaining to the child that breathing can help us feel calm and happy. A script such as the following then can be used.

Even when we feel upset, worried, or afraid, we can calm ourselves down by taking deep breaths. Pretend you are holding a beautiful balloon. It can be any color you like! Breathe in through your nose to take a deep breath. Breathe in and count 1, 2, 3, 4, 5. Breathe out through your mouth to blow up the balloon! Blow and count 1, 2, 3, 4, 5. Tie a knot on the end of the balloon and attach it to a string. Hold the string and watch the balloon fly around above you. Take a moment to just watch

the balloon. While you watch, think of something that makes you happy. Blow up more balloons and think of more happy things as long as you need! You can blow up balloons any time you feel upset, worried, or afraid.

Another example of easily adaptable engagement is the use of a "mindful jar." Students can participate in an activity in which they create sensory jars (i.e., glass jar filled with water, food coloring, and glitter glue). The teacher can use this jar as a lesson on emotion regulation. When swirling the jar, the glitter can be seen spinning all over. When the jar is set down, the glitter begins to settle. The teacher can use this as a metaphor for our feelings. When the body is calm and relaxed, thoughts begin to settle, just as the glitter does in the jar.

There are countless ways to provide engaging connections for children to work on SEL through mindful activities. Table 1 includes examples of activities that correspond with each of the CASEL competencies. Table 2 provides a listing of resources that educators can access to find additional low-intensity mindfulness strategies for use in their classrooms.

In addition to these informal, easily implemented mindful awareness strategies that can be used in a variety of educational settings, educators can also take advantage of commercial MBI programs for a more in-depth approach. Although research is still in the evolutionary stages, there are several research-based MBI programs that have demonstrated positive findings for students in school-based settings, including students with or at risk for disabilities. We highlight several programs in the next section. Table 3 provides a more comprehensive listing of MBI programs for use in educational settings with students with EBD.

MindUp program lessons include (a) three daily breathing exercises, (b) focusing on the present moment, (c) perspective taking, (d) practicing kindness, and (e) an opportunity to reflect and share experiences (Maloney et al., 2016). The program's activities target the SEL competencies of self-awareness, social awareness, relationship skills, and responsible decision making. De Calvalho (2016) noted that students exposed to MindUp increased their ability to regulate emotions, experienced more positive affect, and were more self-compassionate.

Mindful Schools provides training for educators to improve their own foundations of SEL in order to provide quality SEL instruction to students. Online courses are used to provide teachers with a solid understanding of the importance of mindfulness and how this is connected to the nervous system. After covering foundational knowledge, the training covers how to provide a trauma-sensitive approach to incorporating mindfulness in the classroom. Black and Fernando (2014) reported a reduction in problem behavior in elementary school students following implementation of the Mindful Schools program.

Table 1. Social and Emotional Learning (SEL) and Mindfulness for Students With Emotional and Behavioral Disorders (EBD): Selected Practices

SEL competency	Mindful awareness	Selected mindfulness practices for students with EBD
Self-awareness	Emotional awareness; understanding strengths and weaknesses	Mindful breathing (e.g., birthday candle or balloon breathing); journaling; self-expressive art
Self-management	Stress management Impulse control	Mindful breathing (e.g., four square breathing), “Mindful jar” Movement activities (e.g., yoga; red light, green light game; body scan)
Social awareness	Capacity to empathize	Positive affirmations
Relationship skills	Active listening Meaningful and reciprocal dialogue Conflict resolution	Read-alouds (e.g., <i>Whole Body Listening Larry at School</i> by Elizabeth Sautter) Video modeling; structured role playing Structured role playing
Responsible decision making	Non-judgmental awareness of self and others Making ethical and culturally-sensitive decisions	5 senses scavenger hunt (i.e., name something you see, hear, smell, taste, feel) Service-learning projects

Source. Adapted from Lawlor (2016, p. 69).

Table 2. Mindfulness Resources for Elementary Education Teachers of Students With Emotional and Behavioral Disorders

Resource	Author	Website/more information
Mindful Schools	Mindful Schools	Mindfulschools.org
Mindful.org	Mindful	Mindful.org
Headspace	Headspace	Headspace.com or Headspace app
Calm	Calm	Calm.com or Calm app
Mind Yeti	Mind Yeti	Mindyeti.com or Mind Yeti app
Cosmic Kids Yoga	Cosmic Kids	YouTube: Cosmic Kids
Kids Yoga Deck	Namaste Kid	Kids Yoga Deck app
Blissful Kids	Chris Bergstrom	Blissfulkids.com
<i>I am Peace: A Book of Mindfulness</i>	Susan Verde	ISBN: 9781419727016
<i>Meditation Station</i>	Susan B. Katz	ISBN: 9781611807912
<i>Mindful Kids: 50 Mindfulness Activities for Calm, Focus, and Peace</i>	Whitney Stewart & Mina Braun	ISBN: 9781782853275
<i>Alphabreaths: The ABCs of Mindful Breathing</i>	Christopher Willard & Daniel Rechtschaffen	ISBN: 9781683641971
<i>Here and Now</i>	Julia Denos	ISBN: 9780385736800
<i>Planting Seeds: Practicing Mindfulness with Children</i>	Thich Nhat Hahn	ISBN: 9781935209805
<i>My Magic Breath</i>	Nick Ortner & Alison Taylor	ISBN: 9780062687760
<i>Quiet</i>	Tomie dePaola	ISBN: 9781481477543
<i>Today</i>	Julie Morstead	ISBN: 9781927018682
<i>Wild Mindfulness</i>	Laura Larson	ISBN: 9780578468686
<i>Listen</i>	Gabi Snyder	ISBN: 9781534461895
<i>Now</i>	Antoinette Portis	ISBN: 9781626721371

Note. ISBN = International Standard Book Number.

With any MBI program, it will be important to track the effectiveness of implementation in order to make informed instructional decisions (Gage & McDaniel, 2012). With MBI programs or strategies, this can be done using a variety of methods. Teachers might use a formal assessment tool such as the Devereux Student Strengths Assessment to measure SEL competencies over time (LeBuffe et al., 2018). Teachers can also informally measure SEL competencies using structured observations. For

example, a teacher could conduct an observation of a child during recess to watch for specific relationship skills the student has been working on. Students could also be involved in the assessment process. Teachers could meet with students individually and help them set personal goals and teach them how to self-monitor their performance. Estrapala et al. (2021) reported that goal-setting is a socially-valid intervention for students with EBD.

Table 3. Research on Mindfulness-Based Interventions for Children With/at Risk for Disabilities in Elementary Settings

Citation	Age or grade level of participants	With/at risk for disabilities	Intervention	Implementer	Setting	Length of intervention	Noted positive academic outcomes
Thierry et al. (2016)	4–5 years	Yes, at risk	MindUP	Classroom teacher	Whole-group instruction	3 years	Improved EF, vocabulary, reading scores
Flook et al. (2010)	Preschool	Yes, at risk	Kindness curriculum	Experienced mindfulness instructors	Whole-group instruction	12 weeks	Improved social competence
Felver et al. (2014)	3rd grade	No (disruptive behavior displayed)	Soles of the feet	Doctoral student interventionists with yoga experience	Individual	5 intervention sessions	Improved engagement
Santonastaso et al. (2020)	7–11 years	Yes, ADHD	Mindfulness oriented meditation	Mindfulness meditation instructors	Small-group instruction in a clinical setting	8 weeks	Improved EF
Semple et al. (2010)	9–13 years	Yes, at-risk	Mindfulness-Based Cognitive Therapy for Children	Cognitive behavior therapists	Small-group therapy	12 weeks	Reduced inattention, symptoms of anxiety, and behavior problems
Mendelson et al. (2010)	4th–5th grade	Yes, at risk	Holistic Life Foundation (HLF) MBI	HLF instructors	Whole-group instruction	12 weeks	Improved capacity for self-regulation
Malboeuf-Hurtubise et al. (2019)	9–12 years	Yes, severe LDs	Mission Meditation	School counselor	Whole-group instruction	8 weeks	Decreased anxiety symptoms
Van der Oord et al. (2012)	8–12 years	Yes, ADHD and ODD	Mindful Parenting and Mindful Child Training	Cognitive behavior therapists	Small-group instruction in a clinical setting	8 weeks	Decreased symptoms of ADHD
Coholic et al. (2012)	8–14 years	Yes, with and at risk of behavior disorders	Holistic Arts-based Group Program	Social workers and childcare providers	After-school small-group sessions	12 weeks	Increased resilience
Black & Fernando (2014)	K–6th grade	Yes, at risk	Mindful Schools	Mindfulness meditation teachers	Whole-group instruction	5 weeks	Teacher-reported improvements in behavior

Note. EF = executive functioning; ADHD = attention-deficit/hyperactivity disorder; LD = learning disability; MBI = mindfulness-based intervention; ODD = oppositional defiant disorder.

Conclusion

From limited self-regulation abilities to unpredictable school routines and increasing academic demands, students with or at risk for EBD experience numerous challenges both within and outside of the classroom. Incorporating MBI in the classroom through intentional planning can provide support for these students to access the general education curriculum with confidence and success. Mindfulness-based intervention strategies and programs can be used to help students with or at risk for EBD improve their SEL and achieve success in school.

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