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# The Benefits of Teaching Professionals Using Mindful Practices for Stress and Emotional Regulation

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**The Benefits of Teaching Professionals Using Mindful Practices for  
Stress and Emotional Regulation**

by

Becky Aish

A Starred Paper

Submitted to the Graduate Faculty of

St. Cloud State University

in Partial Fulfillment of the Requirements

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## Chapter 1: Mindfulness Explained

“A good teacher is like a candle; it consumes itself to light the way for others.”

- Mustafa Kemal Atatürk

The profession of teaching can be very fulfilling. Teachers become teachers because of passion, not on a whim. Teaching requires a lot of caring, determination, creativity, flexibility, knowledge, and understanding. To have these greatness traits shine through, teachers must have much compassion for the students they educate. Along with compassion comes the stress of feeling empathetic for children. Add on the stress of teaching for district achievement and rigid academic standards, budget decreases, completing tasks off the time clock, buying classroom supplies, and daily classroom uncertainties and you have a person who carries much weight on his/her shoulders. Teachers frequently are drained emotionally and physically. Furthermore, when one teaches a specialty like special education, it requires knowing the history and emotional background of each child on his/her caseload. Pair that with 47.9% of students experiencing at least one or more traumatic experiences in their childhood (Davis & Palladino, 2011), teachers carry a lot of compassion, stress, and trauma.

When a person experiences compassion stress, it can turn into psychological distress. Figley (2015) wrote about the concerns of compassion fatigue and the effects from it. He explained that the first indicators of psychological distress occur and include emotions (sadness, depression, anxiety, or dread), nightmares or negative images, sleep difficulties, headaches, gastrointestinal suffering, obsessive behaviors, physiological symptoms of palpitations and hyperventilation, and/or impairment of daily activities. Second, a cognitive shift results in professionals who experience feelings of extreme helplessness and heightened

vulnerability. Third, relational disturbances, the process of distancing and detaching from family, friends, and colleagues may also occur (Figley, 2015).

If nothing changes to counter the effects of this constant emotional weight, the person can be affected for the rest of their life. When stress becomes too much to bear, often the teacher chooses to realign their priorities by choosing a different profession. Based on the 2019 Biennial Minnesota Teacher Supply and Demand, in Minnesota, more than half (52.5%) of teachers holding an active license are not actively teaching. Furthermore, districts continue to report a perception of "difficult" and "very difficult" to fill teaching positions. Compared to 5 years ago, 89.9% of Minnesota districts report fewer applicants for positions. Many "special permission" licensing grants are awarded (3.8%) to individuals not carrying a precise license for teaching in a specific field. In the 2017-2018 year, 4,393 teachers in Minnesota were teaching under special permission or out of compliance status. Unfortunately, 62.5% of these permissions are for positions in Special Education (Wilder Research, 2019).

About one-half million (15%) of U.S. teachers leave the profession every year (Seodel, 2014). More than 41% of teachers leave the profession within 5 years of starting, and teacher attrition has risen significantly over the last 2 decades (Ingersoll, Merrill, & Stuckey, 2014). The Economic Policy Institute estimated that the annual teacher shortage would reach about 110,000 by the 2017–2018 school year (Garcia & Weiss, 2019). Besides, there is a higher "turnover" rate for teachers in special education (20%) as compared to regular education teachers (16%) (Boe, Bobbit, Cook, Whitener, & Weber, 1997). Teachers of specialty professions like mathematics, science, special education, English language development, and foreign languages are more likely to leave their school or the profession than those in other fields. These are teaching fields that

experience shortages in most states across the country. Turnover rates are 50% higher for teachers in Title I schools which serve more students in levels of poverty (Hammond, 2017). N.E.A. Today reported that the shortage is driven by several critical factors, including effective professional development, teacher pay gap, demoralization, and stress (Walker, 2019).

The question for the educational system remains: What can be done for teachers to recognize stress and how it affects their emotions to a point where they can no longer effectively teach? The key is to help teachers with a tool for identifying the physiological signs of everyday classroom stress and compassion fatigue and teaching them how to take control and combating the distress that comes with it.

There is growing popularity in using self-care strategies in lowering the effects of distress. One strategy that is gaining popularity in many schools around the world is the tool of using mindful techniques in calming the overstressed system. Mindful practices are designed to bring emotional awareness to the person with physical and mental activities to help calm the overactive emotional system. Many districts and individual educators are using mindful practices with not only the teacher, but also with the whole classroom of students. Mindfulness training has been used in the medical field to reduce stress and anxiety and has become increasingly popular with large companies and organizations, including Google and the United States Military (Bauer et al., 2018). Many employment fields are looking at this emerging idea of mindful practice to help employees better deal with work-related stress and focus on the task at hand. Since the stress in the classroom environment can be emotionally and physically draining, teachers are urged to look at mindful practice in a classroom routine.

## **What is Mindfulness?**

Mindfulness is the basic human ability to be fully present, aware of where we are and what we are doing, and not overly reactive or overwhelmed by what is going on around us (Shea, 2018). Mindfulness is available for all. It can be accessed with training for anyone. While mindfulness is natural from within, it can be cultivated through proven techniques, particularly seated, walking, standing, lying down, and moving meditation, inserting short pauses into everyday life, and merging meditation practice with other activities, such as yoga or sports (Shea, 2018). When we are mindful, we see several benefits like reduced stress, enhanced performance, gained insight and awareness through observing our mind, and increased attention to others' well-being. Mindfulness meditation gives us a time in our lives when we can suspend judgment and unleash our natural curiosity about the workings of the mind, approaching our experience with warmth and kindness—to ourselves and others. In a Harvard Health article, it explains: “There is more than one way to practice mindfulness, but the goal of any mindfulness technique is to achieve a state of alert, focused relaxation by deliberately paying attention to thoughts and sensations without judgment. This allows the mind to refocus on the present moment. All mindfulness techniques are a form of meditation” (Ince & Allison, 2009, p. 24).

Shea (2018) provided five examples of mindfulness techniques:

1. Basic mindfulness meditation—Sit quietly and focus on natural breathing or on a word or "mantra" that you repeat silently. Allow thoughts to come and go without judgment and return to focus on breath or mantra.



2. Body sensations—Notice subtle body sensations such as an itch or tingling without judgment and let them pass. Notice each part of the body in succession from head to toe.
3. Sensory—Notice sights, sounds, smells, tastes, and touches. Name them “sight,” “sound,” “smell,” “taste,” or “touch” without judgment and let them go.
4. Emotions—Allow emotions to be present without judgment. Practice a steady and relaxed naming of emotions: “joy,” “anger,” “frustration.” Accept the presence of the emotions without judgment and let them go.
5. Urge surfing—Cope with cravings (for addictive substances or behaviors) and allow them to pass. Notice how the body feels as the craving enters. Replace the wish for the craving to go away with the certain knowledge that it will subside.

### **History of Mindfulness**

Mindful practices have been used for thousands of years. The oldest forms have been dates in Eastern philosophy throughout religion and historical practices. It has been found in ideologies around the world. It began in 1500 BCE in Hinduism under the context of yoga, Daoism since 6th c. B.C.E. in qì gong exercise, and Buddhism in 535 BCE in terms of focusing on breathing. It was also found in Christian, Muslim, and Jewish practice. Now mindfulness is commonly used in clinical psychology with personality disorders, depression, anxiety, and pain (Williams & Kabat-Zinn, 2011). “Mindfulness,” as used in ancient texts, is an English translation of the Pali word *sati* which translates into the meanings of awareness, attention, and remembering. Pali is the language in which the teachings of the Buddha were originally recorded. The first dictionary translation of *sati* into “mindfulness” dates to 1921 (Davids, Stede,

Norman, Pruitt, & Jackson, 2015). Mindfulness can be interpreted as a meditative exercise as well as a way of the world. The arrival of mindful practices to the U.S. is attributed to Jon Kabat-Zinn. Kabat-Zinn is a Professor of Medicine Emeritus and creator of the Stress Reduction Clinic and the Center for Mindfulness in Medicine, Health Care, and Society at the University of Massachusetts Medical School. Kabat-Zinn was first introduced to the philosophy of Buddhism while he was a student at M.I.T. In 1979, he founded the Stress Reduction Clinic at the University of Massachusetts Medical School, where he adapted Buddhist teachings on mindfulness and developed the Stress Reduction and Relaxation Program. He developed a program by using his Buddhist influence on mindfulness and developed a program called “Mindfulness-Based Stress Reduction” (MBSR) (Shea, 2018).

### **Historical Trends**

Approximately 40 years ago, mindful practices had initially been taught to patients for pain management. It has been helpful in the medical and healthcare fields as a positive way to reduce stress, increase relaxation, alleviate pain, and reduce anxiety. The goal of mindfulness is to enable individuals to regulate their responses and behaviors.

Just in the past 15 years have mindful practices been examined in the classroom settings with the intent to help calm emotional outbursts and help with better focus and attention (Fleவர், Frank, & McEachern, 2014). It is considered to be an excellent complement to the Social-Emotional Learning practices that are taught to teach students better self-regulation. Since 2004, research in education began to focus on mindfulness for general well-being for all which included a reduction in anxiety and emotional regulation in a reduction of stress cortisol (Fogarty, 2009;

Willis, 2007) and a thickening of the prefrontal cortex which is associated with emotional regulation (Lazar et al., 2005).

### **Theoretical Background**

Cognitive Behavioral Therapy, or CBT is “a system of psychotherapy that attempts to reduce excessive emotional reactions and self-defeating behavior by modifying the faulty or erroneous thinking and maladaptive beliefs that underlie these reactions” and has been found useful in the treatment of emotional disturbances including anxiety and depression in adolescents (Sinha & Kunar, 2010, p. 20).

Many therapists that use this practice have integrated the use of mindfulness within sessions. Mindfulness-based Cognitive Behavioral Therapy (MBCT) integrates the practice of mindfulness with the principles of CBT and is based on the idea that in order to recognize and modify unhelpful thoughts, we have to understand and have some control over the processes in our mind, which produce them; “we cannot change a problem with the means that created it” (Sinha & Kunar, 2010, p. 20).

### **Research Question**

When given the tools of mindfulness, can teachers use this practice to regulate stress levels and build sustaining relationships, which can lead to increased job satisfaction and teacher retention?

### **Focus of the Paper**

The focus of this paper was to examine mindfulness practices used in a classroom and the effects on teachers. This paper discusses if teachers can use this practice to regulate emotions and build positive relationships with students skillfully. The focus was also to examine if guided

mindfulness can help with classroom management by helping teachers be less reactive to stressors. In addition, this paper reviews how mindfulness, when added into Social Emotional Learning practices, can affect self-awareness and lower stress levels to affect overall job satisfaction.

## **Chapter 2: Mindfulness Researched**

This chapter reviews literature that evaluates the effectiveness of mindfulness and relaxation practices in the classroom and the ramification on teachers and therapists working in counseling programs. The effectiveness of mindfulness has been investigated on regulating emotions and building positive relationships with students, which, in turn, improves job satisfaction. The research reveals connections between mindful practice and overall emotional management.

The types of mindfulness and relaxation brought forward in the literature are:

- breathing regulation
- meditation
- cognitive behavioral therapy
- social-emotional learning practice
- yoga
- urge surfing
- sensory awareness
- emotional presence

### **Scope of Review**

The research led to 12 studies and scholarly articles from 2009-2019, which show the effects of mindful or relaxation practices on teachers, students, or therapists in a classroom setting. The research is from the ERIC, EBSCO, Wiley, and JSTOR databases. Entries in various educational and psychology-based journals and from a variety of universities have been reviewed. The databases were searched using a variety of crucial term combinations, including

mindfulness, relaxation, yoga, education, special education, stress, job retention, burnout, and meditation. All the research was classified as being peer-reviewed. Studies were identified to support mindfulness and relaxation practices used by teachers and therapists. From this research, strategies for using meditation or relaxation techniques for improving stress management, emotional wellness, and job satisfaction were compiled. A conclusion was formulated to establish the connection between using mindful meditation or relaxation techniques and overall emotional regulation.

### **Research Findings**

**Mindfulness experiences for educators in a classroom setting.** Educators have been using mindful practices for decades in classroom settings to help students with emotional regulation. An example of a study with students classified with emotional or behavioral disorders is included in this research to show how mindfulness has effectiveness with overall emotional regulation on not only students but teachers as well. In 2016, Malow and Austin completed a 6-week investigation using the *Learn to Breathe: A Mindfulness Curriculum for Adolescents to Cultivate Emotion Regulation, Attention, and Performance Curriculum* by Broderick (2013). It provided an 18-session course of mindfulness study. Fifteen adolescents, ages 15-17, completed both the pre- and post-test administration of the *Resiliency Scales for Children and Adolescents* by Prince-Embury and Prince-Embury (2007). All the adolescents were diagnosed with emotional or behavioral disorders and classified as emotionally disturbed. The three subscales for this assessment were: Sense of Mastery Scale (M.A.S.), Sense of Relatedness Scale (R.E.L.), and Emotional Reactivity Scale (R.E.A.). M.A.S. represents the interaction with the individual environment and individual optimism, self-efficacy, and adaptability. R.E.L. measures the

individual's connection to others in a social context: Sense of Trust, Perceived Access to Support, Comfort with Others, and Tolerance of Differences. The R.E.A. measures the pre-existing vulnerability or threshold of tolerance, with subscales of Sensitivity, Recovery, and Impairment. Each student completed a pre and post-assessment as well as participated in the daily mindfulness activities. Over 6 weeks student mean scores for the M.A.S. in Optimism, Self-Efficacy and Adaptability revealed a statistical significance in improvement in these areas ( $p = .011$ ) in this two-tailed  $t$ -test. This was a significant increase for 12 of the 15 participants. Furthermore, there was a positive directional trend in the R.E.L. scale, measuring an individual's Sense of Trust, Perceived Access to Support, Comfort with Others, and Tolerance of Differences. The  $p$ -value of the two-tailed  $t$ -tests ( $p = .151$ ) indicates a significant increase in nine of the 15 participants. Finally, the R.E.A. score, which represented the threshold for Emotional Reactivity in Sensitivity, Recovery, and Impairment, Showed a Negative Directional trend of the two-tailed  $t$ -test with a significant  $p$ -value ( $p = .001$ ) when  $p < .01$ . This indicated that 11 out of 15 students felt they were less reactive and showed less emotional reactivity. Overall, the students were actively engaged in the mindfulness activities, and several students shared they truly looked forward to the morning mindful practices. The teachers of this study reported that students appeared more centered and less anxious after participating in the mindful exercises. With students less anxious, teachers can teach with less reactivity to the anxiety and more response to optimism and self-efficiency (Malow & Austin, 2016).

In a peer-reviewed academic journal, Zolkoski and Lewis-Chiu (2019) researched mindful practices in the classroom to improve challenging behaviors which can be difficult for

educators. Before the mindful practice happened within the classroom environment, the teachers were asked to establish their own personal practice of mindfulness. It was recommended that the teachers experience mindfulness 15-30 minutes a day. Zolkoski and Lewis-Chiu noted:

Often teachers are not prepared for the social and emotional demands of the classroom. Teachers often face a variety of stressors daily. When practicing mindfulness, teachers can begin to recognize their own emotions and proactively regulate how they react. Mindfulness has the ability to help increase teachers' awareness of what is causing some students to demonstrate challenging behaviors. (p. 52)

When teachers experience mindful or relation practices with their students, they engulf themselves in the experience. If done correctly, they, too, should see changes within their emotional regulation. Rupprecht (2017) investigated the impact of Mindful Based Stress Reduction (MBSR) training on professional performance and emotional strain. The sample was derived from 32 German school teachers (18 in intervention and 14 control), with 93% of them being female. The purpose of this study was to investigate the impact of Mindful Based Stress Reduction training on self-regulation and professional performance. The teachers were trained in MBSR (Kabat-Zinn, 1991) over 5 weeks for a total of 26 hours. Every course in the program focused on a topic that included coping with stress or working with difficult emotions. The study was classified as a quasi-experimental, non-randomized, wait list-controlled study that combined quantitative and qualitative mixed-method design. On average, participants engaged in 29.7 minutes of mindful practice a day. Sixteen teachers in the intervention group found the program beneficial. Furthermore, 12 teachers found that the students benefited from taking part in the mindfulness experience in the classroom as well. When compared to the control group, in a



paired t-test, the MBSR group showed a statistically significant change in decreased emotional irritation and tendency to resign in the face of failure and improved inner calm and balance and clarity of emotions ( $t = -3.27, p < .05$ ). Post-test intervention group participants reported statistically significant reductions in cognitive and emotional strain. Negative emotions decreased in both the non-intervention and control groups; however, the changes were only statistically significant for those in the intervention group. Final interviews reported that teachers in the MBSR group were engaging more wisely in work demands while finding more space to teach creatively. A teacher reported she felt more relaxed, even in stressful times. Teachers in the MBSR group also reported they were more confident in coping with challenging students, effectively dealing with professional demands, and coping with negative emotions in the classroom. Finally, teachers in the MBSR group built greater resilience by using mindful practices to switch off from work stressors, to regain energy during breaks, and able to work more effectively on activities demanding endured attention.

Mindfulness can be beneficial for teachers, even in the form of meditation or relaxation. Hepburn and McMahon (2017) used Pranayama Meditation (Yoga Breathing) with teachers for stress relief. The article investigated whether participants, in a 5-week Pranayama Meditation course, experience stress reduction. There were five full-time teachers from an all-boy independent school with over 1,300 students. The tools that were used to measure progress were the Perceived Stress Scale (P.S.S.) (Cohen, Kamarck, & Mermelstein, 1983), weekly journal reflections, and one-on-one open-ended structured interviews. The P.S.S. is a self-reporting measurement for assessing psychological stress. Each week the participants attended a 60-minute Pranayama Meditation (yoga breathing), class. The P.S.S. was given out before the

start of the research and again at the final meditation session. Interviews were also conducted a week after the final session. The interview data results are presented according to six domains and themes: Work-Life Balance, Benefits Gained, Degree of Stress Relief, Maintained Practice, and Opportunities for Staff. The results with the Perceived Stress Score showed that four out of five participants reported an increase in their feelings of control over their events in their lives. Three out of five reported an increase in confidence. Overall, P.S.S. scores for all the participants were below their original scores, with an average score of 13. Whereas, a score of 20 or above qualifies as a high-stress score. Throughout the data from the interview section, a theme of a balance of stress emerged. In the area of Work-Life Balance, a participant stated: “I can be more present to my work, to my family, and to be the person I hope to,” “I make space for life and space for school,” and “I’m good at knowing when to say 'no' to work and when I should do something else” (Hepburn & McMahon, 2017, p. 152). Under the interview category of degree of stress relief, the participants reflected on the awareness of when they were feeling the effects of stress and how to use breathing techniques to help them destress. When reflecting on Maintained Practice, a participant commented: “It is really nice to have that hour set aside for me” (Hepburn & McMahon, 2017, p. 152). Finally, the participants felt it would be beneficial for other staff members to participate in the Pranayama Meditation course. One participant recorded, “I think it would be incredible. I think it would be just what we need here.” “I think it helps the tone of the school. I think it would be a great thing” (Hepburn & McMahon, 2017, p. 152).

Bernay and Rix (2015) explored the life experiences of beginning teachers of mindfulness during their initial teaching programs. Through this qualitative study the teachers kept journals

about their experiences. The five beginning teachers kept journals and engaged in three interviews during their first year of teaching. Forty-three primary school teacher education teachers at Auckland University of Technology (AUT) in New Zealand were exposed to mindfulness strategies to build in everyday experiences. They experienced mindful activities like mindful eating, breath awareness, body scan, sitting meditation, and walking meditation and were encouraged to incorporate the experiences in everyday activities. Four females and a male agreed to participate in the study after engaging in a full-day review session with a mindfulness trainer. The participants maintained journals and participated in three interviews. From the discussions, aspects of the first year of teaching were described noting effects of mindfulness on their personal and professional well-being, their teaching ability, and their desire to remain a teacher. The data was interpreted in a hermeneutic qualitative design, where the researchers interpreted the information from the personal experience of the first-year teachers. In the findings, each of the five participants developed their mindfulness routine based on the exercise they were initially instructed. All participants used the tools of body scans and breath focus regularly. In the results, all the participants were aware that they were observing activities at the moment. One participant was pleased with her ability to notice children's needs and be able to respond accordingly. Another noticed a change in body language and muscle tensing when she had to focus on behavior management instead of her lesson. The more the participants participated in mindfulness more regularly, the participants noticed a reduction in stress. They also stated they noticed the lessons are more creative than before and that they were able to integrate actual mindfulness practices into their teaching (Bernay & Rix, 2015). The teachers reported that mindfulness helped them to be non-judgemental of themselves and to connect this

to their awareness of children's behavior so they could respond rather than react. One participant reflected how regular mindfulness helped her to create her teaching styles to be interested in what she was teaching; therefore, the students were engaged in learning, not negative behavior. By Terms 3 and 4, all participants felt they were responding with greater clarity with mindfulness and felt less stressed. Participants also noticed how students were making connections to activities. Finally, participants developed an acceptance of themselves and discovered professional discussions with their colleagues. Overall findings showed that participants highlighted greater resilience by using mindfulness by reducing stress levels, better focus on lesson plans and students, and responding objectively rather than reacting emotionally to the children in their classroom (Bernay & Rix, 2015).

Mindfulness can teach teachers to respond more objectively to everyday stressors in the classroom. This control of stress levels can then affect the feelings of burnout from the job. Flook, Goldberg, Pingter, Bonus, and Davidson (2013) researched a quantitative pilot study that looked at just that. Eighteen public elementary school teachers were invited to participate in a study of mindfulness meditation, breathing practices, and emotional awareness. Ten teachers were randomly chosen to be in the intervention condition. The sample was predominantly female ( $n = 16$ ) with a mean age of 43.06. The intervention group participants reported spending approximately 28 minutes on mindful practice per day. The intervention group showed significant improvements in several self-report measures, including a decrease in psychological symptoms as reported by the Symptom Checklist 90-R (SCL-90) (Derogatis, 1977) ( $t(9) = -3.66$ ,  $p = .005$ ). They noticed a significant increase in self-compassion humanity as measured by the Self-Compassion Scale (SCS) (Neff, 2003) ( $t(9) = 3.42$ ,  $p = .008$ ). The burnout value, as

measured by the Maslach Burnout Inventory-Educators Survey (MBI-ES) (Maslach & Jackson, 1981) significantly decreased in the emotional exhaustion category ( $t(9) = -2.42, p = .038$ ) and increased in personal accomplishments categories ( $t(9) = 3.03, p = .014$ ). Finally, the control group showed a significant decrease in cortisol levels in the morning compared to the intervention group ( $t(6) = -2.48, p = .048$ ). The hormone Cortisol plays a role in regulating the body's sleep-wake cycles, managing how the body utilizes carbohydrates, fats, and proteins, reducing inflammation, and controlling blood pressure. Lower morning Cortisol has been associated with both acute and chronic post-traumatic event distress (Flook et al., 2013). In most people, Cortisol levels are highest in the morning when they wake up and lowest around midnight. If Cortisol levels are too high or too low, one may have a condition that needs to seek medical treatment (Cortisol, 2020). Overall, the mindful intervention group reduced psychological symptoms and feelings of burnout and increased self-compassion.

McCarthy and Reiser (2017) researched the effects of mindfulness, using the Stress Prevention and Mindful (SPAM) model, on emotional regulation. The study compared a total of 45 teachers from Southwest Texas (26 SPAM participants and 19 control) in a quantitative and qualitative exploratory data design. The 26 experimental groups participated in a six-session SPAM introduction training. The goals of the SPAM group were to increase teachers' resources to prevent and manage stress. It did this by increasing knowledge of the stress process, introducing the use of mindfulness techniques, and increasing social support by providing a therapeutic group environment. Each session included psychoeducation about stress, cognition, and emotion. (McCarthy & Reiser, 2017). Two weeks after the final SPAM session, semi-structured interviews were held with eight group members from three of the SPAM groups. In

the quantitative component of this study, there was no significant difference between the characteristics of study variables between the intervention and control groups with the pretest. While not statistically significant, because of the small effect size ( $d = .31$ ), the overall post job satisfaction score for the was higher for the SPAM group ( $M = 75.08$ ) than the control group ( $M = 73.37$ ). There was a significant difference between the two groups in the Five Facet Mindfulness Questionnaire (FFMQ-SF) (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006)  $F(1, 42) = .012, p = .913$ . The Facets measured are Observing, Describing, Acting with Awareness, Non-Judging Inner Experience, and Non-Reactivity to Inner Experience. The SPAM group ( $M = 74.88$  versus  $M = 80.13$ ) indicated their mindfulness facets increased over the eight weeks, whereas the control group ( $M = 76.88$  versus  $M = 75.81$ ) decreased slightly from pre- to post- data. In the qualitative portion of this study, eight individuals were interviewed 2-3 weeks after the conclusion of the final SPAM group meeting. In the interviews, all participants in the SPAM group reported that the intervention had a positive and had a personal impact. Interviewees reported a vast range of positive benefits of participation, including improvements in the engagement of emotion, engagement with stress, responding versus reacting, compassion for self, colleges, and students, and strengthened relationships with colleges. Many interviewees cited an increased ability to allow themselves to experience or feel an emotion as it occurred ( $n = 6$ ) instead of bottling up or avoiding the feelings. Several group members reported judging themselves less for having difficult emotions and being better able to let the emotions go. Three interviewees reported that their increased ability to engage with emotions led to decreased exhaustion and feeling more refreshed and energized. Five to six interviewees increased the ability to notice and cope with stress. Many interviewees ( $n = 6$ ) mentioned an increase in the

ability to pause when engaged in stressful classroom situations, and that pause allowed them to provide a more thoughtful response versus an immediate reaction. Seven respondents reported a strengthened relationship with colleagues and an increased feeling of community at school. Finally, all SPAM participants described their experience as positive and valuable. Analysis of the interviews suggests that being in a group with colleagues is therapeutic (McCarthy & Reiser 2017).

Teachers who teach at a variety of age levels can benefit from the mindful experience. Lindner and Healy (2004) surveyed 157 teachers on what type of perceived stress they experience and what strategies worked for them to address the stress of working with students with varying combinations of cultural, learning, and language differences. Many reported they used mindfulness strategies which helped them calm. Some of the coping strategies addressed to relieve stress were yoga, deep breathing, sleep, talking to someone trusted, and watching television.

Singh, Lancioni, Winton, Karazsia, and Singh (2013) disclosed that many preschool teachers do not have sufficient experience and expertise to prevent and resolve issues that give rise to the challenging behaviors of children with intellectual or developmental disabilities. This results in teacher stress and burnout and eventually affects the recruitment and retention of teachers. To combat this, three preschool special education teachers attended an 8-week mindfulness course on the behavior of the students in their classroom. The teachers used mindful practices with 18 children in each classroom ranging in age from 5 to 8 and all functioned at the mild level of intellectual disabilities. The teachers were taught a new mindfulness meditation technique each week and were required to practice this at home. After the first week of training,

they were also required to practice the meditation techniques taught in previous weeks. Besides, they were taught to apply their newly learned mindfulness skills in their interactions with the children in their classrooms. During the last week of the mindfulness practice phase, the trainers informally interviewed the teachers regarding their experiences and perceived outcomes with the mindfulness training. The interviews focused on several issues, including meditation practice, use of mindfulness in daily life, social interactions with the children in their classroom, relationship with their family members, mindfulness versus previous training in other forms of intervention, and personal growth. It was recorded that during mindfulness practice, the children engaged in fewer maladaptive behaviors per week. This downward trend of maladaptive behaviors was across all three classrooms, and this decrease is statistically significant ( $\phi = .92, p < .001$ ). During mindfulness practice, the children showed an upward trend in compliance across all three classrooms, and this increase is statistically significant ( $\phi = 1.00, p < .001$ ). Overall, when we compared the averages from baseline to averages of the mindfulness practice, there was almost no change in positive interactions ( $\phi = .044, p = \text{ns.}$ ). However, there were significant decreases in negative interactions ( $\phi = .761, p < .001$ ) and significant increases in neutral interactions (i.e. isolated play) ( $\phi = .841, p < .001$ ) (Singh et al., 2013). In the teacher interviews, they noticed a positive effect on their attitudes and behavior toward self and others, so they increasingly found that they looked forward to their formal meditation practice at home and to using the other meditations during the day. The teachers also noticed they found that, as they progressed in their mindfulness practice, premature cognitive commitment to responding in a given manner and confirmation bias with regards to being vigilant about the children's maladaptive behaviors slowly receded from their classroom management plan. They began to



respond automatically to specific behaviors instead of changing their whole curriculum to fix a specific behavior. They all noticed, toward the later stages of their mindfulness practice, that instead of being upset and frustrated, avoiding a child who was misbehaving, or directing a teacher aide to provide one-on-one supervision to these children, they were able to “be with the child's misbehaviors,” a practice that, in hindsight, they identified as calm abiding in the present moment with whatever behavior the children engaged in (Singh et al., 2013). Finally, all teachers noted that they had changed in some tangible way such that their family members, and especially their children, saw them as being “a better person.”

A relaxation meditation technique called Inquiry-Based Stress Reduction (IBSR) has been suggested to have a positive effect on burnout and mental well-being. Schnaider-Levi, Mitnik, Zafrani, Goldman, and Lev-Ari (2017) have researched this intervention to see if it did influence teacher burnout. Burnout is defined as a response to chronic emotional strain due to dealing extensively with other human beings, partially when having to deal with recurring problems as well as reduced coping resources (Schnaider-Levi et al., 2017). IBSR is a meditation technique developed by Katie in 1986 (Katie, 2002). It is designed to identify the thoughts that cause stress and to use mediation to investigate them by a series of questions and turnarounds in qualitative research design. A total of 54 teachers signed up for the study. The first 27 participants were classified in the intervention group and the rest were in the control group. All participants completed four psychological questionnaires before and after the intervention. The first stage of IBSR training recorded thoughts about stressful situations. The next stage involves inquiries on stressful thoughts about a series of questions and turnarounds. That stage is followed by a meditative self-investigation that allows individuals to examine their emotional and physical

responses during physical situations. The IBSR intervention lasts 12 weeks and includes weekly group meetings and weekly individual sessions. Before the intervention occurred, a semi-structured interview was conducted. The interviews were analyzed using the Interpretive Phenomenology Analysis Method (Smith & Osborn, 2003) by a third party. Before the intervention, teachers described emotional overload and difficulty in dealing with a complicated reality despite recognizing positive and supportive relationships with colleagues. They also expressed a sense of frustration due to unfulfilled expectations and a gap between their professional ideology and reality. Prior to the intervention, teachers described having various interactions on a personal level with emotional involvement, but the interactions were highly demanding and intensive that made it difficult to set clear boundaries. They also had a positive attitude toward the profession; however, they were frustrated with the busy schedule and limited ability to deal with meaningful educational issues. There was a gap between what they ideally saw of their job versus what was actually happening. After practicing IBSR, the teachers expressed a greater ability to accept reality and a more centered and focused self. They noticed an increased awareness of their reactions and perceptions of reality which helped them to avoid futile attempts to change or confront things they cannot change. The teachers experienced a higher level of satisfaction with themselves as well as their surroundings. They also increased the ability to be flexible in interpretation and perceptions of reality without emotional involvement. This allowed the participants to acknowledge the subjectivity of their thoughts and beliefs. The teachers also described a more focused and centered self, which helped them to deal with various relationship dynamics (Schneider-Levi et al., 2017). The emotional burden of building many relationships with strong emotional attachments can lead to burnout if that person

cannot separate their emotional connection. IBSR can help individuals draw the line to help with relieving some of the emotional burdens.

Kebbi and Al-Hroub's (2018) research was designed to explore sources of stress, effects, and coping strategies used by general (mainstream) classroom teachers and special education teachers. A total of 139 teachers from schools in Beirut, Lebanon, were selected to participate in a study using the Pullis Inventory of Teacher Stress (PITS, unknown). The teachers consisted of 100 general classrooms and 39 special education educators. They were all directly involved at one point in time in teaching students with special educational needs. The purpose of this comparative study was to identify the main sources and effects of stress that both general/mainstream and special education teachers encounter while educating students with special needs, and to examine the correlation between sources of stress, its effects, and coping strategies used by general/mainstream and special education teachers. If stressors are properly identified, and positive coping strategies are chosen and practiced with success, consistently, teachers will attain a more stress-free, friendly, class environment (Kebbi & Al-Hroub, 2018). A quantitative survey design was used as a means of examining the relationship between stress sources, their effects, and teachers' coping strategies. Data were collected using a modified version of the Pullis Inventory of Teacher Stress (PITS). In addition, several questions designed to elicit demographic information were added to the PITS. The results demonstrated, when comparing the two types of teachers, with a t-test, general and special education, there were no significant differences between special needs and general classroom teachers concerning all demographic sources and effects of stress. There were no specific sources of stress that were experienced as 'extremely stressful' for either general or special education teachers, since none of

these sources had a mean value that was equal to, or above three and a half. Most sources of stress were 'moderately stressful.' The five highest 'moderately stressful' sources were "Demands on After-School Time" with ( $M = 3.44$ ), "Too Much Work to Do" ( $M = 3.42$ ), "Students Impolite or Rude Behavior" ( $M = 3.32$ ), "Not Enough Time Allotted to Do the Work" ( $M = 2.31$ ), and "Inadequate Salary" ( $M = 3.28$ ). Furthermore, the five highest 'frequently' occurring effects of stress experienced by both types of teachers were "How Often Do You Feel Exhausted?" ( $M = 3.72$ ), "How Often Does School Stress Affect Other Aspects of Your Life?" ( $M = 3.56$ ), "How Often Do You Feel Overwhelmed by Your Work?" ( $M = 3.41$ ), "How Often Do You Feel Frustrated" ( $M = 3.27$ ), and "How Often Do You Have Headaches?" ( $M = 3.07$ ). When inquired upon, the most effective coping strategies that teachers used when they felt stressed were "Organizing Your Time and Setting Priorities" ( $M = 3.51$ ) and "Doing Relaxing Activities" ( $M = 3.35$ ) (Kebbi & Al-Hroub, 2018).

A mindful or relaxation intervention can not only be useful for general education teachers but also can be helpful for teachers in a specialist role like Special Education. In a quantitative case study design Kynaston (2017) investigated the relationship between using mindfulness techniques and the impact on special educators' self-efficacy, awareness, motivation, and teaching practices. Thirteen special educators filled out a questionnaire, and four journaled about their experiences with mindfulness. The special educators perceived that mindfulness had contributed to an increase in empathy, motivation, self-efficacy, and compassion toward the students and themselves. It was found that all the participants viewed their experience with a personal and classroom mindful practice to be the reason for the students' making academic, social, and emotional gains. Special educators reported that they were able to cope with the

feelings of burnout and, thus, focus on the needs of the students and the classroom environment (Kynaston, 2017).

Mindfulness can be used in the classrooms of teachers that devote their teaching to one academic specialty. In 2016 Varona (2018) researched 9.1 % of music teachers left the profession. Some of the reasons included professional dissatisfaction and burnout. (Hancock, 2015). Varona's article provides an overview of how mindful practices can assist music educators in managing occupational stress and avoid burnout. Several music teachers were introduced to 10 different mindful strategies: giving pause, talking time, awareness and attention, giving our full attention, mindful awareness, looking inward, setting intentions, gratitude journals, accountability, and becoming more aware. Overall the feedback from the teachers was positive; one high school choir teacher said, "These were not life-changing, but they were perspective-changing. I'm in my tenth year of teaching, so I'm not trying to re-roll my bag of tricks. I did need the extra motivation, though, and it was great to reconsider how to handle most stressful situations" (Varona, 2018, p. 68)

### **Location of Research Found/Selected**

The article research led to several studies from 2009-2019 which show the effects of mindful type practices on teachers in a classroom setting. Searches from the ERIC, EBSCO, Wiley, and JSTOR databases were used. Entries in various educational and psychology-based journals and from a variety of universities were reviewed.

**Table 1***Review of Studies*

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Arslan (2016)	Quantitative	80 master's students in social work and counseling programs	61 participants were given a questionnaire about their perceived stress levels, mindful practices, and age.	<ul style="list-style-type: none"> <li>- A significant negative correlation between the levels of perceived stress and one facet of mindfulness, with high levels of non-reacting mindfulness associated with lower levels of perceived stress.</li> <li>- In answer to the research question, the data show a significant negative correlation between stress levels as measured by the Perceived Stress Scale, and mindfulness levels in the non-react subscale as measured by the Five Facet Mindfulness Questionnaire.</li> </ul>
Bender, Fedor, & Garner (2018)	Quantitative	78 preservice teachers—some had preschool teaching experience	All teachers experienced Mindful-based training with breathing awareness. Forty-three teachers had their mindfulness experience infused with S.E.L. (Social Emotional Learning). Forty-four only had breathing training.	<ul style="list-style-type: none"> <li>- Both groups improved in mindfulness practices; however, the group, which included S.E.L. training, also showed an improvement in emotional competence.</li> <li>- The findings in this study of infusing Mindful Based Practices (M.B.P.) with S.E.L. show it can positively impact preservice teachers' ability to perceive, understand, and regulate their emotions.</li> </ul>

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Bernay & Rix (2015)	Quantitative hermeneutic design of journals	Forty-three primary school teacher education students	The teachers all practiced mindful strategies, including mindful eating, breath awareness, body scans, sitting meditation, and walking meditation to use in their everyday lives. Five teachers volunteered to complete daily journals during their first year of teaching.	<ul style="list-style-type: none"> <li>- This article is a review of the life experience study of an introduction to beginning teachers of mindfulness during their initial teaching programs. The participants kept journals about their experiences.</li> <li>- The literature review gives a history of what mindfulness is and where it originated.</li> <li>- Results showed that each participant developed and continued their own mindfulness practice. Many of the participants did not engage in the practice seismically until they felt they were under higher stress. Many partitions noticed they were judging their own practice of teaching and observing more at the moment. Some noticed their body changing under more stress. The participants noticed a reduction in stress once they engaged in mindful practice regularly.</li> </ul>
Boujut, Dean, Grouselle, & Capp (2016)	Quantitative	245 teachers—203 teachers in this sample worked with one or more children with A.S.D. in their class; 103 of these children were in regular classes, and 100 were in specialized classes or institutions.	245 teachers filled out four self-report questionnaires measuring perceived stress, social support, coping strategies, and burnout	- The results of the study indicate that teachers from specialized classes/institutions perceived their experiences more as challenges and less as threats or losses, they felt that they received more social support from colleagues and professionals, used more problem-focused coping strategies, and were less burned out.

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Fernando (2013)	Qualitative evidence -randomized-control -survey data -pilot study	11,000 children, 550 teachers in 41 schools 71% at-risk	The intervention randomized per classroom. The classes performed the in-class intervention and measured before and after the intervention.	- After 6 weeks of Mindful practices in the classroom, students showed statistical improvements in paying attention, self-care/participation and showing care for others. Anecdotes from teachers who received Mindfulness training stated improved confidence in her class, the ability to respond more skillfully when challenged by students, and student ability to calm themselves after kicking a chair.
Griffith, Barbakou, & Hastings (2014)	Quantitative	Forty-five A.B.A. therapists across six schools in the UK	A questionnaire on work-related stress (burnout), general distress, perceived supervisor support, and coping was completed	- 42% of A.B.A. therapists reported low levels of personal accomplishment at work; Thirteen percent reported high levels of emotional exhaustion, and forty percent met criteria for experiencing high levels of general distress. Wishful thinking coping was predictive of higher emotional exhaustion burnout and depersonalization, and lower personal accomplishment. Conclusions: Given that the wishful thinking approach to coping may contribute to experiencing stress at work, it is essential to consider support interventions for A.B.A. therapists that may enhance their well-being. Mindfulness and acceptance-based strategies, in particular, may be relevant to the support of A.B.A. therapist well-being.



Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Hepburn & McMahon (2017)	Qualitative	Five full-time teachers from an all-boys independent school	The participants received a weekly journal for reflections and a questionnaire with self-reporting measures for assessing psychological stress. The participants experience 60-minute pranayama meditation classes each week.	- Participants experienced a decrease in their perceived level of stress. Participants reported benefits in both their professional and personal lives.
Kebbi & Al-Hroub (2018)	Quantitative	139 teachers, from eight private schools in Beirut, Lebanon, were directly involved at one point in time in teaching students with special educational needs	The teachers completed a Pre and Post modified version of the Pullis Inventory of Teacher Stress (PITS). In addition, several questions designed to elicit demographic information were added to the PITS.	<ul style="list-style-type: none"> <li>- Results showed that there was no significant difference between special education and general (and at times integrated) classroom teachers concerning all sources and effects of stress.</li> <li>- The teachers ranked the coping strategy of "doing relaxing activities" as an "extremely effective" coping strategy." Some of the most effective techniques were sleeping, social interaction, relaxing, and watching television. They suggested pursuing their hobbies and other activities in their daily life, or even at school during their free time.</li> </ul>

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Kynaston (2017)	Quantitative	Thirteen special educators	Teachers filled out a questionnaire and journal about their experiences with the use of mindfulness, and the results noticed towards their teaching practice, classroom environment, and student behavior. Additionally, two administrators completed a questionnaire about their views towards the effects of mindfulness on classroom management, instruction, and teacher self-efficacy.	- The special educators perceived that mindfulness had emerged in an increase in empathy, motivation, self-efficacy, and compassion towards the students and themselves. It was found that all of the participants viewed their interaction with personal and classroom mindful practice to be the reason for the students' academic, social, and emotional gains. Special educators reported that they were able to get through the feelings of burnout, and thus, focus on the needs of the students and the classroom environment. Potential impacts for the results from this study include training special educators to have a personal mindfulness practice, in which the benefits can meet the needs of the educator as well as the students.

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Lindner & Healy (2004)	Quantitative	157 individuals	The teachers were surveyed at four schools in the project's partner district focused on perceived problems, sources of stress, and coping strategies utilized by teachers working with students with varying combinations of cultural, learning, and language differences.	<ul style="list-style-type: none"> <li>- Elementary Educators reported greater stress than middle or secondary educators. Administrators reported a lower level of stress as well as greater satisfaction in dealing with problems related to diversity than those (e.g., teachers) who were more directly involved in day-to-day student interaction.</li> <li>- Some of the coping strategies addressed to relieve stress were yoga, deep breathing, sleep, talking to someone trusted, and watching television.</li> </ul>
Malow & Austin (2016)	Quantitative & Qualitative	Fifteen adolescents, aged 15-17 diagnosed with an emotional or behavioral disorder	Students completed a pre and post-test assessment as well as in-class mindfulness activities. Throughout the 6-week program, the classroom teacher informally observed the students as they participated in the mindfulness activities	<ul style="list-style-type: none"> <li>- Each morning, all 15 student participants appeared to be actively engaged in the mindfulness exercises. When present, each student participated fully for the entire six-week program. Several student participants shared that they perceived the mindfulness exercises to be effective in helping them feel centered and focused for the day.</li> <li>- 11 out of 15 students felt they were less reactive and showed less emotional reactivity.</li> </ul>

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Mayorga, DeVries, & Wardle (2016)	Quantitative	A total of 29 students were recruited from three counseling skills courses, two of which were included in the treatment condition and one was designated as the control condition.	Students in the treatment condition were instructed in one-pointed breathing meditation and it was practiced for five minutes at the beginning of each class.	- The results indicated that there was a significant reduction in anxiety in the treatment group; however, no significant changes in mindfulness were noted.
McCarthy & Reiser (2017)	Quantitative	A SPAM (Stress Prevention and Mindful) group was formed with 26 teachers and compared with 19 teachers in a control group.	They were followed for 6 to 8 weeks. The SPAM group was given an 8 weeks education course about stress, cognition, and emotion. Two weeks after the courses, the teachers reported more job satisfaction, even though the results were not significant	<p>-This investigation began with a review of current literature on the effectiveness of reducing stress with programs that include mindfulness, relaxation therapy, meditation, and stress inoculation therapy. The reading reported a reduction in depression and anxiety, and improvement in the ability to manage conflict and anxiety and increased productivity in the classroom and shifts in emotional reactivity and approach to students.</p> <p>-The SPAM group did report a higher score in mindfulness-awareness and use in personal lives. They also reported improvements in emotional engagement and compassion along with noticing and coping with stress.</p>

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Paulus, Rupperecht, & Walach (2017)	Quantitative & Qualitative mixed method	Thirty-two German school teachers 93% of female	The purpose of this study was to investigate the impact of Mindful Based Stress Reduction training on professional performance. The MBSR group participated in the program on an average of 29.7 minutes per day.	<p>- The teachers in the MBSR group reported greater mindful presence and acceptance. The intervention group reported statistically significant reductions in cognitive and emotional strain and the tendency to reign. They found an inner calm and balance more. They also reported a substantial improvement in emotional competence and a decrease in negative emotions.</p> <p>- Furthermore, many of the results from the Intervention MBSR group sustained and maintained after three months.</p>
Preston & Spooner-Lane (2019)	Qualitative	Single case study	This case study explored the perceived outcomes of a 6-week school-based mindfulness program to manage stress and support the emotion regulation of four teachers at a metropolitan Australian alternative school. The study took a mixed-methods approach to data collection, which included self-report questionnaires, interview responses, and journal reflections.	- Some limitations, such as small sample size and lack of experimental design, had an impact on the generalizability of the study's findings. However, a range of beneficial outcomes emerged in association with the mindfulness program, revealing that participants experienced increased levels of both mindfulness and emotion regulation ability, in conjunction with decreased stress and emotional exhaustion levels.

Table1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Singh, Lancioni, Winton, Karazsia, & Singh (2013)	Quantitative	Three preschool teachers participated in the study. Teacher 1 was A 28-year-old woman who had four years of teaching experience Teacher 2 was a 32-year-old woman who had 7 years of teaching experience Teacher 3 was a 26-year-old man who had 1 year of teaching experience.	Each teacher attended an 8-week mindfulness course to use on the behavior of the students in their classroom. The teachers were randomly observed before, during, and after the training for positive interactions with students.	- Results showed that decreases in the students' challenging behaviors and increases in their compliance with teacher requests began during mindfulness training for the teachers and continued to change following the training. While the students did not show a change in positive social interactions with peers, they did show a decrease in negative social interactions and an increase in isolated play. Our results indicate that mindfulness training for teachers was effective in changing teacher-student interactions in desirable ways.
Schneider-Levi, Mitnik, Zafrani, Goldman, & Lev-Ari (2017)	Qualitative	54 Israeli high school teachers	All participants completed four psychological questionnaires before and after the intervention. The experimental group (27 teachers) were trained on the IBSR technique.	- Teachers in the experimental group felt more centered and focused on a stronger ability to accept reality. The teachers described a more focused and structured perspective toward their profession and its unique aspects. The teachers also described an increase in awareness of their reactions and perceptions of reality. This awareness helped them to accept reality as is and avoid futile attempts to change or confront it, thereby reducing the levels of frustration and stress.

Table 1 (continued)

AUTHORS	STUDY DESIGN	PARTICIPANTS	PROCEDURE	FINDINGS
Testa & Sangganjanavanich (2016)	Quantitative	380 Counseling Interns ages 22-68	All participants completed surveys, which included the Maslach Burnout Inventory–Human Services Survey, the Brief Emotional Intelligence Scale, the Five-Facet Mindfulness questionnaire, and a demographic questionnaire.	- Results indicated that higher scores on mindfulness and emotional intelligence were related to lower burnout scores.
Varona (2018)	Qualitative	Seven in-service and preservice music educators.	Participants were instructed on Mindfulness-Based Stress Reduction (MBSR) and instructed to incorporate into a daily routine. They were asked to log the experience in a journal. They were also interviewed regarding their experience.	<ul style="list-style-type: none"> <li>- Every teacher reported a different perspective on mindfulness. Teachers noted they came up with their own style to remember to be mindful throughout the day. It was shared that mindfulness allowed teachers to give full attention to the students through mindful awareness.</li> <li>- A middle school orchestra director found that mindful awareness helped with sensing the mood in the room.</li> <li>- The author noted practicing mindfulness offers a way to be more aware of the factors contributing to both classroom climate and well-being.</li> </ul>

### **Chapter 3: Mindfulness Implemented**

This literature review research examined the concept of mindfulness on regulating stress levels and building relationships to increase job satisfaction to increase teacher retention. The focus of this paper examined mindful practices used by teachers, students, and therapists. It discussed the concept of teachers skillfully using mindfulness in a classroom setting and the effects on regulating emotions, lowering stress levels, and building positive relationships and how this affects the overall job satisfaction of the teachers. Chapter 1 gave the reader an explanation of mindfulness, historical implications, therapeutics background, and the focus of the literature review. Chapter 2 critiqued the research literature found on the subject of mindfulness used in an education setting by professionals. Chapter 3 presents conclusions and recommendations for future research and current practice with mindfulness in a professional educational setting.

#### **Conclusions**

Studies in this literature review focused on the effects that mindfulness practice has on the emotional regulation of the individual who is experiencing the relaxation. The relaxation of mindfulness has evolved between basic meditation, body awareness and sensation or yoga practices, sensory awareness and exploration, emotional identification and awareness, and controlling and coping with urges. Initial mindfulness work with pain management in the 1970s and 1980s laid the groundwork for mindfulness in therapeutic and educational settings as a classroom management tool along with a tool for emotional calmness and regulation. When teachers in both general and special education areas have the tools of mindfulness, they can better cope in stressful situations. Educators have taken advantage of this mindful practice in helping



students with emotional regulation but found the experience also aided themselves with responding optimistically by responding with less reactivity to the anxiety and focused on self-efficiency. When practicing mindfulness 15-30 minutes a day, teachers began to recognize how they responded emotionally and regulated the negative emotions so they could be more proactive in the classroom management of challenging behaviors. Teachers report they feel more relaxed even in stressful times and feel more confident in handling classroom management challenges when using a mindful based meditation through yoga breathing. They felt equipped better to balance the activities between work and home life. With a mindful routine, teachers developed a greater reliance on stressful events, focus on teaching, and respond objectively to the students in the classroom. This proactive response allowed teachers to physically respond to external stress by regulating the hormone Cortisol, which can affect the overall sleep cycles, manage how the body regulates carbohydrates, and controls blood pressure. This can make an overall healthier person by controlling the feelings associated with post-traumatic distress. Teachers felt a significant decrease in a feeling of emotional exhaustion, had more self-compassion, and felt more personal accomplishments in their job. This positive self-worth translates into less susceptibility to job burnout. Burnout is a response to emotional strain, especially when working with individuals with recurring problems. When using mindfulness in the classroom, teachers can prevent and resolve classroom conflicts easier, which then translates into better stress control and lower burnout due to employee stress. Both general/mainstream education and special education teachers encounter this burnout stress. Many of these teachers use relaxation activities to help them cope with burnout stress. Special education teachers perceived that mindfulness increased empathy, motivation, self-efficacy, and compassion with their students, which helped

to increase the student/teacher relationships. The stronger the relationship, the less feeling of job burnout.

For mindfulness to work on emotional regulation consistently, a teacher must dedicate time to learning this practice and allowing time in everyday routines. Unfortunately, an authentic mindfulness experience requires dedication to learning the practice. Whether it is using simple breathing techniques, meditation, yoga, sensory awareness, the emotional presence, or more complex cognitive behavioral therapies or social-emotional practices, mindfulness must be practiced and used regularly to achieve the best outcome. In the research, many reflections from teachers expressed the need for having students and co-workers experience mindfulness as cultural employment experience.

### **Implications for Current Practice**

As educational standards for Social and Emotional Learning become refined to having students learn more self-awareness and grow more socially and emotionally competent, the demand for mindfulness practice in the classroom setting is only enhanced. If a student is distracted by emotional burdens and stressors, they will not be in the right mindset to learn. Teaching a student to be able to manage stress by using mindful practices is a way the student can learn to self-regulate. This allows the brain to shift its attention from emotional stressors to active learning. Coping strategies of breathing, focus, letting negative thoughts go, and focusing on the here and now, are skills that a person can access at any time or place in their lives.

Furthermore, as burnout and turnover rates for teachers, especially those in specialty fields like Special Education, remain at a high level, the need for having emotional coping tools

for not only students but teachers remain in demand. School districts should incorporate the teaching of mindful practice in everyday professional development. Teachers should schedule time throughout the academic rigor to allow for a "Mindful Moment" every day.

### **Recommendations for Further Research**

When researching mindful practices for Special Education Teachers, most of the research leads to studies that were designed all over the world with general/mainstream teachers. Further research is needed to narrow the effects of mindfulness on specialty educators like Special Education Professionals. Furthermore, more research is needed specifically in the United States with the education professionals who work with Common Core or equivalent academic standards to see how mindfulness improves the overall emotional regulation of teachers and students and how that mindfulness helps to improve job satisfaction and decreases job burnout due to distress.

Finally, biological research on the brain and hormone blood levels should be examined, specifically looking at the effects of everyday mindfulness in general. Additionally, investigating and comparing how each specific type (breathing, yoga, sensory, etc.) of mindful practice influences the biological changes and development of the organic systems must be examined.

## References

- Arslan, U. (2016). Mindfulness and stress: A quantitative study of therapist trainees. *Journal of Academic Social Studies, 48*, 345-354.
- Bauer, C. C. C., Caballero, C., Scherer, E., West, M. R., Mrazedk, M. D., Pillips, D., & Gabrieli, J. D. E. (2018). *School-based mindfulness enhances attentional resilience: A randomized control trial*. Cambridge, MA: Center for Education Policy Research, Harvard University.
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Five facet mindfulness questionnaire. *PsycTESTS Dataset*. doi:10.1037/t05514.000
- Bender, S. L., Fedor, M., & Garner, P. W. (2018). Mindfulness-based SEL programming to increase preservice teachers' mindfulness and emotional competence. *Psychology in the Schools, 55*(4), 377-390.
- Bernay, R., & Rix, G. (2015). A study of the effects of mindfulness in five primary schools in New Zealand. *Teachers Work, 11*(2), 201-220.
- Boe, E., Bobbit, S. A., Cook, L. H., Whitener, S. D., Weber, A. L. (1997). Why didst thou go? Predictors of retention, transfer, and attrition of special and general education teachers from a national perspective. *Journal of Special Education, 30*(3), 390-411.
- Boujut, E., Dean, A., Grousell, A., & Cappe, E. (2016). Comparative study of teachers in regular schools and teachers in specialized schools in France. Working with students with an autism spectrum disorder: Stress social support, coping strategies and burnout. *Journal of Autism and Developmental Disorders, 46*(9), 2874-2889.

- Broderick, P. C. (2013). *Learning to breath: A mindfulness curriculum for adolescents to cultivate emotion regulation, attention, and performance*. Oakland, CA: New Harbinger Publications.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). Perceived stress scale, *PsycTESTS Dataset*. doi:10.1037/t02889-000
- Cortisol* (Blood). (2020). Retrieved from: [https://www.urmc.rochester.edu/encyclopedia/content.aspx?contenttypeid=167&contented=cortisol\\_serum](https://www.urmc.rochester.edu/encyclopedia/content.aspx?contenttypeid=167&contented=cortisol_serum).
- Davids, T. W. R., Stede, W., Norman, K. R., Pruitt, W., & Jackson, P. A. (2015). *The pali text society pali-English dictionary*. Bristol: The Pali Text Society.
- Davis, K. C., & Palladino, J. M. (2011). *Compassion fatigue among secondary special education teachers: A case study about job stress and burnout*. Ypsilanti, MI: Department of Special Education, Eastern Michigan University.
- Derogatis, L. R. (1977). Symptom checklist-90-revised. *PsycTESTS Dataset*. doi:10-1037/t01210-000
- Flever, J. C., Frank, J. L., & McEachern, A. D. (2014). Effectiveness, acceptability, and feasibility of the soles of the feet mindfulness-based interventions with elementary school students. *Mindfulness*, 6, 589-597.
- Fernando, R. (2013). *Measuring the efficacy and sustainability of mindfulness*. Retrieved from: <https://www.mindfulschools.org/pdf/Mindful-Schools-Study-Highlights.pdf>.
- Figley, C. R. (2015). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. New York: Brunner/Mazel.

- Flook, L., Godlberg, S. B., Pingter, L., Bonus, K., & Davidson, R. J. (2013). Mindfulness for teachers: A pilot study to assess effects on stress, burnout and teaching efficacy. *Mind, Brain, and Education*, 7(3), 182-195.
- Fogarty, F. (2009). *A comparison of mindfulness mediators and non-meditators following writing about negative emotional memories: Are their psychological and physiological responses different?* Unpublished Master's thesis. Auckland, New Zealand: University of Auckland.
- Garcia, E., & Weiss, E. (2019, March 26). *The teacher shortage is real, large, and growing and worse than we thought: The first report in 'the perfect storm the teacher labor market series*. Retrieved from: <https://www.epi.org/publication/the-teacher-shortage-is-real-large-and-growing-and-worse-than-we-thought-the-first-report-in-the-perfect-storm-in-the-teacher-labor-market-series>.
- Griffith, G. M., Barbakou, A., & Hastings, R. P. (2014). Coping as a predictor of burnout and general health in therapists working in ABA schools. *European Journal of Special Needs Education*, 29(4), 548-558.
- Hancock, C. B. (2015). Is the grass greener? Current and former music teachers' perceptions a year after moving to a different school or leaving the classroom. *Journal of Research in Music Education*, 63(4), 421-438.
- Hepburn, S. J., & McMahon, M. (2017). Pranayama mediation (yoga breathing) for stress relief: Is it beneficial for teachers? *Australian Journal of Teacher Education*, 42(9), 142-159.
- Ince, S., & Allison, S. (2009). *Positive psychology harnessing the power of happiness, personal strength, and mindfulness* (K. Cahill Allison, Ed.). Boston, MA: Harvard Health Publications.

- Ingersoll, R., Merrill, L., & Stuckey, D. (2014). *Seven trends: The transformation of the teaching force*. Updated April 2014. CPRE Report (#RR-80). Philadelphia, PA: University of Pennsylvania: Consortium for Policy Research in Education.
- Kabat-Zinn, J. (1991). *Gesund und streßfrei durch Meditation das große Buch der Selbstheilung*. Burn: Otto Wilhelm Barth.
- Katie, B. (2002). *Loving what is*. New York: Three Rivers Press.
- Kebbi, M., & Al-Hroub, A. (2018). Stress and coping strategies used by special education and general education teachers. *International Journal of Special Education*, 33(1), 34-61.
- Kynaston, K. (2017). *The use of mindfulness to enhance a special educator's self-efficacy: A qualitative case study*. Dissertation, Northcentral University.
- Lazar, S. W., Kerr, C. E., Wasserman, R. H., Gray, J. R., Greve, D. N., Treadway, M. T., McGarvey, ... & Fischl, B. (2005). Meditation experience is associated with increased cortical thickness. *Neuroreport*, 16(17), 1893-1897.
- Lindner, R. W., & Healy, D. E. (2004). Perceived stress and use of coping strategies as a response to rapidly changing student demographics. *Multiple Voices for Ethnically Diverse Exceptional Learners*, 7(2), 74-94.
- Maslach, C., & Jackson, S. E. (1981). Maslach burnout inventor—ES form. *PsycTESTS Dataset*. doi:10.1037/t05190-000
- Malow, M., & Austin, V. (2016). Mindfulness for students classified with emotional/behavioral disorders. *Insights into Learning Disabilities*, 13(1), 81-94.
- Mayorga, M., DeVries, S., & Wardle, E. (2016). Mindfulness behavior and its effects on anxiety. *Journal on Education Psychology*, 9(4), 1-7.

- McCarthy, C. J., & Reiser, J. E. (2017). Preliminary investigation of a stress prevention and mindfulness group for teachers. *The Journal for Specialists in Group Work, 43*(1), 2-34.
- Neff, K. D. (2003). Self-compassion scale. *PsycTESTS Dataset*. doi:10.1037/t10178-000
- Paulus, P., Rupprecht, S., & Walach, H. (2017). Mind the teachers! The impact of mindfulness training on self-regulation and classroom performance in a sample of German school teachers. *European Journal of Educational Research, 6*(4), 565-581.
- Preston, K., & Spooner-Lane, R. (2019). 'Making space:' A study into the use of mindfulness for alternative school teachers. *Journal of Psychologists and Counsellors in Schools, 29*(2), 108-129.
- Prince-Embury, S., & Prince-Embury, S. (2007). *Resiliency scales for children and adolescents: A profile of personal strengths*. San Antonio, TX: Harcourt Assessment.
- Rupprecht, S. (2017). Mind the teachers! The impact of mindfulness training on self-regulation and classroom performance in a sample of German school teachers. *European Journal of Educational Research, 6*(4), 565-581.
- Schnaider-Levi, L., Mitnik, I., Zafrani, K., Goldman, Z., & Lev-Ari, S. (2017). Inquiry-based stress reduction meditation technique for teacher burnout: A qualitative study. *Mind, Brain, and Education, 11*(2), 75-84.
- Shea, C. (2018, October 8). *A brief history of mindfulness in the USA and its impact on our lives*. Retrieved from: <https://psychcentral.com/ib/a-brief-history-of-mindfulness-in-the-usa-and-its-impact-on-out-lives>.



- Singh, N. N., Lancioni, G. E., Winton, A. S. W., Karazsia, B. T., & Singh, J. (2013). Mindfulness training for teachers changes the behavior of their preschool students. *Research in Human Development, 10*(3), 211-233.
- Sinha, U. K., & Kumar, D. (2010). Mindfulness-based cognitive behavior therapy with emotionally disturbed adolescents affected by IV/AIDS. *Journal of the Indian Association of Children's Adolescent Mental Health, 16*(1), 19-30.
- Smith, J. A., & Osborn, M. (2003). Interpretative phenomenological analysis. In J. A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods*. Sage Publications.
- Testa, D., & Sangganjanavanich, V. F. (2016). Contribution of mindfulness and emotional intelligence to burnout among counseling interns. *Counselor Education and Supervision, 55*(2), 95-108.
- Varona, D. A. (2018). The mindful music educator: Strategies for reducing stress and increasing well-being. *Music Educators Journal, 105*(2), 64-71.
- Walker, T. (2019, April 12). *Teacher shortage is real and growing, and worse than we thought*. Retrieved from: <http://neatoday.lorg/2019/04/04/how-bad-is-the-teacher-shortage/>.
- Wilder Research. (2019). *2019 biennial Minnesota teacher supply and demand* (pp. 1-68). St. Paul, MN.
- Williams, J. M. B., & Kubat-Zinn, J. (2011). Mindfulness: Diverse perspectives on its meaning, origins, and multiple applications at the intersection of science and dharma. *Contemporary Buddhism, 12*(1), 1-18.
- Willis, J. (2007). *Introduction to ME: Mindfulness education program*. Vancouver, Canada: Goldie Hawn Foundation.

Zolkoski, S. M., & Lewis-Chiu, C. (2019). Alternative approaches: Implementing mindfulness practices in the classroom to improve challenging behaviors. *Beyond Behavior*, 28(1), 46-54.