



Counting Backward from Zen: Mindfulness-Based Interventions in the Classroom

Abstract

This paper will explore the link between mindfulness-based interventions (MBIs) and increased attentiveness and self-regulation in school-aged children, in order to support the idea that schools should provide mindfulness-based interventions to all K-12 students. In addition to the effects of MBIs on students in general, this essay also takes a more focused look at how they can improve the overall education experience for children with ADHD, children with a history of trauma, ethnic minorities, and children in low-income households. Several studies are cited, each using MBIs over a time frame of several weeks, exact sessions varying by study. Individual studies recorded specific improvement in the areas of self-regulation, sleep, on-task behavior, reduced impulsivity and less volatile reactions to stressors. All the studies concluded that there were noteworthy improvements in attentiveness and overall social-emotional wellness.

Keywords: mindfulness, attention, education, ADHD, children

Fred Rogers, our favorite neighbor, said, “When I was very young, most of my childhood heroes wore capes....But as I grew, my heroes changes, so that now I can honestly say that anyone who does anything to help a child is a hero to me” (2019). During the current pandemic-induced bout of homeschooling, many parents are echoing a similar sentiment; educators are now being publicly lauded instead of openly criticized. Public school teachers are often blamed for everything from poor test scores to stressed kids, but they do the best they can with the tools they have. They don’t get to choose the material they teach, but they may have some input in its delivery. One of their challenges is student behavior, specifically inattention and difficulty with self-regulation. My son’s elementary school has a state-mandated curriculum and schedule to follow. Yet, school administration has created several interventions for teachers to

work into their daily lesson plan¹. All staff members have attended training to become trauma informed; now, empathy comes before a sharp rebuke against unwanted behaviors. The more tools educators have at their disposal, the greater an effect they will have on their students, and the farther that influence will travel. One such underutilized tool is mindfulness. Public schools should provide daily mindfulness-based interventions (MBIs) for all K-12 students; engaging children in mindfulness practices improves their social-emotional health and increases focus in the classroom.

Mindful of What Matters

The name Jon Kabat-Zinn pops up frequently when researching the concept of mindfulness. Though the idea stems from ancient Buddhist philosophy, Kabat-Zinn brought mindfulness into the mainstream in the 1970s. According to Berkley's Greater Good Magazine, mindfulness is the practice of bringing awareness to the present state of one's mind, body and surroundings, accepting that state, and leaning into it without judging the feelings that come up (*Mindfulness Defined*, n.d.). Mindfulness is a technique that can be taught once, practiced often, and relied on for a lifetime.

Detractors like David Forbes (2016) suggest that mindfulness in the classroom is just a way to turn children into good little lemmings who listen and follow directions without question, preparing them to enter the corporate world as bland worker bees who can "om" themselves out of business burnout. Mindfulness doesn't create robots, but it can create a more grounded atmosphere in a child who is too overwhelmed to self-regulate without help. Skeptics on social media suggest that it's a way for "crunchy" parents and earthy therapists to sell programs to schools, offering them the equivalent of essential oils and a heart-shaped band-aid for a broken education system that places unrealistic expectations on students. While it's true that mindfulness isn't a cure-all, it is a less daunting undertaking than successfully lobbying to scrap current testing standards. It is a cost-effective plan; curricula can be implemented quickly and reused annually, tweaked to best suit each classroom with teacher input, further impressed on the student with "homework", and is overall proving to be quite beneficial in a myriad of ways. The Washington Post reported that some religious organizations claim mindfulness is too intertwined with its roots in the Buddhist philosophy, and features

¹ Every 20 minutes, each child in every grade level takes a three-minute movement break in the classroom or in the designated Move Room, rotating sensory stations, because the staff know that even the most well-meaning kids (and many adults) have a limited attention span. Flexible seating -- wobble stools, gaming chairs, beanbag chairs, cushions on the floor -- has been incorporated into each class to allow the students some literal wiggle room.

spiritual aspects that may conflict with religious views held by children or their families (Brown, 2019). In fact, the type of secular mindfulness being studied and implemented in many classrooms has nothing to do with spiritualism and everything to do with science. Tom Ireland explained the effects of mindfulness on the amygdala:

MRI scans show that after an eight-week course of mindfulness practice, the brain's "fight or flight" center, the amygdala, appears to shrink. This primal region of the brain, associated with fear and emotion, is involved in the initiation of the body's response to stress. As the amygdala shrinks, the pre-frontal cortex – associated with higher order brain functions such as awareness, concentration and decision-making – becomes thicker. The "functional connectivity" between these regions – i.e. how often they are activated together – also changes. The connection between the amygdala and the rest of the brain gets weaker, while the connections between areas associated with attention and concentration get stronger (2014).

A brief published by the Boston Charter Research Collaborative in conjunction with Harvard University backs this research; field tests on study groups found a decrease in the amygdala's response to stressors or typical triggers after eight weeks of mindfulness-based interventions, (West, et al., 2019).

Real Talk – Exploring the Facts

Mindfulness is noted in several studies to have a positive impact on children with ADHD (Attention-Deficit/Hyperactivity Disorder), childhood trauma², and children in minority and/or low-income households. This isn't all based on abstract emotions; here are some shocking statistics that may be new information to some:

- As of 2016, the CDC noted that nearly 10% of children in the US had been diagnosed with ADHD ("Data and Statistics About ADHD", 2019).
- According to the Substance Abuse & Mental Health Services website, "More than two thirds of children reported at least 1 traumatic event by age 16" ("Understanding Child Trauma", 2017).
- The Annie E. Casey Foundation, gleaning information from the Census Bureau, indicated that nearly fifty percent of children in the US qualified as a minority race in 2018 ("Child Population by Race | KIDS COUNT Data Center", 2019).

² See the SAMHSA website ("Understanding Childhood Trauma", 2017) for a list of recognized traumatic childhood events.

- Over 40% of all children in the US live in low-income households ("NCCP | United States: Demographics of Low-Income Children", 2018).

With figures this large, those fragile groups of children could easily make up an entire classroom. The idea of using mindfulness to help students cope with internal turmoil and external triggers isn't new, but it has taken time to catch on. Numerous studies have been done on the effects of MBIs in schools, surveying specific categories of children as well as general classroom populations. Studies did not all use the same curricula but did overlap the types of interventions measured³. Each of the studies I examined show that MBIs used consistently with students over several weeks brought about an increase in their focus and retention of material during academic instruction. Several studies also recorded an increase in self-regulation and empathy for others. All studies also included some variation of assigned mindful "homework", lasting no more than 15 minutes.

Rescued by Results

A review of 11 previously completed studies, called a "meta-analysis", on the link between MBIs and improved attention in children with ADHD found a notable increase in focus when MBIs were used in the classroom when compared to the control groups, who did not receive any mindfulness-based exercises (Xue et al., 2019). Anne Herbert and Anna Esparham's meta-analysis on mind-body therapies found that when used in twice weekly 30-minute sessions over the course of three weeks, yoga reduced inattention in primary school students with ADHD (2017). In this same review, an additional study reported that a group of male students who received 20 mindfulness-based yoga interventions saw a lessening of typical ADHD symptoms and improved sleeping patterns (Herbert & Esparham, 2017).

A study focused on children living in foster homes and low-income homes with a history of trauma, found that a school-based program of MBIs lasting 12 weeks lessened anxiety and harmful behaviors, promoted better sleep patterns, and decreased cortisol levels (Ortiz & Sibinga, 2017). Another group study, focused on high-school students in ethnic minorities, administered 12 weekly MBI sessions – one 50-minute session per week -- to youth with a history of poor self-regulation; the result was a group of children who had significantly lower stress levels and who were better able to regulate their emotions, improving their mental health (Fung et al., 2018).

³ MBIs noted across several studies included but were not limited to yoga, deep breathing, meditation, visualization, awareness of one's surroundings, awareness of one's body, mindful eating, and awareness of one's thoughts or feelings.

Researchers using 31 Italian primary school students three times weekly, for a maximum of 30 minutes per session, in an eight-week experiment of mindfulness-oriented meditation concluded that:

...the introduction of mindfulness-meditation practices in educational settings can be useful to improve children's cognitive, emotional, and social abilities. This awareness practice could be regularly used during the school year and, combined with other SEL programs, could become a powerful preventive tool and a mean to improve the academic development of students even in the 1st years of school (Crescentini et al., 2016).

Dr. Ricardo Tarrasch wrote perhaps the most intriguing journal article I've read to date. In his study of 101 Israeli primary school students broken into a test group and a control group, MBIs were administered in 45-minute weekly sessions over 10 weeks (Tarrasch, 2018). Detailed tables are included in his work that clearly outline the pre-MBI attention assessments, in-session topics given to the children, the specific mindfulness exercises taught, and how long each instruction lasted (Tarrasch, 2018). After 10 weeks, the children took the same attention assessments; Tarrasch concluded that the group who participated in the mindfulness sessions showed a major increase in attentiveness and a decrease in impulsive/hyperactive behaviors (2018).

Making a Mark

Now that most U.S. parents have gotten a taste of what it's like to teach our own children, and teachers are being challenged to impart wisdom in unconventional ways, there is no time like the present to begin establishing mindfulness practices, even if they begin online. Social-emotional learning shouldn't stop simply because students aren't currently in standard classroom settings. "Homeschool" supplies may have been hastily cobbled together out of old clipboards and the leftovers from the summer craft drawer, but it's our current learning environment, nonetheless. There are dozens of programs, apps and online resources available to begin practicing mindfulness, and many of them are free. The more knowledge parents and educators have at their disposal, the greater an effect they will have on the children they care for, and the farther that influence will travel. If every educator had access to a tool that could make a positive impact on their students' attention level and emotional regulation, imagine the academic and psychological advances that could be made in the classroom. If every parent stood behind their local educators, the exchange of information could be enough to alter the face of education. Children who struggle with attentiveness, paying attention for a few minutes more. The kid who typically explodes when something is too hard is taking a moment to breathe and re-center his thoughts. If teachers were educated on

mindfulness and its benefits, it would be exponentially easier to present mindfulness-based interventions to their local school board as an effective tool for improving social-emotional health and increasing attentiveness in the classroom.

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Footnotes

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