Building Educator Resilience through Mindfulness

A disquisition presented to the faculty of the Graduate School of Western Carolina University in

partial fulfillment of the requirements for the degree of Doctor of Education

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February 2021

Abstract

Educator stress is a growing concern as the demands on the profession have increased in recent years. Multiple factors have been found to contribute to educator stress levels. Increasing educator resiliency is one way to protect teachers from burnout. Mindfulness training has been used in recent years with educators in order to build educator resilience. Equity concerns related to the typical demographics of mindfulness trainers and participants are important to consider. The researcher's theory of improvement holds that providing educators with mindfulness training will increase their resilience in the short term, and in the long term potentially impact student outcomes. This disquisition proposal outlines a planned intervention based on Plan-Do-Study-Act cycles that provide mindfulness training to a small group of educators. The research setting is a public high school in North Carolina. As part of the improvement initiative, educators participated in a six-week program during which they received new mindfulness lessons during the odd weeks and participated in group discussion sessions during the even weeks. Participants completed weekly surveys to measure outcomes, process and balancing measures. Qualitative data coding as well as quantitative measures were used to assess the impact of the mindfulness training improvement initiative.

Key Words: Educator, Resilience, Mindfulness

Acknowledgements

I would like to thank Dr. Heidi Von Dohlen, Chair of my disquisition committee, along with Dr. Emily Virtue, my disquisition methodologist. Your support, feedback and guidance along the way were instrumental in the completion of this work. I am thankful for the opportunity to work with and learn from you both through this process. I would also like to thank my other committee members, Dr. Russ Curtis and Dr. Diane Villwock, for your time and willingness to serve on my committee and provide insight and feedback to the process as well. Dr. Villwock, you have provided professional and personal guidance to me since I met you when arriving in current school district, and I revisit your words of wisdom often. Thank you!

I would also like to thank Stefanie Kotzen, whose willingness to provide mindfulness training to faculty and staff made this work possible. Without Stefanie, this work might never have manifested in the way that it did. Stefanie is a calming force in all of our lives at our school, and I am grateful to be able to know and work with you!

This work is dedicated to all the teachers that have shaped my life, starting with my mom and those who gave me an incredible foundation in my own K-12 education in Swain and Jackson counties, and including all those I have worked with as a professional in North Carolina public schools, and those that I will work with in the future. It is my role as an administrator to do anything I can to support those who do the demanding work of teaching every day. The challenges faced by teachers and students that create feelings of tremendous stress cannot be ignored.

Table of Contents

List of Figures

List of Tables

Introduction/Problem of Practice

Educator stress and burnout is a growing concern as the demands on the profession have increased in recent years. It is important to identify and understand factors that contribute to educator stress in order to proactively address this concern. A person's ability to manage stress may be related to his or her personal resilience (Dicarlo, Meaux & LaBiche, 2019). Resilience is a frequent focus of studies with children, and refers to the ability of people to seemingly flourish despite the presence of adverse conditions (Gu & Day, 2007). Resilience can also be studied in adults. Like understanding the factors that contribute to educator stress, it is important to identify and understand the factors that contribute to resilience. This knowledge can inform practices to build resilience in an attempt to mitigate educator stress.

Mindfulness training has been used in recent years to address student and teacher stress levels in schools. Rooted in Buddhist teachings, mindfulness has been used by Western psychologists to develop programs to help people manage emotions by focusing on the present moment in a non-judgemental way (Blum, 2014). Communities and schools are increasingly racially and socio-economically diverse. As mindfulness continues to gain popularity in both social and professional avenues, mindfulness trainers must address equity concerns and expand their own cultural competencies as it relates to mindfulness training. If mindfulness teaching is to be used in diverse settings, it is important to not overlook potential cultural inequities for educators and their students (Pettway, 2017).

This study aims to increase educator resilience through mindfulness training, enabling them to better cope with workplace stressors. This study used improvement science to implement mindfulness training to increase resilience with high school teachers in a high-achieving environment in North Carolina.

<center>**Literature Review**</center>

In order to gain greater understanding of the problem of practice and proposed intervention, the researcher presents literature related to the topic of stress, how stress is defined, and stress in both educators and students. Following that, the researcher presents literature on resilience. Finally, in order to guide implementation planning, the researcher discusses literature on mindfulness and mindfulness training for educators.

Defining Stress

Grant et al. (2003) noted, "few constructs in mental health and psychopathology have been as important, yet at the same time as difficult to define, as the concept of stress" (p. 448). While most definitions of stress focus on environmental conditions such as those mentioned above, Lazarus and Folman (1984) were among researchers who proposed a more transactional view of stress, defining stress as a relationship between environmental events and individual's perceived sense of threat or harm that will result from that event. Many researchers, including Cohen, Kessler and Gordon (1995), agreed that stress can be defined as environmental events or conditions that make individuals perceive a threat to their physical or psychological well-being. DiCarlo et al., (2019) referenced "perceived stress" as the level in which an individual considers a situation stressful or threatening (p.2).

Stress Among Educators

Educator stress is often attributed to one or more of three categories of factors, including internal factors, environmental factors, and/or external factors. Teaching has historically been considered one of the most stressful careers (Gu & Day, 2007). More recently, teaching has continued to be identified as one of the most stressful human service industry careers, with almost 50% of teachers surveyed in a recent Gallop Poll reporting they felt high levels of stress

on a daily basis (DiCarlo et al., 2019). Internal factors, or personal attributes, have contributed to teachers feeling burnout and lack of efficacy. Teachers can experience stress when they feel they lack the freedom to make professional decisions, or if they feel they must choose between their own "moral compass" and complying with school mandates (Schussler et al., 2018, p.3). Other theories about teacher stress include the idea that teaching inherently comes with significant social-emotional demands, as teachers spend all day working to meet the needs of upward of thirty students (Roeser et al., 2013). While trying to meet the demands of so many students, teachers must make hundreds of decisions "on the fly" (Roeser et al., 2013, p. 788).

Schussler et al. (2018) also pointed to key environmental factors that contribute to teacher stress, including lack of support from building administrators, classroom management problems, a school culture lacking trust, and a lack of supportive peer relationships with other teachers. Relatedly, Collie, Shapka, and Perry (2012), in their research on school climates, found that perceived school climate is a key factor in reported teacher stress level. Teacher efficacy and stress are impacted by discipline-related classroom management concerns including disruptive student behavior, as well as unmotivated student behavior.

Some researchers have viewed sources of teacher stress as either inherent to the job, or a result of external forces (Roeser et al., 2013). Schussler et al. (2018) pointed to different categories of challenges that contribute to educator stress: external challenges can include students with food insecurity or violence in the community, or industry changes such as the switch to Common Core standards and teacher evaluation systems based on student test scores, all with little support provided for teachers. In similar findings, Berry and Shields (2017) reported teachers leave the profession due to stressful working conditions, including high-stakes testing, loss of professional autonomy in the classroom, and not feeling valued by districts or

states. In the United States as well as other countries, teaching conditions and expectations have changed, as many countries have experienced governmental policy reforms in education (Gu & Day, 2007). At the same time teachers reported feelings of distrust by members of society, and the conditions in which everyone lives and works have changed (Gu & Day, 2007). Dicarlo, et al. (2019) identified similar concerns contributing to teacher stress level including high stakes job demands and lack of support.

Researchers noted there is also a relationship between an educator's ability to cope with stress and their greater psychological and physical well-being; educators' stress level has been associated with negative psychological states (Wolgast & Fischer, 2017). Research has also shown educators who indicate high levels of stress often show symptoms of sleepiness, atypical cortisol levels, and negative affect in the classroom environment (Dicarlo, et al., 2019). Wolgast and Fischer (2017) found a link between colleague support and shared teacher interests and better psychological health for educators. Collaborative environments tend to contribute to lower levels of stress and over all greater psychological well-being for teachers, while more competitive environments often lead to greater stress and psychological struggles. The fishbone diagram in Figure 1 organizes known information about the contributing factors of teacher stress. A fishbone diagram, otherwise known as the Ishikawa diagram, is a tool that can be used to organize information about the potential causes of a problem (Langley et al., 2009). This diagram shows causes of stress among educators organized into the three main categories: external factors, environmental factors and internal factors. External factors include food insecurity in a student's community, violence in a student's community, industry shift to high stakes testing, and a nationwide change to new Common Core Standards (Schussler et al., 2018). Environmental factors include lack of support from administrators, classroom management

challenges, lack of trust in school climate, lack of peer support, and student behavior and discipline. Internal factors include teachers feeling a perceived lack of autonomy in decision-making, teachers feeling in moral opposition to current priorities of school districts, and socio-emotional demands of meeting the needs of so many students at one time all day.

Figure 1

Contributing Factors to Educator Stress

External Factors
- Food Insecurity in student community.
- Violence in student community.
- Industry shift to high stakes testing.
- Nationwide change to new Common Core Standards.

Environmental Factors
- Lack of support from administrators.
- Classroom management challenges.
- Lack of trust in school climate.
- Lack of peer support.
- Student behavior and discipline.

Internal Factors
- Teachers feeling percieved lack of autonomy in decision-making.
- Teachers feeling in moral opposition to current priorities of school districts.
- Socio-emotional demands of meeting the needs of so many students at one time all day.

Educator Stress

Note. This figure illustrates the contributing factors to educator stress.

Stress Among Students

In addition to teachers, increasing numbers of adolescents face stressful experiences that can pose a threat to their well-being and development. Grant et al. (2003) explained that stressful life experiences for adolescents can include a range of causes, from traumatic life events such as death of a family member, chronic adversity such as living in poverty, abuse, neglect, as well as normative events such as school transitions and peer interactions. Furthermore, according to

Calvete, Orue, and Sampedro (2016), ongoing stress in adolescents is a known predictor of more severe psychological symptoms such as depression, anxiety, self-injury, drug abuse and aggressive behavior toward others.

Hamilton et al. (2016) supported past research that contributing factors to symptoms of anxiety and depression in adolescents include "interpersonal stressors, peer victimization, and familial emotional maltreatment" (p. 495). Hamilton et al. (2016) found interpersonal stressors include fighting with friends or relatives, having a close relative sick or hospitalized, or familial emotional maltreatment including emotional neglect. Hamilton et al. (2016) also highlighted stressors such as peer victimization (including feeling left out from what other peers were doing or having peers gossiping about you). Swan and Kendall (2016) reviewed studies indicating that youth internalize symptoms of anxiety, which is then correlated with self-reporting of decreased "life satisfaction" (p.418).

Anxiety is one of the most common disorders to impact children and adolescents (Costello, Egger, & Angold, 2005). Not only is anxiety one of the more common disorders experienced by children, research indicates that adolescence is a time that students face increased chances of developing anxiety and depression (Cummings, Caporino, & Kendall, 2014). More concerning, the symptoms of anxiety and depression that often coexist in students during adolescence are associated with more severe symptoms such as suicidal tendencies as well as increased academic and social challenges through adolescence and into early adulthood (Garber & Weersing, 2010). In similar findings, according to Swan and Kendall (2016), a diagnosis of anxiety is linked to having impaired functioning both academically and socially, as well as inhibited family functioning.

Swan and Kendall (2016) reviewed short- and long-term effects of treating anxiety in children, and in this work indicate anxiety symptoms experienced in adolescence are sometimes associated with struggles later in adulthood as well. Huges, Hedtke, & Kendall (2008) found that experiencing anxiety as an adolescent can contribute to students being less likely to explore various educational and career opportunities, as well as being more inhibited in creating social relationships, all of which can impact functioning, available opportunities, and ultimately happiness, as an adult. Essau, Lewinsohm, Olaya, and Seeley (2014) looked at youth anxiety and adult outcomes at age thirty and found that anxiety in adolescence is frequently a predictor of those same individuals struggling to adjust to work as young adults.

Resilience

Resilience is a common topic with regards to students, but has been explored less as it relates to teachers. The concept of resilience started in the realm of developmental psychology, as a result of studying the characteristics of children who were thriving despite significant adversity (Gu & Day, 2007). Early resilience research focused on attributes of the individual, while a more recent shift has focused on an individual's ability to overcome adversity in the presence of protective factors, suggesting resilience is more of a dynamic relationship between personal and environmental characteristics (Ainsworth & Oldfield, 2019).

Schussler et al. (2018) noted that resilience lacks a commonly accepted definition; they defined resilience as "the phenomenon that occurs when teachers experience stress but continue to maintain a sense of purpose or ability to flourish" (p.3). Schussler et al., (2018) used Perkin and Borden's (2003) framework to understand resilience as occurring when teachers who are experiencing stress possess the ability to maintain their purpose. Perkin and Borden (2003) looked at adolescents' ability to develop resilience despite being exposed to multiple risk factors.

Perkin and Borden (2003) found that positive, protective factors had to also be in place along with risk factors for adolescents to develop resilience.

Relatedly, Frederickson's (2004) framework suggested that positive experiences can contribute to building a person's resilience over time (Gu & Day, 2007). Fredrickson (2004) held that positive emotions such as joy, contentment, and interest contribute to people engaging in activities and developing social bonds with others. These types of experiences, according to Frederickson (2004), help build an individual's own personal resources, which in turn function as a sort of energy reserve during challenging situations; in other words, positive experience can fuel resilience.

Given the emotional nature of the job of educators, Frederickson's (2004) understanding of the psychological component of resilience serves as a foundation for studying teacher resilience. The emotional component of resilience is a key factor to the importance it serves for teachers. Teaching is an emotionally involved job, especially for those considered the best at their job (Hargreaves, 1998). Hargreaves (1998) argued that good teachers have more attributes than strong content knowledge and organizational techniques. Good teachers also use passion and positive emotions to "fill their work and their classes with pleasure, creativity, challenge and joy" (Hargreaves, 1998, p. 835). This diverse skill set that teachers need, combined with the wide variety of emotional demands that the job involves on a daily basis, contributes to teachers' stress and need for resilience (Wolgast & Fischer, 2017).

Ainsworth and Oldfield (2019) reviewed data that indicated the following: teachers felt overwhelmed by their workload, pressured to meet high stakes demands, and challenged by managing student behavior. These researchers highlighted the existence of both interpersonal factors specific to individual teachers, as well as contextual factors that may contribute to

teachers' positive adaptation and resilience in the face of professional challenges in educational settings. Ungar's model of resilience as applied to teachers suggests that teachers have a capacity for resilience through self-efficacy, as well as drawing from resources present around them (Ungar, Ghazinour, & Richter, 2013). Several individual factors may be key to teacher resilience including, "emotional competence, empathy, a sense of purpose, optimism, intrinsic motivation, and self-belief" as well as environmental factors such as "involvement in decision-making processes, relationships with management, and support from colleagues" (Ainsworth & Oldfield, 2019, p. 118). In their review of data, Ainsworth and Oldfield (2019) found that self-care "was found to be the most important individual level predictor of [teacher] well-being" (p. 123). While self-care was the most significant contributing factor to teacher well-being, Ainsworth and Oldfield believed it should not be solely the teacher's responsibility to build resilience to better cope with the stressors in educational settings. As they pointed out, focusing on increasing teachers' ability for self-care is just one piece of a multi-factor equation that also includes environmental factors contributing to resilience. Environmental factors noted by Ainsworth and Oldfield (2019) as contributing to teacher resilience are similar to environmental factors noted by Berry and Shields (2017) and Schussler et al (2018) as contributing to teacher stress. These factors include the inability to participate in decision-making, lack of support by administrators, and lack of support from peers.

Differences also exist in research regarding what terminology should be used when discussing resilience. Luthar, Cicchetti, and Becker (2000) made a distinction between resiliency and resilience. Resiliency was seen by Luthar et al., (2000) as a defined personality trait that may exist regardless of exposure to adversity. Resilience, on the other hand, was viewed by Luthar et al. as a developmental state that can change and grow over time as the individual is exposed to

adversity. This distinction of resiliency versus resilience made by Luthar et al. had implications

for finding ways to build resilience in educators. In recent work, researchers have looked at

mindfulness-themed professional development as a means to help build teachers' resilience, but

few studies have explored how such interventions can help teachers develop their resilience to

cope with challenging situations (Schussler et al., 2018).

Mindfulness

The understanding of mindfulness varies. Mindfulness training has emerged as a way to

help both children and adults better manage feelings of stress (Roeser et al., 2013). Research

indicates teacher training programs in mindfulness may support increased teacher resilience

(Schussler et al., 2018), and different training programs have been conducted with educators in

recent years. Equity concerns must be kept at the forefront of conversations about mindfulness.

As Blum (2014) noted, mindfulness trainers as a population in the United States lack cultural and

socio-economic diversity. The topic of mindfulness and equity will be addressed in more detail

in a future section.

Mindfulness can be associated with Buddhism, and Buddhist meditation practices have

had a significant influence on present day mindfulness teachings rooted in Western psychology

(Blum, 2014). As Blum (2014) noted, one definition of mindfulness can be interpreted as, "rather

than being concerned with ushering in any certain state, mindfulness brings an accepting

curiosity to what is already here and now" (p. 1). While present-day mindfulness has roots in

Buddhist traditions of meditation, it is not accurate to say that mindfulness is Buddhist (Blum,

2014). Molecular Biologist Kabat-Zinn, influenced by Buddhist teachings (Blum 2014),

described mindfulness as "paying attention in a particular way: on purpose, in the present

moment, and nonjudgementally [*sic*]" (p.4). Kabat-Zinn believed mindfulness was inherent to

human nature, and Buddhist meditation practices were one example of actions that helped to cultivate this human capability (Blum, 2014). Bishop et al. (2004) interpreted Kabat-Zinn's definition to have two different parts. According to Bishop et al. (2004), mindfulness was made up of one dimension that involved self-regulation and focus on immediate experience, while the second dimension of mindfulness included the presence of an accepting, open attitude. Another way of thinking about Bishop et al.'s (2004) second dimension of mindfulness is to consider a state of being non-reactive relative to experience in the moment. Neff"s (2003) way of understanding mindfulness includes acting with compassion and kindness to oneself while accepting that the human experience is made up of challenges and setbacks. Similar to Neff (2003), Cullen (2011) considered mindfulness as acting in a positive way with curiosity toward the present moment.

Researchers Roeser et al. (2013) saw mindfulness as multi-faceted. According to Roeser et al. (2013), mindfulness involved three related mental strengths: 1) "focusing attention intentionally on the here and now (rather than letting the mind wander into ruminating on the past or worrying about the future)," 2) "perceiving situations and engaging in actions with the clear light of conscious awareness" and 3) "experiencing the moment just as it is" without judgement (p. 789). Many studies have indicated that mindfulness, considered in this case a particular way of attuning to the present moment without reaction or judgement, "is instrumental in helping adults reduce stress, regulate emotion, and thereby improve their health and well-being" (Roeser et al., 2013, p. 789).

Mindfulness Training for Educators

In recent years, mindfulness training has become a new strategy to help individuals, including educators, manage stress more effectively (Roeser et al., 2013). Benn et al. (2012)

hypothesized that training to help teachers better manage their own stress and personal concerns would enable them to be better serve and meet the needs of their students. Benn et al. (2012) believed:

> a mindful approach in parenting and teaching can serve as a potent psychological resource for both parents and educators, leading to more adaptive and flexible coping and appraisal of emotionally demanding situations, reduction in stress, greater psychological well-being, and ultimately, more positive relationships and interactions (p. 1477).

Roeser et al. (2013) highlighted that mindfulness training can teach educators how to pay attention to their own internal emotional reactions to provoking situations, helping them recognize when their emotions are heightened and when they should take time to calm down before reacting. Roeser et al. (2013) further noted that a primary goal of mindfulness training is to help adults learn how to have compassion toward themselves during difficult moments both at work and at home. Participants in the Roeser et al. (2013) study involved sixty-five teachers in the United States and Canada who volunteered to participate in an 8-week mindfulness training. Data collection included surveys to gauge teachers' stress, burnout and health, as well as a program evaluation survey and a mindfulness practice journal. Data analysis indicated educators did benefit from mindfulness training. Participating teachers in Roeser et al.'s (2013) study reported significantly less stress at the end of the program as well as at a three-month follow-up. There was also significantly less teacher burn-out reported both at the end of the program and at the three-month follow-up, as well as reporting higher levels of self-compassion and mindfulness.

In a more recent study, Crain, Schonert-Reichl, and Roeser (2017) used mindfulness training with educators that "aims to cultivate mindful awareness and self-regulation of thoughts, emotions, sensations, and behavior" (p. 139). Using Bishop's (2004) two-part definition of mindfulness, Crain et al. (2017) hypothesized that "mindful individuals are more likely to engage in beneficial emotion-focused coping behaviors, which in turn will result in positive work outcomes" (p.140). Crain et al. (2017) conducted research based on the idea that teachers who are able to stay focused on the present moment while approaching new situations with curiosity would report less stress and more job satisfaction at work and at home. This study included two sets of 65 teachers and the 8-week training included a variety of activities including guided mindfulness practice, group discussions of their mindfulness practice, small-group activities, guided home practice, and homework assignments. Results included participants reporting less job rumination while at home, improved moods at work and home, and improved sleep (Crain et al., 2017). Results from Crain et al. (2017) also indicated increased mindfulness practice was a key indicator in the reduction of reported stress and burnout from participants.

Some mindfulness training for educators has shown that by improving educators' own social and emotional wellness, they are then better prepared to meet the needs of their students. Jennings et al. (2017) studied the impact of a faculty training referred to as CARE (Cultivating Awareness and Resilience in Education), which is "designed to address teachers' social and emotional competence" (p. 1013). CARE was carried out over one school year and included a combination of "didactic, experiential, and interactive learning processes" (p. 1015). The CARE training included the following topics: mindfulness awareness to reduce psychological and physical distress, stress reduction, listening practices to improve emotional regulation, and emotion skills instruction. The first pilot round of the study included thirty-one teachers from an

13

impoverished urban setting, and was carried out through multiple in-person training days over a span of a few months, and participants also received a set number of coaching phone calls to support their efforts in the new learning. As Jennings et al. (2017) found, results indicated that "teachers who received CARE for Teachers demonstrated statistically significant improvements in emotion regulation, mindfulness, and teaching efficacy, and reductions in time-related stress and physical symptoms associated with stress" (p.1012).

Benn et al., (2012) took advantage of the school district setting and provided a five-week mindfulness training known as SMART-in-Education (Stress Management and Relaxation Techniques), as part of a summer opportunity for teachers, hypothesizing that mindfulness training would create positive changes in the teacher's capacity to relate to students as well as provide needed care (Benn et al., 2012). Results indicated that mindfulness mediated reductions in stress reported by participants, and the effect had grown larger at a follow-up session two months after program completion (Benn et al., 2012). Benn et al.'s hypothesis that a mindful approach can serve as a strong resource for educators was supported, underscoring the idea that teacher training in mindfulness enabled teachers to better manage their own emotions and be able to respond better to stressful situations with students.

Baum and colleagues (2013) have also focused on training teachers in order to increase students' coping skills. Baum et al. hypothesized that if teachers are trained in how to increase their own skills relative to trauma, the teachers can then transfer that learning and have a positive impact on the students in their classrooms. In Baum et al.'s work, teachers were trained in skill development for both themselves and their students. This training was provided in workshops over a short period of a few months. Training included learning that could be both used by the teachers themselves and implemented in their classrooms with students. This study was one of a

few to investigate the idea that by training teachers, student anxiety and stress would show significant improvement as well.

Educator Mindfulness and Students

The study by Baum et al. (2013) was one of the first of its kind to investigate the idea that students' mental health outcomes could be impacted by training teachers to increase their own coping capacity. Baum et al.'s results showed significant improvement in levels of anxiety and post-traumatic symptoms in the intervention group, with a statistically significant decrease in anxiety levels among students whose teachers has participated in the mindfulness intervention group. Baum et al. noted that previous work involving the impact of teacher training on student outcomes involved a significantly greater time commitment on the part of teachers; teachers were required to go through formal training to become metal health workers.

Some studies in mindfulness training for educators have also shown results related to impacting the classroom environment and future studies may be able to explore this topic more in depth. Benn et al. (2012) found that educators who participated in mindfulness training reported feeling kinder and more sensitive to the needs of others, particularly with regard to student behavior and the challenges faced by students in their classrooms. Jennings et al. (2017) CARE for Teachers mindfulness-based training program showed that control group teachers suffered a decline in classroom emotional support over the course of the school year, but teachers in the training group remained stable in this domain over the course of time. This emotional support measure of Jennings et al. reflected teachers' warmth, closeness and respect for students, all of which contribute to the classroom climate that students experience. Furthermore, Jennings et al. found that "teacher sensitivity, or teachers' awareness and responsiveness to students'

needs" increased significantly with the mindfulness intervention group, also impacting classroom culture and student experience.

Mindfulness and Social Justice

Mindfulness is growing in popularity as a solution to address stress, but there are concerns about using mindfulness to address stress created by inequitable environments, as well as concerns about the lack of diversity and cultural awareness in mindfulness training. As noted by Watson-Singleton et al. (2019), as mindfulness-based interventions have become more common to address stress, there has been little focus on the varying cultural norms and cultural adaptions needed in order to make mindfulness more accessible to African Americans and other people of color.

The racial diversity of mindfulness trainers and trainees is of concern for researchers. Watson-Singleton et al. (2019) collected interview data from a focus group of African American women who participated in a four-week mindfulness program and generated ideas for addressing varying cultural needs of African Americans in future mindfulness training programs. First, Watson-Singleton et al. found that participants found it critical for the trainer to also be African American. Participants noted "having someone look like us is as important as anything," but also having a racially same presenter helped to promote "comfort, validation, and a sense of belonging" in the experience (p. 134). Relatedly, participants requested that supplementary materials, such as guiding CDs, be provided that used African American narrators, to avoid past trauma associated with complying with things that "white voices" command participants to do (p. 135). Participants also recommended mindfulness can help one build on their sense of "inner strength and the sense of control over one's life, worth and health" since these are prioritized in the African American community given the history of racial inequalities in the United States (p.

135). Participants also felt it was important for mindfulness training to not use the word "meditation" to describe actions of the practice, as the word "meditation" has negative connotations in African American communities and often conflicts with other religious beliefs; women suggested words that would be acceptable instead could be "awareness, relaxation, and mindful" (p. 135).

Another equity-related concern regarding mindfulness includes the socio-economic demographics of most mindfulness trainers in the United States. Blum (2014) noted that in a group classified as extremely experienced in mindfulness practices, over 75% had completed some amount of graduate-level education and were middle-to-upper class and white. At the same time, almost half of the United States population were classified as poor or low-income, and 14.5% of U.S. households were classified as food insecure. Furthermore, research indicates living in low socio-economic status can elevate stress, resulting in higher rates of feelings of hopelessness and depression. Blum also noted that a disproportionate number of people living in poverty in the United States are people of color, due to "system structural racism" present in the country (p.3). The Mindfulness Allies Project (MAP) served as a pilot program designed to blend Western Buddhist teachings with clinical mindfulness programs to create a training program they offered in community centers to marginalized populations. MAP consisted of mindfulness classes provided free of charge at a community center, where dinner and childcare were also provided cost-free for mindfulness participants. Trainers visited other events at the community center before the mindfulness sessions started in order to build relationships with participants, and trainers also checked in with participants between sessions to see how they were doing and to encourage them to keep attending sessions throughout the program. End-of-program surveys of participants included positive feedback, and a second pilot was funded and included Spanish-

speaking interpreters in order to meet the needs of an even more diverse population than the first, which was conducted entirely in English. The results from the MAP pilot program have positive implications for continuing to expand mindfulness programs to those with fewer resources.

As mindfulness techniques are spreading in classrooms in the United States, some believe that teaching students mindfulness can be a "dangerous message to students struggling within an inequitable education system" (Pettway, 2017, p.1). Mindfulness is used to address classroom disagreements between students and teachers. Often student/teacher disagreements are considered to be a result of the implicit bias of teachers and how that bias impacts the disciplining of students who are different from themselves (Pettway, 2017). Discipline disparity between students of color and their white peers is not uncommon. The U.S. Department of Education Office for Civil Rights (2014) provided a data snapshot that included the following national statistics:

- White students were 51% of the population, but 31-40% of students suspended, and 30% of students subject to school-related arrests.

- African American students were 16% of the population, but 32-42% of students suspended, and 31% of students subject to school-related arrests.

- Latino students were 24% of the population, and 23% of students suspended, and 24% of students subject to school-related arrests.

Pettway (2017) referenced this data from the U.S. Department of Education that indicated significant disparity in referrals to law enforcement for students of color as compared to their white peers; it is possible that mindfulness training might reduce some behaviors of students of color that lead to referrals, but not address the existing bias of teachers and adults.

In order to address the concerns related to equity, Pettway (2017) suggested teachers be trained and practice mindfulness themselves first for many weeks before implementing it in their classrooms. Suggestions for appropriate implementation of mindfulness practice include teaming up with fellow educators to learn more about mindfulness, practicing individually and with a peer group for a few months, self-reflecting on the personal impact the practice is having, start with just a few minutes of mindfulness activities at a time, and communicating with the school community about what teachers are working on. Pettway argued educators' personal experience with mindfulness practice, as well as working with peers throughout their own training and practice, would lead teachers toward being more culturally competent themselves. Pettway held that this extensive mindfulness training and practice helps educators in understanding their own biases and how those biases tend can impact disciplining children. From this learning, teachers can then implement mindfulness in classroom settings in a way that does not perpetuate old patterns with diverse students.

The Local Context

The geographical area of focus is a region known as the piedmont of North Carolina. Specifically, participants are school district employees in the town of Hill Top. From a review of the town website (n.d.), Hill Top is a small town of around 60,000 residents that is home to a major state research university, which has an enrollment of approximately 18,000 undergraduates. According to the North Carolina Department of Public Instruction School Report Card (2018), the Hill Top Public Schools (HTPS) district has twenty schools with approximately 12,200 students in grades kindergarten through twelfth grade. The HTPS district is known for high achievement; from Hill Top Public Schools public information, the school

district has the highest average SAT score in the state, as well as the second highest graduation cohort rate in North Carolina with a graduation rate of 92.6%.

The student population in Hill Top Public Schools is racially diverse. According to the North Carolina Department of Public Instruction School Report Card (2018), the demographic enrollment approaches the following percentages: White students--54%, Hispanic students--14%, African American students--12%, Asian students--13%, two or more races--7%. Gender distribution is currently 48% female, and 22% of the student population qualify as economically disadvantaged. The school district is a nationally ranked district, with the high schools consistently ranked in the top 100 high schools nationwide by various groups.

However, Hill Top Public Schools also produces a wide achievement gap, with students of color and specifically low socio-economic students performing at significantly lower proficiency rates on End-of-Course tests than their more affluent white peers. District data indicate students at one high school had an overall End of Course test composite score of 72.4%. When separated out by race, white students had a composite score of 87.9%, Asian students had a composite score of 74.1%, Latino students scored 51.7%, and Black students had a composite score of 36.3%. Hill Top Public Schools' district composite data from all three high schools show similar disparities in achievement. Additionally, large disparity exists in discipline referrals for students of color relative to their percentage of the overall student population, as compared to their white peers. In Hill Top Public Schools (June 2018):

- White students were 51.2% of the student population and made up 30.3% of referrals.
- African American students were 11.0% of the student population and made up 31.44% of referrals.
- Latino students were 16.4% of the student population and made up 23.1% of referrals.

In addition to data related to academic achievement and discipline disparity, Hill Top Public Schools collects data every other year using a tool called the Youth Risk Behavior Survey (YRBS) to gauge students' experience in more social-emotional realms. This survey is given to a sample of fifty students from each grade level from each secondary school in the district during the spring of the survey year. This sample is approximately ten percent of the district population of each grade level surveyed. The survey is most often administered through scheduled English classes at the secondary level. The demographics of participants tend to be fairly representative of the district with regard to race and sex. The survey It includes a section with multiple questions to gauge students' experience on topics such as bullying, dating violence, sexual health, and student mental health. Review of data from the Hill Top Public Schools YRBS (2017) indicated a system that likely is contributing to some of the following statistics: one in four students feeling sad enough to stop regular activities for at least two weeks, one in three students not having a positive opinion of themselves, and one in eight students reported purposely trying to harm themselves.

Hill Top Public Schools has used the YRBS to collect data from middle school and high school students every other year, dating back to 2001, and this data is used to monitor behavioral trends as well as plan programming to address concerns based on the data. With specific regard to mental health, within the last academic year the school district added a new position to each high school student services team to focus specifically on student mental health concerns. High School Parent/Teacher/Student Associations (PTSA), supported by a grant from the Public School Foundation, have aimed to offer parent education on the topic of student mental health. As Bellamy (2018) featured in the regional newspaper, the local high school PTSA used granted money from the Public School Foundation to provide a public viewing of the film *Angst*, which

addressed teen anxiety, and followed the film with a panel discussion. Parents were encouraged to attend with their students. PTSA groups have also worked to provide financial support for teachers to receive mental health first aid training, which a small percentage of teachers have participated in. However, to date these trainings for educators have been strictly voluntary. Mindfulness training has not been provided for educators.

Despite the significant work to collect data regarding student risk behaviors and to address student needs, the school district has not conducted similar work to assess teacher stress and burnout. There has been no data collection on the specific topic of educator stress or resilience to date, and there have been no educator interventions related to the topic. The North Carolina Teacher Working Conditions (NCTWC) Survey (2018) is an anonymous survey conducted state-wide of all licensed, school-based educators to assess teaching conditions at the school, district, and state level. The NCTWC survey provides survey results from teachers on multiple topics that have been identified as sources of stress for teachers, including lack of administrative support, school culture lacking trust, lack of freedom to make professional decisions, and student behavior concerns (Collie et al., 2012; Schuessler et al., 2018).

For example, the NCTWC Survey (2018) results for one district high school included the following statistics:

- 48.8% of teachers reported "Teachers have an appropriate level of influence on decision making in this school."

- 48.9% of teachers reported "There is an atmosphere of trust and mutual respect in this school.

- 50.0% of teachers reported "Teachers feel comfortable raising issues and concerns that are important to them.

- 44% of teachers reported "School administrators consistently enforce rules for student conduct."

Less than half of educators surveyed responded positively to the above statements that may be related to educator stress. This research will help provide more data and information about addressing teacher stress in the future. The NCTWC Survey is currently the only formal source of data collection on topics related to teacher stress that is done by the school and school district.

Theory of Improvement/Proposed Improvement Initiative

The Model for Improvement is based on three questions, the first of which asks "What are we trying to accomplish?" (Langley et al., 2009, p. 24). The researcher's theory of improvement held that providing educators with mindfulness training would increase their resilience, making them better able to manage their own stress in their professional setting. In the short term the researcher's aim was to increase educator resilience. In the long term, the researcher hopes this increase in educator resilience will translate into improved outcomes for students in classrooms. A driver diagram was used to brainstorm theories and ideas used in deciding what change should be implemented to bring about improvement. Figure 2 seen below provided a diagram of improvement ideas for increasing educator resilience. For the purpose of this study, in order to increase educator resilience, the researcher focused on building educator capacity to cope with stress by providing weekly mindfulness training.

Figure 2

Educator Resilience Driver Diagram
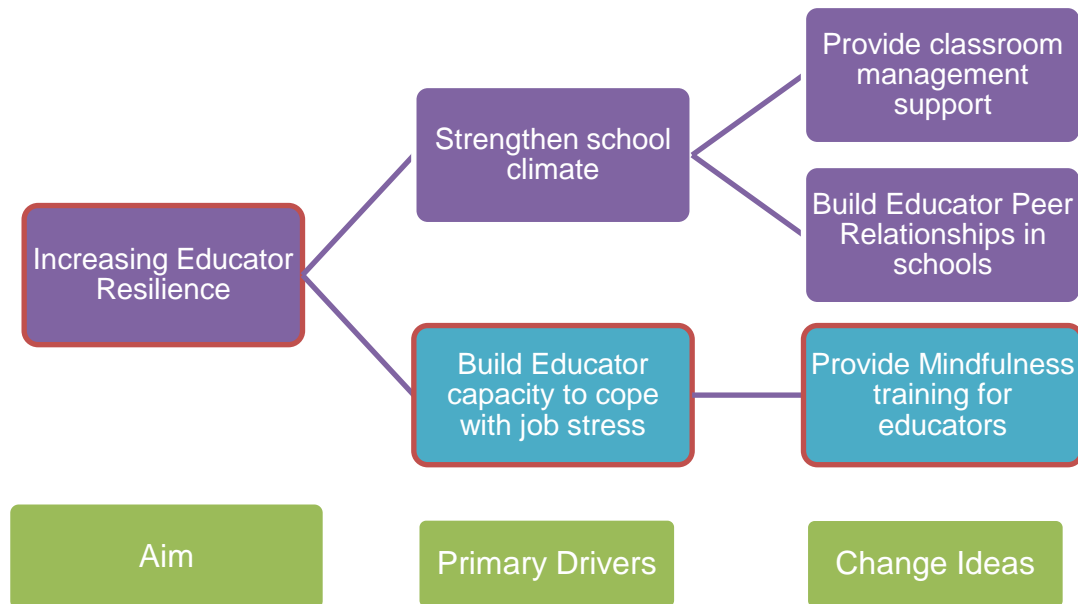
Note. This figure is a driver diagram of ideas for increasing educator resilience.

Improvement Methodology Design Team

The design team included the researcher, who is an assistant principal in the school and who has eighteen years working as a high school counselor and assistant principal; the school principal; the student services mental health specialist; and an on-staff social worker trained in mindfulness. The school principal had been at the school two years and has over ten years of experience at multiple high schools, including other high-achieving school settings. He was involved in all facets of school operations and was critical in granting permission for teachers to be able to participate in intervention sessions. The student services mental health coordinator works closely with school counselors to identify students specifically in need of mental health counseling and intervention. The school social worker has been at the school approximately four years and has been leading mindfulness trainings for students. The design team met in early July,

2020 and discussed best practices for implementing teacher training, the exact timeline of implementation, and possible obstacles/concerns to be addressed throughout the intervention process.

The Covid-19 Pandemic

The proposed mindfulness intervention was approved by committee in late March, 2020, just a week after the local school district joined many across the country in closing school buildings due to the Covid-19 pandemic. The local district closed buildings on March 16th, 2020 and instruction became entirely virtual. Buildings never re-opened during the 2019-2020 school year, and students and educators finished the year virtually.

In late summer, 2020, the pandemic continued to be widespread across North Carolina, and the local school district decided to start the 2020-21 school year virtually, for at least the first semester, from August through mid –January. A new daily schedule was created for the high school as part of the district's decision to start the first semester of the school year remotely. The schedule included synchronous, or "live" class sessions for students and teachers on Monday, Tuesday, Thursday, and Friday. Wednesdays were left as completely asynchronous days, with no live sessions scheduled. The implementation design team met to discuss the shift to fully virtual school. The trainer was agreeable to continuing to offer the mindfulness training, but to offer it virtually. At this point, the research opportunity had not been advertised, so potential participants did not yet have any information. It was agreed that it would be advertised to staff as a virtual opportunity, and that given the school's new weekly schedule, it would be proposed to participants that the mindfulness sessions would take place on Wednesday, a day that they would not have scheduled live class sessions to teach.

Participants

        Participants included faculty and staff of a Hill Top Public Schools high school who volunteered to participate in mindfulness trainings. The goal was to have a cohort of twenty participants for the weekly mindfulness sessions. The only criteria for participating was that participants be employed at the school where the intervention was taking place. The opportunity to participate was offered to licensed teachers from any department in the high school, licensed school counselors, as well as classified staff serving as teaching assistants or office assistants. Instructional subject area departments in the high school included English, Math, Science, Social Studies, Health/PE, Visual and Performing Arts, World Languages, and Exceptional Children's services. The years of experience for faculty staff ranged from employees being in their first year of teaching/school work to some staff members who have over twenty-five years of experience. There were twelve people who expressed interest in participating during the information sessions, and six total people who participated in the weekly mindfulness intervention. There was no control group in this intervention.

Procedure

        The school social worker advertised the mindfulness intervention opportunity to faculty and staff with an email (See Appendix A) to avoid any conflict or undue pressure to participate since the researcher is in a supervisory position in the school. Using the advertisement email as well as the participant consent form (See Appendix B), the lead trainer explained to potential participants that they were invited to participate in a research study about the use of mindfulness techniques by educators, and that the intent of the study was to learn if educators' use of mindfulness techniques improved their resilience. The lead trainer reviewed consent information during a pre-intervention information session to avoid any conflict since the researcher

supervised participants. Participants were asked to participate and submit weekly survey responses through Qualtrics (See Appendix E and F). Participants were asked to create a pseudonym to protect their confidentiality throughout the data collection process. The researcher was a direct supervisor of faculty and staff in the building where the mindfulness intervention was taking place. Due to this supervisory role, the researcher was not present during any of the mindfulness training sessions.

Improvement Methodology

A Plan/Do/Study/Act (PDSA) cycle was used over the course of implementation and data collection to address the questions "How will we know that a change is an improvement?" and "what changes can we make that will result in improvement?" (Langley et al., 2009, p. 24). These questions were a useful guide through the improvement process, which is designed to start with a plan for improvement, move to an action, and then study or build new knowledge around the outcomes (p. 25). Bryk et al. (2017) explained the PDSA cycle is a set of four steps designed to be repeated to address issues that arise throughout the intervention process. Multiple change cycles are needed, and the learning in each cycle contributes to creating more effective improvements as the work progresses. One of the key advantages to using PDSA cycles was that it allowed for learning at different stages of the change process, from the start of a good idea to the time in which the idea may be working for some but not all, to more finalized steps of a larger-scale improvement.

Mindfulness training sessions consisted of an introduction session including participants completing their consent to participate, six mindfulness training sessions that lasted forty-five minutes each, and concluded with a post-intervention follow-up one month later. During the introduction session, the lead trainer provided general information about mindfulness, including

basic concepts addressed by Pederson (2017), such as learning to concentrate on what one chooses rather than letting emotions control one's self, as well as addressing common misconceptions including beliefs that mindfulness is a religion or can only be done through meditation. Participants completed the consent form during this session, as well as completing the The Resilience Self-Reflection (Weis 2017, Appendix C) for the first time.

Weekly sessions consisted of one of two different types of sessions: week one, week three, and week five sessions consisted of a mindfulness lesson presented to participants by the lead mindfulness trainer. Participants were taught a new skill and given the opportunity to practice the skill during the session. The trainings during odd weeks consisted of a set of lessons presented in Altman's (2014) *The Mindfulness Toolbox*, which included activities (see Appendix D) such as "Tool #11 The Power of Breath," "Tool #16 BE-THIS Sense-Grounding," and "Tool #35, Take a Stress Pause" (p. 29-33, 47-51, 126-128). Members of the design team proposed using a set of lessons such as these because they provided good introductory training in basic mindfulness techniques for people new to mindfulness training. The lesson for week one, "Tool #11 The Power of Breath" by Altman (2014) taught participants to focus on deep breathing techniques known to calm the body and activate different portions of the brain, enabling people to move away from "reactivity and unhealthy emotions" (p. 30). During week three, Altman's (2014) "Tool #16 BE-THIS Sense-Grounding" lesson was designed to teach participants techniques to connect the five senses – hearing, sight, smell, taste and touch—in order to separate oneself from anxious or ruminating negative thoughts and emotional reactivity (p.47-48). Week five involved Altman's (2014) "Tool #35 Take a Stress Pause" designed by the author to be used with "Tool #11" and "Tool #16," and which focused on teaching participants to find moments of calm during hectic, emotional or transitional times (p. 126). Participants learned to

focus on pausing to be more present and aware of the current moment at any given time in their surroundings, which would then teach them to avoid reacting impulsively or out of fear when faced with challenging situations (Altman, 2014).

During even weeks two, four and six, participants participated in group discussion sessions about their experience with practicing the mindfulness techniques learned the previous week. Participants were assigned homework assignments each week that included practicing the mindfulness skills that were taught in the past week. This means for week two, participants were asked to practice breathing exercises as they learned in week one. During week four participants were asked to practice the sense-grounding exercise from week three, and during week six participants practiced the pausing activity from week five. There was opportunity in the discussion sessions to address any concerns that arose for participants.

Week one, week three, and week five lessons took place on Wednesday mornings, which were scheduled as asynchronous learning time for students and flexible work time for faculty and staff. These sessions lasted approximately forty minutes. Week two, week four, and week six check-in sessions took place on alternating Wednesday mornings. These sessions lasted forty-five minutes.

At each session formative, qualitative data was collected. Participants used their pseudonym on all data collection instruments to protect their confidentiality. Participants were asked to complete a warm-up activity of questions (see Appendix E), as well as an exit ticket activity (see Appendix F) with two questions. Participants were asked to complete surveys about resilience during week one, week three, and week seven. This frequent data collection allowed the design team to make any adjustments needed to the intervention process. The design team and researcher planned to use this data to gauge concerns that emerged during the intervention,

and to make any necessary adjustments; however, the data showed that no adjustments to planned sessions were necessary. There were no adjustments made at any time during the intervention.

During the seventh week participants completed a program "wrap-up" session including a survey designed to collect data about the participants' experiences in the training (see Appendix G). One month following the conclusion of the mindfulness training sessions, there was a follow-up exercise with participants and they completed the Resilience Self-Reflection again at that time. A review of the PDSA cycle can be seen below in Figure 3.

Figure 3

Mindfulness Training PDSA Cycle
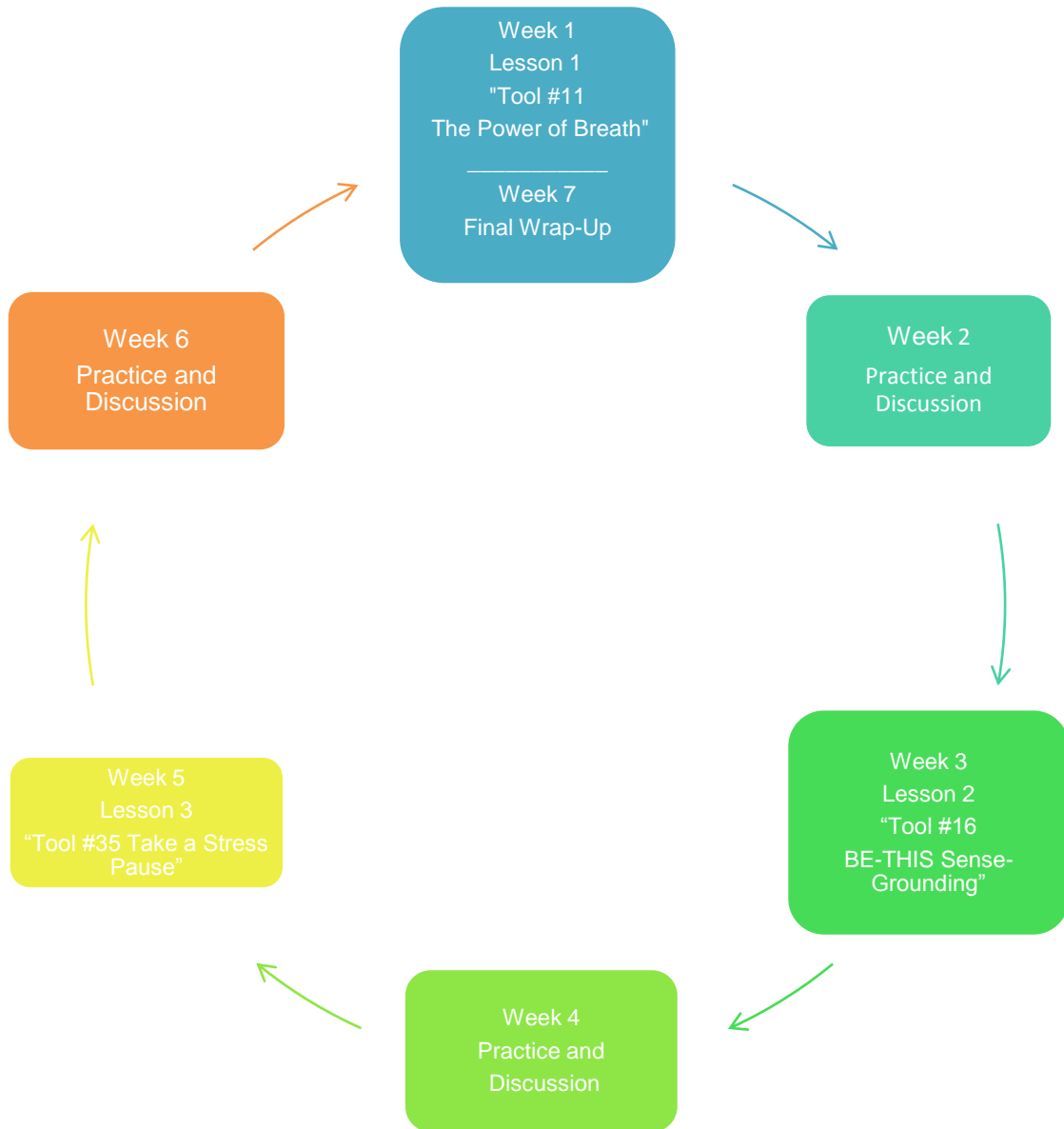
Note. This figure shows the multi-step mindfulness training cycle.

Timeline

The design team met in July 2020 to finalize the exact training plan including lesson plans. The advertisement email was sent to faculty and staff on August 24th, 2020. The

introduction session for potential participants was scheduled for and provided on September 2nd,

2020. The seven mindfulness sessions begin on September 9th, 2020 and continued once a week

on the following dates: September 16th, September 23rd, September 30th, October 7th and October

14th. The program wrap-up session took place on October 20th. A post-intervention check-in

took place one month after the conclusion of the intervention, on November 18th, 2020. This

timeline can be reviewed below in Figure 4.

Figure 4

Mindfulness Implementation Timeline

Pre	• September 2nd, 2020 • Information Session and Consent Form Signing
Week 1	• September 9th, 2020 • Mindfulness Lesson #1
Week 2	• September 16th, 2020 • Discussion Check-In #1
Week 3	• September 23rd, 2020 • Mindfulness Lesson #2
Week 4	• September 30th, 2020 • Discussion Check-In #2
Week 5	• October 7th, 2020 • Mindfulness Lesson #3
Week 6	• October 14th, 2020 • Discussion Check-In #3
Week 7	• October 20th, 2020 • Program Completion Wrap-Up
Post	• November 18th, 2020 • One-Month Program Follow-UP

Note. This figure shows the timeline created for the Mindfulness Monday intervention.

Goals

The ultimate aim was to increase educator resilience by building educator's capacity to manage stress. The goal was to provide an intervention to address internal factors that contribute to educator stress, such as the socio-emotional demands of the job and feelings of lack of control in decision-making. Short term goals included a weekly participation rate of 95% in the mindfulness training sessions, as well as educators reporting implementation of mindfulness practices and reduced feelings of stress. The goal was for 100% of participants to report increased resilience by the end of the PDSA cycle.

Evaluation of Improvement Methodology

Using the concepts of Improvement Science as a guide, Plan/Do/Study/Act (PDSA) cycles were used over the course of implementation and data collection (Langley et al., 2009). The outcome measure (Bryk et al., 2017) evaluates the result of a system. Educator resilience was measured as an outcome measure related to mindfulness training intervention. The Resilience Self-Reflection (Weis, 2017; Appendix C) was used for this measure. This measure covers key abilities and mindsets associated with resilient people, including curiosity, good coping skills, having a curious outlook to problem solve, as well as exhibiting self-confidence, self-esteem, and positive self-concept (Weis, 2017). This self-reflection measurement tool can be used to identify strengths and weaknesses of individuals as it relates to their relative resilience (Weis, 2017). This tool was revised by Weis (2017), and was based on years of resilience research including interviews and observations. While the tool has not been scientifically validated, it is commonly used to measure resilience in educators.

Process measures help determine if the intervention is implemented with fidelity (Langley et al., 2009). The Weekly Warm-Up (Appendix E) was used for the process measure, to
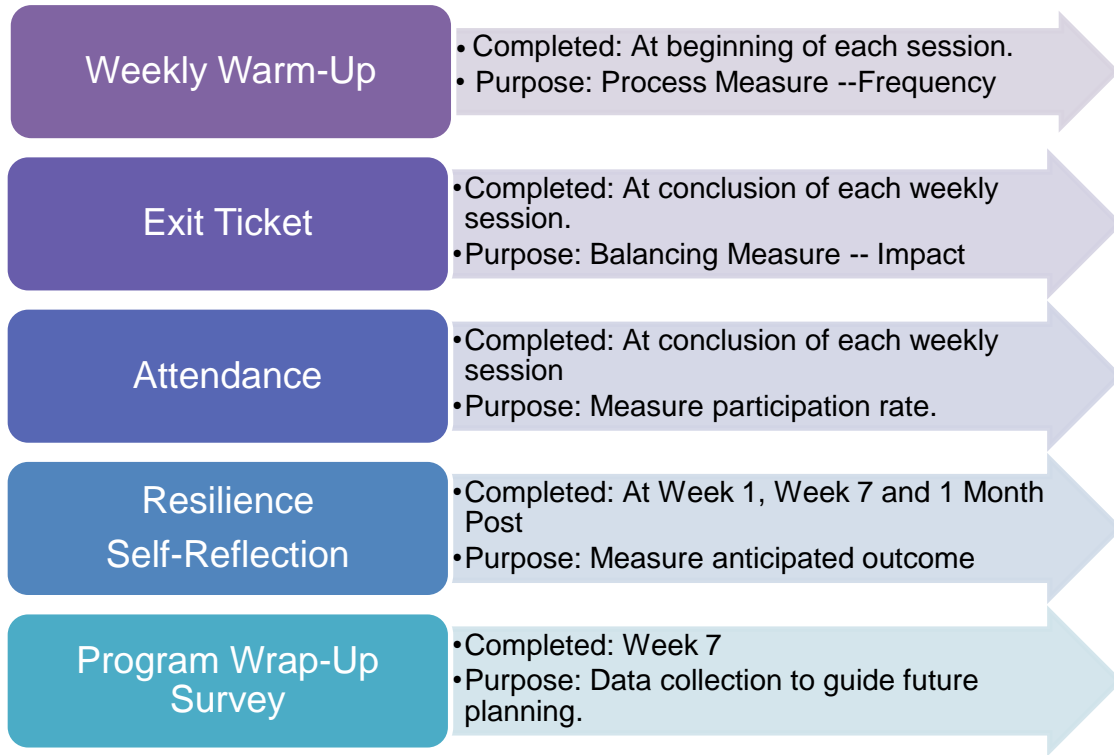
determine participants' use of mindfulness techniques from week to week. This measure was done at the beginning of each weekly session. Balancing measures help determine if a different, unintended change is happening as a result of the intervention (Langley et al., 2009). The balancing measure was assessed using the Weekly Warm-Up (Appendix E) and the weekly Exit Ticket (Appendix F) in order to measure any unintended consequences resulting from participation in mindfulness training implementation. These measures were done each week. The Weekly Warm-Up included qualitative questions such as "Do you have any concerns or questions that need to be shared or addressed?" as well as "How did using your mindfulness learning in the past week impact other obligations/duties that you had?" The Exit Ticket included the qualitative questions "How do you plan to use your new learning?" and "What concerns do you have about how your Mindfulness training experience will impact your upcoming week?" The Exit Ticket also included questions adapted from the Session Rating Scale (Johnson et al., 2000), to measure participants feelings about the individual session as well as their feelings about the trainer during the session. Participant attendance was taken weekly.

Throughout the data collection process, results were shared and reviewed with the design team on a weekly basis at the conclusion of each mindfulness training session. The researcher reviewed the survey data the day after each weekly session, scanning for any areas of concern reported by participants, and conducting coding analysis for themes. Details of the coding process are addressed in upcoming pages. The weekly data was then reviewed with members of the design team in a weekly debrief meeting that was held each Thursday. A program Wrap-Up Survey (see Appendix E) was used to collect data about participant experience to help guide future planning. The collection of Mindfulness measurement tools can be reviewed below in Figure 5.

Figure 5

Mindfulness Measurement Tools

Weekly Warm-Up	• Completed: At beginning of each session. • Purpose: Process Measure --Frequency
Exit Ticket	•Completed: At conclusion of each weekly session. •Purpose: Balancing Measure -- Impact
Attendance	•Completed: At conclusion of each weekly session •Purpose: Measure participation rate.
Resilience Self-Reflection	•Completed: At Week 1, Week 7 and 1 Month Post •Purpose: Measure anticipated outcome
Program Wrap-Up Survey	•Completed: Week 7 •Purpose: Data collection to guide future planning.

Note. This figure summarizes the mindfulness measurement tools used in the

intervention.

All surveys and data collection referenced was done using Qualtrics software through

Western Carolina University. The researcher used qualitative coding as a means to label and

categorize data in order to detect themes that may lead to theories about outcomes (Saldaña,

2009, p.13). As noted by Saldaña (2009) coding is a transitional process "between data collection

and data analysis" that can be used to represent the "primary content and essence" of data, as

well as link concepts together (p. 3). Descriptive codes identifying primary topics, as well as

InVivo coding, or codes using direct quotes from data, were both used in data analysis (Saldaña,

2009). This data collection method was chosen because coding allows researchers to categorize

data and identify patterns, as well as potentially identify what is creating those patterns. Rounds
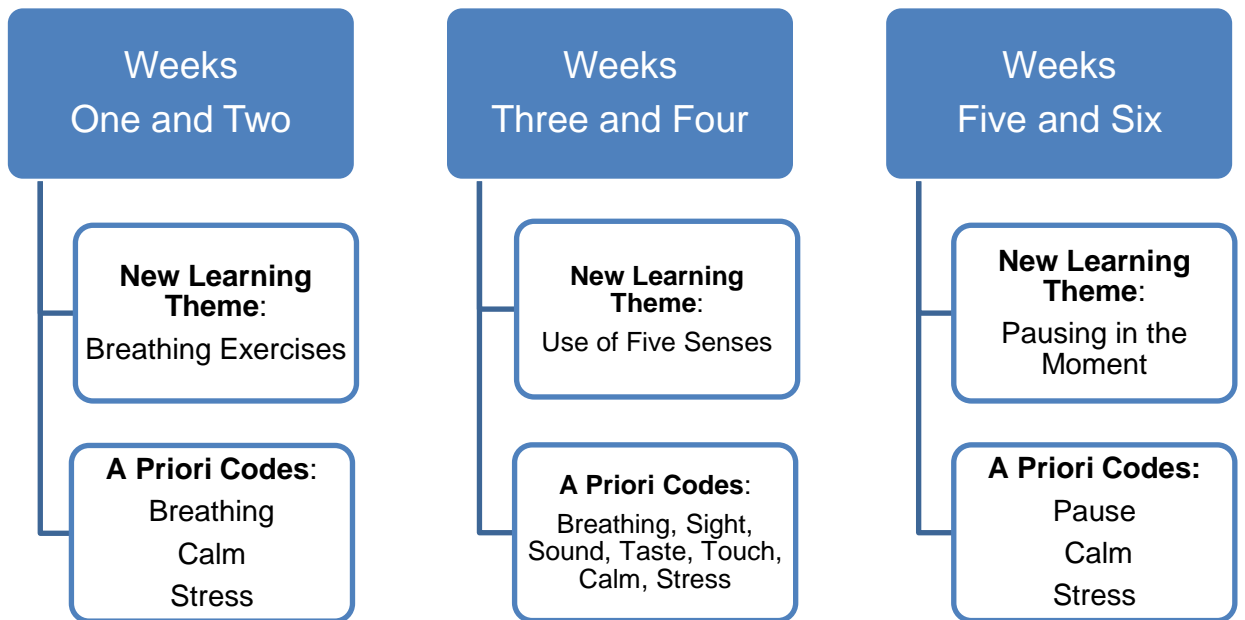
of coding can be used to detect themes and begin to build theory about what is causing the patterns to exist (Saldaña, 2009). Coding was done by hand weekly after participants completed Warm-Up and Exit Ticket surveys during their Mindfulness sessions.

The researcher started the coding process by looking for pre-determined codes, or *a priori* codes, specific to each weekly lesson. In week one and week two, during which the new learning focused on breathing exercises, the researcher used the following codes as a starting point in data analysis: "breathing," "calm," and "stress". In week three and week four, when the new learning focused on use of the five senses, the researcher looked for the following codes: "breathing," "sight," "sound," "taste," "touch," "calm," and "stress". The *a priori* codes can be reviewed below in Figure 6.

Figure 6

A Priori Code Plan

Weeks One and Two	Weeks Three and Four	Weeks Five and Six
New Learning Theme: Breathing Exercises	**New Learning Theme**: Use of Five Senses	**New Learning Theme**: Pausing in the Moment
A Priori Codes: Breathing, Calm, Stress	**A Priori Codes**: Breathing, Sight, Sound, Taste, Touch, Calm, Stress	**A Priori Codes:** Pause, Calm, Stress

Note. This figure contains categories of a priori codes used in data analysis in the mindfulness intervention.

During each week the researcher also used InVivo coding to capture exact words and phrases used by participants. Multiple coding cycles were used to detect emergent themes over the course of the entire intervention timeline. Magnitude coding was used to analyze frequency of themes. In addition to weekly coding, a round was done at the end of the intervention to look for holistic themes that may have emerged.

In addition to descriptive and InVivo coding, descriptive statistics were used to analyze data from the Program Completion Survey as well as the Resilience Self-Reflection. Descriptive statistics are used to determine what is typical in a data set, as well as how much variation there may be, without having to refer to each individual measure of data. Measures of central tendency, including mean, were used for questions using ordinal scale data, such as Likert scales, in the program completion survey (Tanner, 2012). Question seven in the program completion survey (Appendix G) is one such question designed with a Likert scale. Considering there were only six participants in the study, there are limitations to what can be deduced from these measures.

Implementation Analysis

Process and Balancing Measures: The Weekly Warm-Up

The Weekly Warm-Up Survey instrument was designed as both a process measure, to determine if the invention was implemented with fidelity, as well as a balancing measure, to determine if there were any different unintended consequences that happened as a result of the intervention. Participants completed the Weekly Warm-Up electronically, each week before their weekly mindfulness session started on Wednesday morning.

Participants were asked how much time they spent on mindfulness learning each week. A summary of results can be seen in Table 1 below. The numbers indicate number of participants who responded in in a particular category for that given date of the intervention.

Table 1

Weekly Mindfulness Practice

How much time did you spend on mindfulness learning this week?						
	Weekly Session					
	Sept. 9	Sept. 16	Sept. 23	Sept. 30	Oct. 7	Oct. 14
A Great Deal (At least 20 minutes a day)	0	0	0	0	0	0
A Lot (At least 10 minutes a day)	0	0	1	2	2	1
A Moderate Amount (At least 45 minutes during the week)	2	1	3	0	1	1
A little (30 Minutes or less during the week)	3	5	2	4	3	4
None at All	1	0	0	0	0	0

Table 1

Participants consistently reported spending what was classified as "a Little" time on mindfulness weekly, categorized as thirty minutes or less during the week. No participants reported practicing

it "A Great Deal," of at least twenty minutes a day. Only one participant during the first week reported practicing none at all. In the weeks following, no participants reported not practicing mindfulness any at all.

As a way to determine if the intervention was having an unintended impact on other aspects of participants' lives, the Weekly Warm-Up survey also included the following question: "If you had not spent this time on mindfulness, what would you have spent it on?" Participants had three choices for their response. Those three choices where: I would have spent the time as "down time" (reading, social media, favorite hobbies), I would have spent the time on personal obligations (family, childcare, meal prep), or I would have spent the time on work obligations (grading, planning, etc). Summary of the results can be seen in Table 2 below. The numbers indicate number of participants who responded in in a particular category for that given date of the intervention.

Table 2

Mindfulness Time Usage

If you had not spent this time on mindfulness, what would you have spent it on?						
	Weekly Session					
	Sept. 9	Sept. 16	Sept. 23	Sept. 30	Oct. 7	Oct. 14
I would have spent the time as "down time" (reading, social media, favorite hobbies),	2	2	4	5	2	2
I would have spent the time on personal obligations (family, childcare, meal prep)	2	2	0	1	2	2
I would have spent the time on work obligations (grading, planning, etc)	1	2	2	0	2	2

Table 2

During Weeks 1, 2, 5, and 6 participants were split evenly regarding how they would

have used their time otherwise spent on mindfulness. During week 3 and 4 there was an increase

in participants reporting they would have used the time for "down time" versus other categories

for their time. Overall, the amount of time participants spent on mindfulness each week and the

impact it had on time spent in other areas of life remained consistent over the course of the six

weeks intervention.

As another part of the Weekly Warm-Up survey, participants were asked the question

"How did using your mindfulness learning in the past week impact other obligations/duties you

had?" This was a free response question, and participants were allowed to type short answers.

Given the number of participants and the nature of their responses, the data proved to be fairly

straightforward for coding. One round of coding was done using the a priori codes, including

"calm" and "stress" which found in participants' responses each week. In each week of data

collection this question generated responses indicating participants felt "calm" or "less stress." In

addition to the round with these a priori codes, there was also a round of in vivo coding done.

The theme that emerged over multiple weeks of was participants reporting feeling "relaxed,"

having "better focus" and being "more productive." There was limited report of "no impact" to

this question. None of the data collected from this question indicated any negative impact as a

result of the intervention. As a final question of the Weekly Warm-Up, participants were asked

to report if they had any questions or concerns that needed to be addressed by the trainer that

week. Each week, all participants responded to that question with "no." Though this data was

fairly simplistic, it did allow the researcher to see a few consistent themes in the participant

experience related to have they were feeling about stress, and the data indicated the intervention

was having a positive impact on the participants' feelings weekly.

Balancing Measure: The Exit Ticket

The weekly Exit ticket survey was designed as a balancing measure, to help determine if

there were unintended consequences happening as a result of the intervention. Participants

completed the Exit Ticket survey at the end of each weekly Mindfulness session. The first

question on the Exit Ticket asked participants "How Useful was Today's Lesson?" and provided

a range of choices as follows: "extremely useless, moderately useless, slightly useless, neither

useful nor useless, slightly useful, moderately useful, and extremely useful." All participants, all

weeks of the intervention, chose two of the five possible options. Participants reported that the

intervention was either "moderately useful" or "extremely useful" all six weeks. See Table 3

below for a summary of participant responses.

Table 3

Mindfulness Lesson Usefulness

How Useful was Today's Lesson?

		Weekly Session					
		Sept. 9	Sept. 16	Sept. 23	Sept. 30	Oct. 7	Oct. 14
Extremely Useful	5	1	4	5	2	4	4
Moderately Useful	5	4	1	0	2	2	2

Table 3

During the weeks of September 16th, September 23rd, October 7th and October 14th, the majority of participants rated the weekly experience as "Extremely useful." Next, participants were asked how they planned to use their learning from the week. This was a free response answer. As mentioned previously, the *a priori* codes determined in advance for weeks 1 and 2 were "breathing," "calm" and "stress." A priori codes for weeks 3 and 4 were "breathing," "calm," and "stress." A priori codes for weeks 5 and 6 were "pause," "calm" and "stress." These A priori codes were created based on key vocabulary from the mindfulness lessons from each set of weeks, and based on the key terms "stress" that the intervention was focused on trying to improve with participants. Data from participants included use of "breathing" and "calm" by multiple participants during all weeks of the intervention, which were key terms from the first lesson experienced in Week 1. During weeks 3 and 4, the a priori codes were not seen in these data response, but the "grounding" was referenced multiple times during these weeks. The second lesson had used the term "grounding" as it related to use of the five senses in mindfulness practice. During weeks 5 and 6, the code "stress" did reappear in participant responses. A new

code that appeared was "pause," which had been a key word of the mindfulness lesson presented to participants during week 5.

The next question on the Exit ticket asked participants to express any concerns they had about how their mindfulness training would impact the coming week. Out of the six weeks of data collection, there were only three total responses that could not be classified as "no concerns." Those three responses, one of which was reported September 23rd and two of which were reported September 30th, all involved the code "time" and referenced remembering to pay attention to take the time to practice the mindfulness learning.

The second portion of the Exit ticket contained Likert scale questions that had a response scale for ratings that included a score of "0" for the lowest rating up to a "10" for the highest rating. These questions were adapted from the Session Rating Scale (Johnson, Miller, & Duncan, 2000), to measure participants feelings about the sessions as well as their feelings about the trainer. Minimum and maximum scores, as well as the mean for each question, can be seen in Table 4 below.

Table 4

Mindfulness Session Ratings

	Measure of Central Tendency		
	Minimum	Maximum	Mean
I felt heard, understood and respected.	2	10	9.48
We did work on or talk about what I wanted to work on and talk about.	3	10	9.39
The trainers approach is a good fit for me.	3	10	9.42
Overall, today's session was right for	6	10	9.52

me.
<center>Table 4</center>

The high mean score for all questions from this portion of the Exit ticket indicate participants felt

strongly that the sessions met their needs in terms of relationship with trainer, and the sessions

felt appropriate to what the participants wanted to get out of the weekly sessions.

Outcome Measure: The Resilience Self-Reflection

The Resilience Self-Reflection (Weis, 2017; Appendix C) was used for the outcome

measure, to determine if educator resilience improved as a result of educators participating in the

mindfulness training intervention. Participants completed the Resilience Self-Reflection three

times over the course of the intervention, including once at the beginning of the intervention in

early September, once a couple of weeks later after the initial sessions, and again at the end of

the six weeks of sessions. Participants self-rated on the survey and then computed their overall

score. Summary scores for each participant can be seen in Figure 7 below.

Figure 7

Resilience Self-Reflection Sum Score Over Time

Resilience Self-Reflection
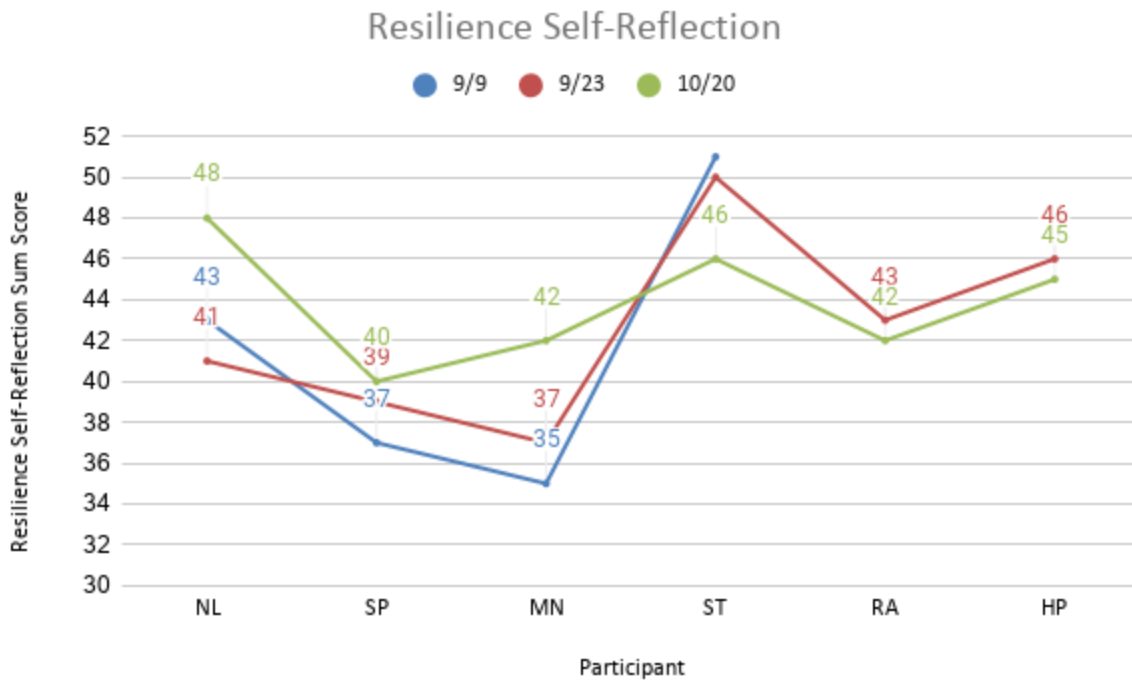
Note. This figure shows the resilience ratings of participants over time.

When looking at the summative scores across the Resilience Self- Reflections, the participants Nikel, Sir Purr, and Mindfulness experienced increases in their resilience total over the course of the intervention. However, three other participants, Sunset, Rachel, and Hope moved in the opposite direction and had lower scores on their Resilience Self-Reflection over time It must be noted as well that participants Rachel and Hope did not have survey results for the first round of survey done September 9th. The researcher does not know why that is the case, but the survey for those two participants was not completed in Qualtrics.

When looking at data from the three participants who had lower scores on their Resilience Self-Reflection over time, it is possible this change could be attributed to the Resilience Self-Reflection being a self-report measure. Caputo (2017) looked at the role social desirability has been known to plan in self-report measures. Caputo noted that there is often societal pressure to seem agreeable or happy and this expectation can contribute to over-

reporting positive ratings. Caputo found this effect to be small. Kozma and Stones (1987) also studied social desirability in self-report measures regarding participant well-being, and found the effect to be small when social desirability was controlled for.

Program Completion Survey

As part of the Program Completion Survey, participants were asked how frequently they used the mindfulness training. Four participants reported using the training at least 3-5 times a week, and the other two participants reported using it daily. No one indicated they were not using the training. Fifty percent of participants indicated they did use the training during their school/work day. Of those participants, one of those educators was in a counseling role as opposed to a classroom teacher. That person reported using mindfulness with students in individual and group counseling sessions, as well as during parent/student conferences. The other two participants who reported using mindfulness during the school day reported using it during their lunch break and at the end of the school day. Participants were also asked if they felt the training was useful for educators. One participant reported it was "moderately useful" and the other five participants reported it was "extremely useful."

Participants were then given a free response question to provide feedback about how the mindfulness training had impacted their work experience during the cycle of weeks. A round of in vivo coding of these responses produced three common themes: "connected," "focused," and "less stress." Interestingly, when asked about feedback regarding what could make the experience better, all participants replied with a common theme of "nothing" and "good as is." One participant added in this question response that they wished more faculty and staff would participate. When asked a final question of if they had anything additional to share, all

participants reported positive responses, including in vivo codes of "helpful," "wonderful," and "worthwhile."

It is worth noting that participants felt so strongly that the weekly mindfulness training was a useful, positive experience, that they asked the trainer if she was willing to continue the weekly sessions once the study formally ended. The trainer agreed, and is continuing to provide mindfulness sessions weekly for the study participants that want to continue meeting with her.

Implications and Recommendations

The positive results reported by participants in the mindfulness intervention suggest that mindfulness training for educators is a worthwhile use of time and professional development resources. As highlighted earlier, all participants reported that the weekly sessions were either moderately or extremely useful, with no participants reporting at any time that the sessions were not useful. Furthermore, coding exercises revealed consistent themes of participants feeling calm, relaxed, more productive and having better focus. These findings are similar to findings in the work done by Roeser et al. (2013), where mindfulness training helped teachers manage stress and improved self-regularly skills which contributed to better management of workplace stressors. The Roeser et al. study used similar time frame (8 weeks) compared to the current study's six-week intervention with a program wrap-up. Roeser et al. was interested in the impact of mindfulness training on educator burn-out and suggested future work should focus on the effects of mindfulness on educators' ability to manage stressors over time. While early data indicates this study's mindfulness intervention was effective in helping participants remain calm and better manage stress, future work may be planned to focus specifically on measuring the impact of mindfulness training on educator's ability to manage emotions over the course of

longer periods of time, such as a school year, in order to determine if mindfulness training could be an effective strategy for managing long-term stress and burnout.

These results are also similar to findings in research done by Benn et al. (2012). During a similarly timed five-week mindfulness intervention, Benn et al. had results indicating participants showed greater awareness of their mental state and their ability to control stress and feel calmer. Benn et al. included data analysis that was able to determine participants began to feel more empathetic to others and have greater awareness regarding the emotional needs of their students in their classrooms. Related to these findings, future cycles of mindfulness interventions may include adapting data-collection in order to measure the impact on participants" feelings and awareness with regard to their students. Adding this step of data collection would assist in determining the impact of mindfulness educator training on the relationship with their students in the classroom setting.

Work done by Crain et al. (2017) found evidence that mindfulness training created "spillover" effects between work and home, likely related to mindfulness training making participants more aware of self-regulation in general (p.147). Participants in the Crain et al. study indicated improvements not only in mood but also in their quality of sleep. This is noteworthy because one of the six participants in our mindfulness intervention, using pseudonym Daisy, reported "I was better able to unwind and be able to nap and sleep" in response to how the mindfulness training had impacted her week. This same participant reported mindfulness training "helped me rediscover calm during tense family situations." To better understand the potential for "spillover" and the possible benefits of spillover, future work should include more focus on gauging the impact of mindfulness specifically in different settings. Settings may include the participants in their workplace in non-classroom settings (meetings, staff rooms, etc),

participants specifically in their classroom setting with students, and participants in their personal lives/home setting.

Crain et al. (2017) made the recommendation that future work should focus on the impact of possible booster sessions in order to contribute to sustainability of the intervention over time. This idea is one worth considering for future mindfulness planning. The social worker who conducted the mindfulness training reported during the implementation team's weekly debrief sessions that participants spoke in a positive manner about the alternating weeks in which new learning did not take place, but participants were asked to still meet at the same time and share any concerns from the past week. The trainer had some initial concerns that if there was not new learning planned, participants might choose to skip the alternating weekly sessions. However, attendance was just as high during the alternative weeks as it was for the new learning weeks, and participants noted in information conversation, according to the trainer, that those sessions helped them to practice their new skills and to continue to prioritize the intervention on a weekly basis. This informal data collection speaks to the need for, and benefit of, formally planning booster sessions in future trainings.

Jennings et al. (2017) focused on a mindfulness training program for teachers that not only was designed to impact social and emotional skills of educators in their own lives, but also aimed to take the impact a step further, creating improvements in classroom interactions that would lead to improved outcomes for students. The CARE intervention done by Jennings et al. produced positive outcomes with teachers, including increased ability to control emotions, increased mindfulness, and a reduction in stress. There were also improvements in participant sleep and exhaustion in the Jennings et al. (2017) study. Jennings et al.'s work also produced positive results for the impact of mindfulness training on the classroom and student experience,

indicating improvements in teacher emotional support with students in the classroom, as well as greater responsiveness to student needs. Based on the success of the mindfulness intervention and the positive outcomes reported by educators in this study's initial six-week intervention, future study could be planned to expand the scope of the training to be something similar to Jennings et al. work with the CARE intervention, in order to hopefully produce a targeted, positive impact specifically on the classroom environment and student experience. This component was not done during this intervention cycle, but given the ultimate long term goal is on improving student experience and outcomes, this would be an important future step in expanding the scope of the mindfulness intervention.

Limitations of the Study

This student has multiple limitations to consider. The original goal was to recruit a cohort of 20 participants. Initially twelve people indicated interest, and in the end there were six total participants. While the number of participants is small, it is worth noting that results consistently indicated the participants found the intervention to be worthwhile and effective in helping them to manage their emotions and stress. The intervention was also only one PDSA cycle of six weeks of formal sessions. In the future, multiple cycles of intervention could be conducted over a longer period of time, which would help generate more data. This intervention was also done fully virtual, due to the school's district being on a fully remote schedule because of the Covid-19 pandemic. It is hard to know how the experience of participants in a fully virtual setting might compare to an intervention taking place in person. This study was purely voluntary and included a highly motivated group of individuals who requested that the trainer continue providing weekly sessions after the formal study ended. It is difficult to know how results from this voluntary study might compare to a mindfulness program that would be implemented as mandated

professional development for educators. The program was designed for participants new to mindfulness training, but there was no data collected to measure if participants had any prior exposure to mindfulness or not. Future work should include survey questions designed to gauge prior mindfulness experience. All participants also already had a prior relationship with the mindfulness trainer since they all work together at the same high school. This prior relationship may have impacted the participants' willingness to participate and/or their feelings about the experience with the trainer. Offering training to school staff with someone that they do not know or have a prior relationship with could possibly produce different participation rates and outcomes.

Lessons for Social Justice

Blum (2014) wrote about the challenges of implementing mindfulness interventions with people of color. Obstacles, according to Blum, often include that the majority of those trained in mindfulness teaching are from upper socio-economic status and highly educated and white. This can make it challenging for people of color, often impacted by poverty, to feel comfortable engaging with mindfulness trainers who generally have very different life experience. Watson-Singleton et al. (2019) has written about the challenges people of color feel when engaging in mindfulness training, including a lack of mindfulness trainers of color, leading to sessions always led by white people, which can then lead to feelings related to historical trauma of white people being in a position of power over people of color and giving directives. Another challenge, according to Watson-Singleton et al. can include conflict with religious beliefs.

In the researcher's intervention, people of color made up 17% of the group population; there was one person of color in the group of six participants. When looking at the racial demographics of faculty and staff of the school where the mindfulness intervention took place,

17% of faculty and staff identify as staff of color. In order to have more racially diverse participants for future mindfulness interventions, specific actions need to be taken in order to recruit participants of color to participate, and to have discussions with people to learn more about what is needed to help them feel comfortable engaging in such training. As Watson-Singleton et al. (2019) noted, it will be important to find people of color who are trained in mindfulness to participate as trainers, and/or to partner with the trainer in order to facilitate relationship building in order to recruit a more racially diverse group of educator participants. Another option to help in recruitment would be to ask past participants of color if they would be willing to speak to those introduced about their experience in the mindfulness training as a person of color.

Continuing to diversify the participant group is especially important in planning the expansion of mindfulness training in order to impact students' experience in the classroom, given the diversity of our student population. Watson-Singleton et al. (2019) referenced a need for "culturally responsive" mindfulness-based interventions in order to address the reality that people of color often experience an extra stress, "race-based" stress in their lives (p.133). Given the work of Baum and colleagues (2013), that focused on mindfulness training for teachers and the direct effect it can have on students, along with the work of Watson-Singleton et al. (2019), it is important to provide culturally relevant mindfulness training, to a diverse group of participants, in order to have the greatest positive impact on students of color in classrooms. As Pettway (2017) argues, mindfulness can be one tool used as part of a school's focus on equitable practices for all students, but it must be used in a culturally sensitive manner with students.

Suggestions for Future Research

The results from this PDSA cycle of mindfulness intervention are promising. There is still much work to be done in order to expand training among educators in order to address their stress management and resilience. Furthermore, there is much work to be done to prepare educators to be able to use their mindfulness training strategically in the classroom to impact the lives of students in a positive manner, and help contribute to positive student outcomes.

For future participants, the researcher recommends keeping the original six-week plan of introductory lessons in mindfulness alternating with weeks for participant check-in. Expanding from that, the researcher recommends adding at least two additional phases to the training to potentially expand participants' skills. The 2nd phase of training would include lessons and practice to focus on participants using their mindfulness in the specific context of their workplace, including training on classroom specific actions that educators could use to impact their relationship with students in their class. Data collection instruments should be designed to capture the impact of participants use of mindfulness within the context of their workplace and classrooms, in order to gauge the effectiveness of mindfulness on educator stress in the workplace, as well as educator and student experience in the classroom. It is important to start with the fundamental training of introductory skills, but it is also important to move forward with phases of training designed to better understand outcomes over time in school settings, for both the adults and the students.

Given the small number of participants, it is also important to plan for ways to engage more participants in the experience. The researcher recommends expanding this training to include more schools in the local school district, instead of just one school, in order to increase participation. Furthermore, specific effort should be made to address the challenges of recruiting a more diverse set of participants. If there is not an available person of color trained in

mindfulness, one idea would be for the trained trainer to partner with a person of color who does have a related background in social work or mental health counseling in order to create a diverse, partnered experience for participants.

Conclusion

The aim of this proposal was to increase educator resilience to stress at a Hill Top Public Schools High School. To reach this aim, a six-week intervention of mindfulness training in the form of "Mindfulness" sessions was offered to educators at the high school level. Improvement science, including PDSA cycles was used as part of an intervention plan to incorporate alternating mindfulness lessons for educators with weekly practice. When this intervention was planned, the researcher had no idea that the intervention would be taking place during the emergence of a global pandemic, that would impact communities world-wide and would lead to at-home schooling for students and faculty and staff at the school where the intervention was offered.

Educator stress is a major concern in today's schools. Teachers' reactions to different categories of factors that contribute to stress in the school environment impact not only their own personal outcomes, but potentially student outcomes long term. In addition to the positive data collected throughout this intervention, the participants' request to continue mindfulness training beyond the end of the formal intervention is a positive sign that educators found this intervention worthwhile in helping them improve their feelings of stress and resilience.

In implementing mindfulness training it is important to keep cultural competencies and equity for students and participants as a priority. Schools and communities are increasingly demographically diverse, while mindfulness trainers historically have not been as

demographically diverse. This is something that continues to be at the forefront of attention as more mindfulness training, including more in-depth training, is offered in the future.

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Appendix A

Mindfulness Flyer/Advertisement

Dear Faculty and Staff of CHCCS High School:

Do you feel overwhelmed by everything you have to do on a school day?

Have the challenges of the pandemic and virtual learning added to your daily source of stress?

Would you consider yourself "Stressed Out" more often than not?

Are you interested in learning new techniques to manage your stress and everything that must get done?

Starting September 2nd CHCCS is offering "Mindful Wednesdays" for interested Faculty and Staff! September 2nd will be an informational session. "Mindful Wednesday" sessions will start September 9th and continue each Wednesday for the following 6 weeks. Sessions will include learning and practicing Mindfulness techniques, group discussions and homework assignments to practice new skills. Sessions will be held at 10am and will last approximately 45-50 minutes each Wednesday.

If you are interested in participating or have questions about the upcoming Mindfulness Wednesdays, please contact me, Stefanie Kotzen, at SKotzen@chccs.k12.nc.us.

Kindly,

Stefanie Kotzen

Appendix B

Participant Consent

Western Carolina University

Consent Form to Participate in a Research Study

Project Title: Building Educator Resilience through Mindfulness

This study is being conducted by: Anna Hipps, Ed.D student, Western Carolina University, and Assistant Principal Hill Top Public Schools.

Description and Purpose of the Research: You are invited to participate in a research study about the use of mindfulness techniques by educators. By doing this study we hope to learn more about educators' use of mindfulness techniques to manage the stressors faced as employees in school settings. We hope to learn more about the level of resilience educators report having during and after their 6 week mindfulness training.

What you will be asked to do: Mindfulness training will consist of 6 sessions, starting September 9th, 2020 and continuing for the next 6 weeks. There will be one additional request to complete the Program Completion Survey one month after the final session. Weekly sessions will consist of 1 of 2 different sessions: Week 1, 3, and 5 sessions will consist of a Mindfulness lesson presented to participants by the lead Mindfulness trainer. Participants will be taught a new school and given the opportunity to practice the skill during the session. During Weeks 2, 4, and 6 Participants will participate in a group discussion session about their experience with practicing the mindfulness techniques learned the week before. Sessions will take place on a Wednesdays at 10:0am (or TBD) and will last approximately 45-50 minutes. At each session participants will be asked to complete a warm-up activity of questions, as well as an exit ticket activity with two questions. Participants will also be asked to complete surveys about resilience

during Weeks 1, 3 and 7. On the 7th Monday participants will complete a program "wrap-up" session including a survey designed to collect data about the participants experience in the training. Participants will be assigned homework assignments each week that will involve practicing the mindfulness skills that have been taught in past weeks.

Risks and Discomforts: We anticipate that participation in this study will not pose risk or discomfort to participants at any time. If it does, participants can stop participating immediately and withdraw from the study, by notifying the Mindfulness Mondays trainers that they wish to do so.

Benefits: There are no direct benefits to you for participating in this research study. The study may help us better understand mindfulness, stress and resilience in educators. If you would like a copy of the results once the study is complete, that can be provided and may be considered an informal benefit.

Privacy/Confidentiality/Data Security:

If collected data will be confidential:

The data collected in this research study will be kept confidential. You will be asked to create a personal identifying pseudonym to be used in place of your name each time you complete an intervention survey. Participation in research may involve some loss of privacy. We will do our best to make sure that the information about you is kept confidential, but we cannot guarantee total confidentiality. We will share only the minimum necessary information in order to conduct the research. Your personal information may also be given out if required by law, such as pursuant to a court order. While the information and data resulting from this study may be presented at scientific meetings or published in a scientific journal, your name or other personal information will not be revealed.

We will collect your information through qualtrics surveys**.** This information will be stored in a restricted access folder to be kept secure.

If data collected has the potential to trigger mandatory reporting responsibilities:

There are two circumstances where we would be required to break confidentiality and share your information with local authorities. The first is if we become aware or have a reason to believe that a child, an elder, or a disabled individual is being abused or neglected. The second is if you make a serious threat to harm yourself or others.

If data is collected using an online survey or data collection tool (even if anonymous):

The research team will work to protect your data to the extent permitted by technology. It is possible, although unlikely, that an unauthorized individual could gain access to your responses because you are responding online. This risk is similar to your everyday use of the internet.

If direct quotes may be used in dissemination:

If you give the research team permission to quote you directly, the researchers will use the pseudonym you select to use and will generalize your quote to remove any information that could be personally identifying.

Voluntary Participation: Participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty. If you choose not to participate or decide to withdraw, there will be no impact on your standing as an employee of CHCCS. Should you decide not to participate or to withdraw before the full session ends, simply notify the Mindfulness Monday training leaders that you no longer wish to participate.

Compensation for Participation: No compensation will be provided for this study.

Contact Information: For questions about this study, please contact **Anna Hipps** at **919-260-2341 or aehipps2@catamount.wcu.edu**. You may also contact Dr. Heidi Von Dohlen, the principal investigator and faculty advisor for this project, at hbvondohlen@email.wcu.edu.

If you have questions or concerns about your treatment as a participant in this study, you may contact the Western Carolina University Institutional Review Board through the Office of Research Administration by calling 828-227-7212 or emailing irb@wcu.edu. All reports or correspondence will be kept confidential to the extent possible.

You will be given a copy of this information to keep for your records.

I understand what is expected of me if I participate in this research study. I have been given the opportunity to ask questions, and understand that participation is voluntary. My signature shows that I agree to participate and am at least 18 years old.

Participant Name (printed): _____

Participant Signature: _____ Date: _____

Name of Researcher Obtaining Consent: Anna E. Hipps

Researcher Signature: _____ Date: September 2020

If you would like to receive a summary of the results, once the study has been completed, please write your email address (as legibly as possible) here:

Appendix C

Resilience Self-Reflection

Resilience is the ability to navigate and recover from adversity with awareness, intention, and skill.

Resilience develops naturally through healthy connections to others, balanced self-care, and an open,

engaged mind.

_____

Rate yourself on the items below, using the following scale:

In the past 3 months, how often has this statement been true for you?

1= Never or Rarely

2= Sometimes

3= Often

4= Always or almost always

Q2 Click to write the question text

	1 (1)	2 (2)	3 (3)	4 (4)
Connections: I have close, supportive people in my life, whom I trust AND who know each other. (1)	○	○	○	○
Benefiting Others: I strive to benefit others without depleting myself or imposing unwelcome efforts. (2)	○	○	○	○
Physical Self-Care: I am physically active for 30-60 minutes daily, sleep consistently and adequately, spend at least an hour in outdoor daylight, and eat a balanced and moderate diet mostly of wholesome, minimally processed foods. (3)	○	○	○	○
Stress Reduction Practice: I participate in at least one practice to quiet my mind and body. (Examples: deep breathing, time in nature, prayer, journaling, sensory grounding, meditation, yoga, tai chi, qigong, progressive muscle relaxation, autogenic training, biofeedback, imagery work.) (4)	○	○	○	○

Flexible Thinking: When I am going through a difficult time, I consider multiple perspectives on it as well as multiple options for responding to it. (5)

⭘　　　⭘　　　⭘　　　⭘

Self-Confidence: I trust myself, my intuition, and my abilities. (6)

⭘　　　⭘　　　⭘　　　⭘

Openness to Experience: I seek and enjoy experiences new to me. (7)

⭘　　　⭘　　　⭘　　　⭘

Workability: I approach challenges as through I can work through them somehow. (8)

⭘　　　⭘　　　⭘　　　⭘

Awareness: I notice the world around me, and I anticipate opportunities and challenges because of what I notice. (9)

⭘　　　⭘　　　⭘　　　⭘

History of Adaptive Coping w/Adversity: When I have faced adversities, have found healthy and adaptive ways to work through them. (10)

⭘　　　⭘　　　⭘　　　⭘

Willingness: When challenges arise, I face them and I do not deny them, ignore them, or use alcohol, drugs or self-harming behaviors to avoid or cope with them. (11)

⭘　　　⭘　　　⭘　　　⭘

Engagement: I engage earnestly in one or more activities that offer a positive challenge, focus my attention, and deeply reward me. (Examples: meaningful work, playing a musical instrument, dance, artistic expression, volunteering, sports, deep learning). (12)

○　　　　　○　　　　　○　　　　　○

Big Picture: I keep perspectives on my challenges by considering the bigger picture. (Examples: Looking beyond my challenges to consider my strengths, supports, resources, opportunities, and privilege. Considering my challenges in the context of the adversity that others face. Considering the humor in life's challenges and absurdities. Looking for what I can learn from current and past challenges.) (13)

○　　　　　○　　　　　○　　　　　○

Reviewing Your Overall Resilience

Score	Assessment
36 or higher	You are likely to view yourself as resilient. Assuming your view is accurate, you are likely to thrive in the face of challenges and could serve as a strong support and role model for others.
21 – 35	You are likely to view yourself as having adequate resilience, and you will likely do fine with most challenges. Unless you are selling yourself short on your assessment, you have some room for enhancing your resilience. Read below to learn more.
20 or lower	You are likely to view yourself as struggling or having limited options in the face of difficult challenges. Lower scores sometimes reflect having some strengths but limited options. Low scores across items are common among people who have had few challenges early in life or have been overwhelmed by challenges early in life. History is not destiny! Read below for ways to enhance your resilience.

Enhancing Your Resilience

1. Review the 13 items in the *Resilience Self-Reflection exercise*. The items are written to encourage self-reflection as well as relay enough information to help you begin to explore the many aspects of resilience. The lists of examples in some items are not meant to be exhaustive, so consider other current practices of yours that meet the defining criteria. This is an empirically-informed self-reflective exercise, for a validated measure, see #3 below.

2. Balance between maintaining existing strengths (scored 3 or 4) and building on the items you could most readily enhance (scored 2 or 3). While many people are inclined to focus first on addressing greatest vulnerabilities (scored 1), a more effective strategy is to make initial gains with less effort by focusing on middle scores. Note that items are not in any particular order, but generally our healthy connections best predict resilience. If scores were low on the first two items, *Connections* or *Benefitting Others*, efforts to build first on these aspects of resilience would likely show a greater return for effort, although poor sleep habits undermine most people's resilience and energy for any effort. A highly resilient person tends to have close connections to at least a few other people, and those people communicate with each other to collectively support that mutually valued person.

3. Learn more about resilience. A basic resource is *The Road to Resilience*, a brochure published by the American Psychological Association and available free at…http://www.apa.org/HELPCENTER/road-resilience.aspx Also, this handout is just a self-reflection exercise: For an empirically validated measure of resilience, see Johnson, D. C, Polusny, M. A., Erbes, C.R., King, D., King, L., Litz, B. T. & Southwick, S. M. (2011). Development and initial validation of the Response to Stressful Experiences Scale. *Military Medicine, 176(2)*, 161-169.

4. Ask for support in your efforts to enhance your resilience. Seek local counselors, advisors, or mentors. Personal resilience also is tied to community resilience. A resource to learn more about community resilience is provided by the Community and Regional Resilience Institute at … http://www.resilientus.org/

5. Trust your approach to enhancing your resilience. Some people do best with making a plan first. Some people do best by jumping right in. Some people do best with one change at a time. Some people do best making multiple changes at once. Trust the approach to building resilience that feels right for you.

6. Make adjustments if your approach isn't working for you. Consider shifting to one of the other approaches listed in item 5 above, *Trust your approach*. Or, try a different focus. Or, ask for different kinds of support or ask for support from others you might not have first considered asking.

References

Handbook of Adult Resilience (2010) by John Reich, Alex Zautra, & John Stuart Hall
The Resiliency Advantage: Master Change, Thrive Under Pressure, and Bounce Back from Setbacks (2005) by Al Siebert

Appendix D

Sample Lessons: Faculty Mindfulness

Tool #11
The Power of Breath

LEARNING STYLES

(Note: Each of the mindfulness tools in *The Mindfulness Toolbox* begins with a list of learning styles that best complement each tool. While the practices, or tools, found in this book can be used without considering a client's learning style, matching a learning style to a practice can more readily facilitate change. For more information about using learning styles with clients, refer to Tip #3, *Tapping into a Client's Learning Style*)

When practiced with the eyes and ears wide open (seeing the body move and hearing the rhythm of the breath), this practice connects across a variety of learning styles:

Body-Kinesthetic-Tactile
Visual-Spatial
Musical-Sound

THOUGHTS FOR THERAPISTS

As I once wrote in *One-Minute Mindfulness*, "Your breath is your intimate kiss with this moment." In truth, it is much, much more than that. First, it is a fundamental means by which we can biologically regulate the mind and body and calm the reactive core of the brain. In fact, it's so effective that it is a central means of teaching arousal control to training Navy Seals. Second, diaphragmatic breathing is effective with anxiety and depression because it refocuses the attention away from unproductive mind wandering, as well as anxious thoughts about the future.

By practicing diaphragmatic breathing, also known as belly breathing, we are reconnecting with that same natural, effortless form of breathing that we enjoyed as a baby and young child. But over time, in response to stress, the longer, deeper belly breath became more and more shallow. And the shallow, rapid breath in the upper part of the lungs is exactly what makes us more vulnerable to the body's fight and flight stress response. Fortunately, we can relearn our original default breathing method. It's kind of like reinstalling your body's original programming and rebooting your mental equipment so that it all runs optimally.

Best of all, the idea of taking a calming breath to center oneself is found in cultures around the world, and I have yet to find a culture that doesn't appreciate the idea of breathing as a way to calm down. To introduce the idea of breath, I always like to find out if a client has ever been taught diaphragmatic breathing, and whether they use it and have found it helpful.

29

TIPS FOR WORKING WITH ADULTS

- Don't assume that a client understands how to do belly breathing properly—even if they state that they have already learned it. If someone is using the wrong technique, they may not be getting the full benefits of this practice.
  - Have the client demonstrate how she or he belly breathes. This lets you know whether or not the client is doing this correctly.
- It is helpful to describe how breathing turns on the body's built-in relaxation system. This scientific perspective helps patients grasp how the breath actually engages the thinking part of the brain and blocks reactivity and unhealthy emotions.
- If you are dealing with an anxious client, refer to Tip #6, *Working with an Anxious Client.*

TIPS FOR WORKING WITH CHILDREN

Children tend to be quite adept at learning the power of self-soothing through this practice. This practice is useful for all the family members to use in order to calm down.

- When teaching belly breathing to children, you will want to adapt the teaching as described in the handout.
- It is often helpful to get children to blow bubbles. Ask them to blow a bigger bubble, and they will need to exhale a longer and slower breath—which is a belly breath. (In contrast, a short, punctuated breath will produce many tiny bubbles).
- Another idea is to have children to blow on a pinwheel and keep it spinning for as long as they can—again requiring a long, slow breath.
- Instruct children to lie down and place a balloon or piece of paper on their belly. Then, ask them to move the object just by breathing. (Belly breathing is easier when lying down on the back or the side).

A QUICK BIOLOGY LESSON ABOUT THE VAGUS (NOT THE LAS VEGAS) NERVE

Basically, diaphragmatic breathing activates our relaxation system—or what I like to call the air conditioning system of the brain and body. Simply put, diaphragmatic breathing keeps the reactive core of the brain from overheating. Here's how breath accomplishes that in three easy steps:

1. A belly breath causes the lungs to press on the diaphragmatic wall.
2. The diaphragmatic wall in turn pushes down on the abdominal cavity. (Think of balloon that's being squeezed.)
3. The squeezed abdomen spreads outward in the front of the abdomen and the back where it presses on the spine. This causes the abdominal cavity to put pressure on the longest cranial nerve—*the vagus nerve*—which runs all the way down from the brain stem and the spine. When pressed on, the vagus nerve quiets down and turns on the body's relaxation system and regulates the parasympathetic nervous system. (This is in stark contrast to what I affectionately call the "Las Vegas nerve" of the body—the instant gratification nerve.)

THE RELAXATION SYSTEM

You may not want to give clients the entire scenario, but it's a pretty cool and elegant system that we carry with us at all times. Here's the quick rundown of what happens when the vagus nerve gets quieted down:

1. Lowers blood pressure, pulse rate and respiration
2. Cleanses lactate from the blood (lactate increases feelings of anxiety)
3. Increases alpha brain waves (calm and alert)
4. Releases the neurotransmitter serotonin (95% of this feel-good neurotransmitter is stored in the stomach lining and intestines). Serotonin gets into the bloodstream and up to the brain in about 20-30 seconds

Voilà! No wonder breathing helps you feel better and think more clearly.

RESEARCH ON THE BRAIN AND BREATHING

Research has shown that just twenty minutes of diaphragmatic breathing is all that's needed to activate and oxygenate the mindful and thinking part of the brain (the prefrontal cortex).

Suffice it to say, you can share as much or as little of this information as you want. Personally, I find that many adults enjoy learning and talking about the science of breathing—which by the way, activates the thinking part of the brain.

Use the following handout to guide clients through the breath practice.

HANDOUT: LEARNING TO BELLY BREATHE

Instructions: Have you ever seen a baby breathe? With each breath its little belly moves, not the chest. That's our natural breathing method, and with this handout you will learn to use belly breathing, or diaphragmatic breathing, to naturally relax the body.

If you're a chest breather, you're taking shorter, faster breaths. By getting the air in the deeper part of the lungs, you'll actually get 10x more air with each breath. This will be a slower, longer breath—but a *normal* sized breath. **Follow along with the questions below to retrain the breath and get the benefits of belly breathing.**

Question 1: Am I a Chest Breather or a Belly Breather?

To check whether you are breathing shallowly or more deeply, do the following:

1. Sit in a chair, with an erect but comfortable posture.
2. Place one palm on your chest and the other palm on your stomach (below the rib cage and above the navel).
3. Take some normal breaths. Which hand or hands move? If you're not sure, look in the mirror.
4. If the top or both hands are moving, then you're a chest breather. If the bottom hand moves, you're getting a fuller breath. In either case, follow along to get the most out of your belly breathing.

Question 2: How Can I Retrain Myself to Belly Breathe?

You are going to learn a movement that gently stretches muscles that run between the ribs—naturally hinging the ribs open so you can get a more full breath.

1. Reach behind your chair with your arms and bring your hands together.
2. Relax the abdominal muscles so your stomach can move outward as your lungs press on the stomach cavity.
3. Notice if there's more movement in the belly. It's that easy.
4. If you didn't notice any belly breathing, try this posture: raise your arms above your head and clasp your hands behind your neck. This opens the chest area and makes taking a deeper breath easier.

Question 3: How Should I Practice or Use Belly Breathing?

1. Try practicing for 1-minute at a time, three times a day to start.
2. You can notice when you feel tense or stressed, and do a minute right then.
3. Pay attention to your posture, especially if you're sitting at a computer.
4. Practice while standing up or lying down.

Reflections: What time(s) of the day can you practice breathing? _____

_____

_____

_____

32

Are there any challenges you see to using belly breathing? _____
_____
_____
_____

How would this breathing benefit you? _____
_____
_____
_____

33

Tool #16
BE-THIS Sense-Grounding

LEARNING STYLES

The following learning styles are compatible with this practice:

Visual-Spatial

Musical-Sound

Bodily-Kinesthetic-Tactile

THOUGHTS FOR THERAPISTS

Sense-grounding—getting connected to any of the senses through hearing, sight, smell, taste and touch—is an evidence-based practice for constructively distancing from anxious thoughts, rumination, craving, and emotional negativity. Grounding practices have even been shown to be helpful when someone is experiencing trauma, flashbacks, PTSD, or other extremely high levels of negativity.

Grounding practices are not meant as replacements for other long-term methods of dealing with trauma or flashbacks. Yet they are important because they serve as an invaluable, effective, and portable means of helping patients self-regulate at times of negative triggering. The ability to practice grounding almost anywhere can be especially helpful when other resources may not be available.

For anxious clients or patients who are often "in their heads," the *BE-THIS Sense- Grounding* is an ideal, multi-purpose method for engaging all the senses and coming back to the present moment. The practice also builds up a patient's confidence in his or her ability to de-escalate from negativity and be more in control.

TIPS FOR WORKING WITH CLIENTS

The handout below integrates different forms of mindful sense-grounding. The *BE-THIS Sense Grounding Practice* utilizes all the five senses.

- As a prelude to the *BE-THIS Sense-Grounding Practice*, start with Tool #11, *The Power of Breath*. This will familiarize the client or patient with the diaphragmatic breathing, or belly breathing practice that is built into *BE-THIS Sense-Grounding*.

47

- You may want to couple this practice with the demonstration of a second grounding method:
  - Tool #23, *Here and Now Pleasantness*—offers a form of mental and visual grounding that is predominantly based on pleasant images, objects, and even memories.

It may be helpful to follow along with the steps below when working with clients:

1. Have clients rate themselves on a 1-7 scale *before* you guide them through each of the practices—with 1 as the lowest level of emotional reactivity and 7 the highest.
2. Read the handout as a script to guide the client through an in-session demonstration of *BE-THIS Sense-Grounding*. (Optionally, as mentioned above, you can also teach Tool #23, *Here and Now Pleasantness*).
3. Immediately after experiencing the grounding methods, have the client or patient re-rate her or his level of emotional reactivity or negativity on the 1-7 scale.
4. Problem-solve with the client to determine which of the mindful grounding methods was most effective.
5. Give handouts of the grounding methods to patients to take home as practice guides.

CLIENT PREPARATION FOR USING BE-THIS-SENSE GROUNDING

Advise clients to prepare for grounding by doing the following:

- Always practice grounding *before* trying to use it in a real world situation. Mindful sense-grounding is a skill, and skills take time to learn. Try practicing for at least 10 minutes a day, or longer, for up to a week.
- Carry your grounding handout with you, or record it and carry the recording with you. Follow along if necessary when using your preferred grounding method.
- If possible, do your grounding where you won't be interrupted or distracted.
- Ground yourself as long as needed to get calm or centered.

HANDOUT: BE-THIS SENSE-GROUNDING PRACTICE

Instructions:

WHAT: "BE-THIS" is an acronym that stands for six powerful grounding skills (Breath, Emotion, Touch, Hearing, Intentional Stretching, Sight/Smell) that put you in touch with all your senses. This lets you redirect your attention away from anxious or negative thoughts and focus on your surroundings in a more positive way.

WHEN: Use "BE-THIS" when you notice emotional overload, such as when you might rate your negative or anxious state as being in the "5-7" range, or high range, when rated on a scale of 1-7, where 1 is the lowest negativity and 7 is the highest.

HOW: The four steps to practicing the "long form" BE-THIS are as follows:

Step 1. Notice when you have gone into emotional overload, which you can do by rating your level of negativity. You don't have to wait until you reach the "high" range to do grounding. In fact, it is a good idea to start practicing early on, when you notice that your level of negativity is in the medium 4-5 range.

In the space below, write down the clues that let you know when you are in the 5-7 range of emotional overload. In other words, what does your emotional overload look or feel like? (For example, this could be a feeling you have in your body, wanting to cry, a sense of anger or helplessness, etc.) The trick is to notice this before you overreact emotionally, or during your emotional overload.

_____

_____

_____

_____

_____

Step 2. Look around and describe your surrounding environment in a single sentence, followed by your intention to practice BE-THIS awareness skills. This could be stated as, "I am standing in the living room at home, and I am practicing my awareness and grounding skills." The purpose of this is to center you in the moment. Practice this right now by writing a sample intentional statement below:

_____

_____

_____

_____

Step 3. Find a place where you can spend approximately five to seven minutes to practice in peace. This can still be done with others present, but it is best when distractions are limited.

49

Step 4. You will cycle yourself through the BE-THIS sense awareness and grounding skills. You can spend approximately one to one-and- a half minutes with each of the BE-THIS grounding skills. Right now, practice each of the six grounding skills as described below:

B—Breathe. For the first minute, use the diaphragmatic breathing practice to stay grounded in breathing. As you move on to the other senses, continue to keep about 25% of your awareness on your breathing.

How did it feel to do this first part of the exercise?

_____

_____

_____

E—Emotion. For the next one to one-and-a-half minutes, let yourself experience your emotions and feelings with a sense of acceptance, without either pushing them away or attaching to them. Just name or label your emotions as if from a safe distance—without adding any judgment of good or bad, by simply saying "feeling of anger" or "feeling of sadness". You might even say where you feel this in your body, such as "tightness in my stomach" or "clenching in the jaw." As you continue to do this, notice if the feelings are less intense or change.

Practice by naming your present emotions/body feelings in the space below. If you're not exactly sure what name to give the emotion, take your best guess and write it down anyway. In this way you are getting to know your feelings a little more closely.

_____

_____

_____

If someone else is involved in your emotional overload, spend another 30 seconds or one minute to notice if it is possible for you to experience empathy with regards to this person. Empathy means imagining how another person feels. It doesn't mean they are right and you are wrong, or vice versa. It just means that you could understand how they might be feeling. If you don't feel empathy, just notice that you don't feel this. When the minute is up, move on.

What thoughts came up for you while doing this portion of the exercise?

_____

_____

_____

T—Touch. For one minute you will practice relaxing touch. Raise your hands to heart level, with your palms facing one another and a few inches apart. Sense any heat and pay attention to your pulse until you can feel it in your hands. Then, take three breaths, each one filling the space between your palms with positive energy. Then, slowly bring your palms together, compressing the energy. Briskly rub your palms together for a few seconds.

Next, place your hands over your eyes for a few moments, then one hand over each temple, then over the back of your head. Let the energy in your hands relax and soothe you. Next, you can place your palms over the top of your chest and slowly sweep them downward over your heart, stomach, thighs, and knees. Lastly, let your arms hang at your side and shake your hands for a few seconds to release any remaining tension.

50

What thoughts came up for you while doing this portion of the exercise?

_____

_____

_____

H—Hear.   For one minute, tune into the sounds of your environment. Let yourself expand your hearing and awareness to let in as many sounds as are possible—even those you make by breathing, moving in your chair, etc. Try listening to each without putting a name or label on it. Just notice each sound, occurring moment-to-moment, second-to-second.

Again, write down whatever thoughts came up for you while doing this portion of the exercise.

_____

_____

_____

I—Intentional Stretching.   For the next minute, set a simple intention and follow up mindfully. You might set the intention to stretch your neck by rolling your head around from right to left in a relaxing circular movement. Or, you might set the intention to raise your arms high over your head as you inhale, then lowering them as you exhale. It's a good idea to think of an intention that helps you release some tension and tightness from the boy.

In the space below, write down some gentle body movements (such as those mentioned above or others) that you could use as an intention and which would help you to relax.

_____

_____

_____

S—Sight/Smell.   For the final minute or longer, use your olfactory, taste and visual senses with curiosity. Do this without thinking about the function of an object, or whether you like or want or dislike it. Simply look around and notice _in detail_ as many different shapes, sizes, and colors of objects as you can—noticing these with an attitude of openness, child-like wonder, and interest. Also, what different scents are in the environment?

Look around the room or environment you are in at this moment. After you have spent time exploring, take a moment to note in the space below some of your observations about the sights and scents around you:

_____

_____

_____

Wrap-Up: Congratulations on completing the _BE-THIS Sense-Grounding_ practice!

Now that you have completed the practice, go ahead and re-rate your level of emotional negativity on a 1-7 scale. How has the number changed?

51

If grounding has been helpful, write down examples of times when this practice could have been helpful in the past, as well as how you could use it in the future. Remember that *BE-THIS Sense-Grounding* is like any skill. The more you practice and use it the better you get at it!

_____

_____

_____

OPTIONAL PRACTICE: *Speed Scan BE-THIS-Grounding*

Sometimes you don't have five or six minutes to reverse overload! Fortunately, you can scan through all of the BE-THIS Sense Grounding skills in just a minute or less.

As before, you can rate and then re-rate your level of emotional negativity on that 1-7 scale both before and after you do the *Speed Scan BE-THIS Grounding*.

Set the intention to do *Speed Scan BE-THIS*. Then, simply state each letter and the word that it represents. Then, you will follow it with a brief experience as follows:

B-Breath: take one or two deep and satisfying diaphragmatic breaths.

E-Emotion: Quickly scan your body from head to toe, sensing for an emotion or feeling in the body. Name that feeling.

T-Touch: Slowly touch one thing nearby or press your feet into the ground.

H-Hear: Notice a single sound that is happening at this very second—even if it is the sound of your breath.

I-Intentional Stretching: State a simple intention to do a single stretch, and follow it up right now.

S-Sight and Smell: Notice one object in front of you, and take one long inhale to see what scent you can detect in the environment.

Tool #35
Take a Stress Pause

LEARNING STYLES

The following learning styles are compatible with this practice:

Visual-Spatial

Musical-Sound

Bodily-Kinesthetic-Tactile

Natural World

THOUGHTS FOR THERAPISTS

In our non-stop high speed, hi-tech world, we are bombarded daily by hundreds, if not thousands, of emails, tweets, advertisements, text messages and Internet pop-up windows. The effect of speed, working across multiple time zones, and porous boundaries between work and home are setting the stage for unprecedented levels of stress.

The ability to pause is a simple act that can allow us to return to the present, to come back to our "senses" so to speak. At another level, slowing down to pay attention in this way accesses the prefrontal cortex, the regulatory part of the human brain. This is required if we are to pause and reflect on the many possibilities awaiting us, rather than just impulsively jumping in without thinking.

Author and philosopher Huston Smith once said, "I have a slow mind, but it's a good mind." So, too, can we embrace slowness as a way to enter that vast reflective space that lies within. This allows us to process and make connections with the whole of our vast life experience. This is known as wisdom, and slowing down helps us access it.

TIPS FOR WORKING WITH CLIENTS

- The *Take a Stress Pause* practice can be bundled very nicely with these two tools as a way of slowing down a hectic pace and finding peace:
  - Tool #11, *The Power of Breath*
  - Tool #16, *BE-THIS. Sense Grounding.*
- This practice can be done anywhere, and it can be useful as a centering practice before entering a moment of uncertainty or transition when moving between two places, or environments.

HANDOUT: TAKE A STRESS PAUSE

Are things speeding up in your life? Do you feel like you just don't have a moment to take a breather? Are you feeling overwhelmed, over-stimulated, and pressured to make too many decisions too fast?

Fortunately, this easy exercise is an ideal way to create a buffer from speed and stress and to slow things down a bit. If you're stressed and reactive, and feel that you would benefit by stepping back, this could be just the way to open a new doorway. In addition, you can take a stress pause anytime you feel stuck in an old habit or routine.

Instructions:

Use the acronym S-T-O-P to take a pause anytime, anywhere. Simply state each letter and then follow along with what it means. "STOP" doesn't mean to stop everything, but rather, to be more present, aware, at ease, and in flow with what is happening all around you. From this centered, flexible, and aware place, you don't have to react out of fear or impulse. You can be more available in order to make better choices and observe all the options and possibilities before you.

S-*Stand*: Slow the pace by standing in place and taking two or three nice, calming, deep belly breaths. By doing this you are making a conscious and purposeful decision to slow things down. You are deciding to be in control, rather than let external pressures trigger you to reaction and stress.

T-*Tune-In*: In this moment, tune-in to your body with full presence. Feel yourself grounded and connected to the earth, just like a favorite tree. Slowly scan the body starting from the tips of the toes and moving up to the top of the head. As you move upwards, be aware of where you may be holding onto tension or negative emotions. Breathe into the tension and let it go.

Optionally, you can visualize breathing a soothing white or golden light into that tension-filled area. Then as you exhale, imagine your breath carrying the tension down the body—finally releasing it through the bottom of the feet. Take as many breaths as needed to release tension and negativity.

O-*Observe*: Change the channel by closely observing your external environment. Focus on the surroundings, taking note of at least three unique or pleasant things—colors, shapes, objects, sounds, or textures that you like. If you are in a familiar environment, look for even the smallest detail you may not have noticed before—like the space between the wood grains on the table, or the different shades of color in the carpet. Just immerse and ground yourself in your surroundings like this for a minute or two as you find something that delights or surprises you.

P-*Possibility*: Pause to reflect on the openness, spaciousness, and possibilities that lie before you. You have just gone off auto-pilot and are now free to choose a new and beneficial direction. If you had been feeling reactive or angry, for example, you can look with fresh eyes at the variety of different choices and options before you. Who says that right now you couldn't sing, smile, call a supportive friend, take a nice walk, or get a scoop of your favorite ice cream? You might even just feel pleased that you have completed this exercise. Stretch your mind and see how far it can go!

Reflections: What was it like for you to S-T-O-P in this way? What did you notice most?

_____

_____

_____

Appendix E

Weekly Warm-Up

Please answer the following "Weekly Warm-Up" questions as part of the Mindfulness Training program.

This survey should take no more than five minutes.

Q1 Please choose today's date.

○ September 9th (1)

○ September 16th (2)

○ September 23rd (3)

○ September 30th (4)

○ October 7th (5)

○ October 14th (6)

Q2 Please enter your study pseudonym.

_____

Q3 How much time did you spend on your Mindfulness learning this past week?

○ A great deal (At least 20 minutes a day) (4)

○ A lot (At least 10 minutes a day) (5)

○ A moderate amount (at least 45 minutes total during the week) (6)

○ A little (30 minutes or less total during the week) (7)

○ None at all (0 Minutes) (8)

Skip To: Q5 If How much time did you spend on your Mindfulness learning this past week? = None at all (0 Minutes)

Q4 If you had not spent this time on mindfulness practice, how would you have spent that time

otherwise?

○ I would have spent the time on work obligations (grading, planning, etc) (1)

○ I would have spent the time on personal obligations (family, childcare, meal prep) (2)

○ I would have spent the time as "down time" (reading, social media, favorite hobbies) (3)

Q5 How did using your mindfulness learning in the past week impact other obligations/duties that you

had?

_____

_____

_____

_____

_____

Q6 Do you have any concerns or questions that need to be shared or addressed? If so, please explain.

_____

_____

_____

_____

_____

End of Block: Default Question Block

Appendix F

Exit Ticket

Q1 The following questions will tell us more about your experience. Please answer them openly and

truthfully.

Q2 Please Choose Today's date.

○ September 9th (1)

○ September 16th (2)

○ September 23rd (3)

○ September 30th (4)

○ October 7th (5)

○ October 14th (6)

Q3 Please enter your study pseudonym.

_____

Q4 How useful do you think today's lesson will be in your mindfulness practice?

○ Extremely useful (1)

○ Moderately useful (2)

○ Slightly useful (3)

○ Neither useful nor useless (4)

○ Slightly useless (5)

○ Moderately useless (6)

○ Extremely useless (7)

Q6 How do you plan to use your new mindfulness learning?

_____

_____

_____

_____

_____

Q5 What concerns do you have about how your Mindfulness training experience will impact your

upcoming week?

_____

_____

_____

_____

_____

End of Block: Default Question Block

Start of Block: Block 2

Q8 In the next section, please rate today's session with the numerical ranking that best fits your

experience, with 0 being the lowest ranking and 10 being the highest possible ranking.

This section has been adapted from the Session Rating Scale (Johnson, L., Miller, S. & Duncan, B. 2000).

Q7 Relationship

	Lowest Score	Highest Score
	0 1 2 3 4 5 6 7 8 9 10	
I felt heard, understood, and respected. ()		

Q9 Goals and Topics

	Lowest Score	Highest Score
	0 1 2 3 4 5 6 7 8 9 10	
We did work on or talk about what I wanted to work on and talk about. ()		

Q10 Approach or Method

	Lowest Score	Highest Score
	0 1 2 3 4 5 6 7 8 9 10	
The trainer's approach is a good fit for me. ()		

Q12 Overall

	Lowest Score	Highest Score
	0 1 2 3 4 5 6 7 8 9 10	
Overall, today's session was right for me. ()		

Appendix G

Mindfulness Training

Program Completion Survey

 The following questions will give you a chance to tell us more about your experience. Please answer

them openly and truthfully.

Q1 Please choose today's date.

◯ October 2020 (1)

◯ November 2020 (2)

Q2 Please enter your study pseudonym.

_____

Questions 3-6 adapted from "Mindful Schools Program Evaluation" (2012).

Q3 How often do you practice mindfulness?

○ Daily (1)

○ 3-5 Times a Week (2)

○ Once a Week (3)

○ Not at all (4)

Q4 Have you practiced mindfulness in your classroom/school setting?

○ Yes (1)

○ No (2)

Skip To: Q7 If Have you practiced mindfulness in your classroom/school setting? = No

Q5 If you have practiced mindfulness in your classroom/school setting, when did you practice? (You may choose more than one answer.)

☐ In the morning, before 1st period (1)

☐ During individual class periods (2)

☐ During lunch (3)

☐ At the end of the day (4)

☐ During class change transitions (5)

☐ In preparation for class or standardized testing. (6)

☐ To address student disruptions to instruction. (7)

Q6 Are there other times that you practiced mindfulness in your classroom/school setting that were not listed as options in the previous question? If so, please elaborate.

_____

_____

_____

_____

_____

Q7 How useful do you believe it is to teach Mindfulness to educators?

○ Extremely useful (1)

○ Moderately useful (2)

○ Slightly useful (3)

○ Neither useful nor useless (4)

○ Slightly useless (5)

○ Moderately useless (6)

○ Extremely useless (7)

Q8 What was the most beneficial aspect of the Mindfulness training program?

_____

_____

_____

_____

_____

Q9 What was the most challenging aspect of the Mindfulness training program?

_____

_____

_____

_____

_____

Q10 How did participating in the Mindfulness training program impact other aspects of your

professional duties?

_____

_____

_____

_____

_____

Q11 How would you improve the Mindfulness training program for the future?

_____

_____

_____

_____

_____

Q12 Is there anything else you want to share about your experience with the Mindfulness training

program?

_____

_____

_____

_____

_____

End of Block: Block 1