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The Impact of Mindfulness Practices on the Dispositions of Eight Third-Grade Elementary Students at an Elementary School in the Southeast Region of the United States

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THE IMPACT OF MINDFULNESS PRACTICES ON THE DISPOSITIONS OF EIGHT THIRD-GRADE
ELEMENTARY STUDENTS AT AN ELEMENTARY SCHOOL IN THE SOUTHEAST REGION OF THE
UNITED STATES

by

Jakob Lauffer

Bachelor of Arts
Muskingum University, 2004

Master of Science
Walden University, 2012

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Accepted by:

James Kirylo, Major Professor

Suha Tamim, Committee Member

Cathy Compton-Lilly, Committee Member

Yasha Becton, Committee Member

Cheryl L. Addy, Vice Provost and Dean of the Graduate School

DEDICATION

To my loving wife, family, and friends. I want to thank you for the encouragement,

understanding, and support that has helped me throughout my life and this undertaking.

Since none of you talked me out of this crazy idea, this dissertation is dedicated to all of

you because God knows I couldn't have done it alone.

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Thank you to my family and friends who have witnessed the journey from the "outhouse to the penthouse", and if you're taking the time to read this, you make the list.

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All of you help keep me grounded and reminded me frequently to never become "an over-educated idiot". Thanks for understanding and holding things down while we were locked away typing the last three years. We can hang out again!

ABSTRACT

The purpose of the study was to examine the impact mindfulness sessions had on the dispositions of eight third-grade students. In the Spring of 2019, mindfulness practices were presented to third-graders in their regular classroom setting every Monday and Thursday over the six-week qualitative action research study. During this time, the teacher-researcher administered 15-minute mindful lessons that aimed to help increase coping strategies in the student population. The instruments used for data collection in this qualitative action research study were: a pre/post-intervention questionnaire, weekly exit slips utilizing multiple choice and open-ended questions, field notes, and digital video recordings. Students utilized Google classroom to respond to the questionnaires and weekly exit slips. The teacher-researcher also wrote detailed field notes immediately following the daily sessions and then would use the videotaped recording to probe deeper into the interventions to look for themes to emerge. The findings support the inclusion of practicing mindfulness sessions in elementary school to positively impact student dispositions. After the comparison of the data was completed, three distinct themes emerged: (a) universal understanding of mindfulness, (b) enjoyment, and (c) value of future practice.

Keywords: mindfulness, coping, stress, action research study

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LIST OF ABBREVIATIONS

MBSR ....Mindfulness Based Stress Reduction

P. A. ....Physical Activity

P.E..Physical Education

PLC .... Professional Learning Community

CHAPTER ONE

INTRODUCTION

It was two school days before the state test; all third, fourth, and fifth-graders came bustling into the cafeteria for the annual Pep Rally to get them excited about taking a high stakes assessment. They watched as various teachers and administrators conducted skits, songs, and a variety of chants to tell them to "Do your best! Pass the Test." This assembly was to remind them to go to bed early, eat a healthy breakfast, and take your time during the state standardized test. This scene is common all over the nation. After all, teachers have averaged about 60-110 hours annually on reviewing for this test (Strauss, 2013). They want to reiterate to the students that this test is very important. Though the scene appears innocent, the message is clear: we have a lot counting on you; you better do your best.

With all this pressure, it is no wonder that stress associated with standardized testing has increased for both teachers and children after the publication of *A Nation at Risk* in (1983). Legislation like *No Child Left Behind* (NCLB) and *Race to the Top* soon followed, incentivizing schools to teach to a test so they could receive funding and escape threats of staff firings and government takeovers for underperforming schools (Ravitch, 2013). In short, these high-stake tests have negatively impacted the environment of the traditional classroom. Added pressures to perform according to regulations are felt by teachers and students alike. According to ongoing reports, most of American teachers say they experience a lot of daily stresses, even at times surpassing levels reported in other

high stakes professions like doctors and first responders (Skaalvik & Skaalvik, 2015; Turner, 2016; Walker, 2016).

It has been shown that almost three out of every four teachers report feeling "moderate" or "extreme" pressure from both school and district administrators to improve test scores (Walker, 2014; Nelson, n.d). Because of the implementation of the aforementioned legislation with their emphasis on standardized testing, school age children are also under more stress (Garruto, Heiser, Simidian, Albert, Catucci, Faustino, McCarten-May, Caci, 2015; Simpson, LaCava, & Graner, 2004). This burden is evident even though in a recent report from Magee and Jones (2014), it showed that two thirds of the public thought statewide test don't provide a fair measurement of how effective schools are, the system continues to thrive as states spend hundreds of millions of dollars and countless hours on testing and test preparation materials (Ravitch, 2013).

The increase in stress to children has both local and national relevance. Across the nation, students are consistently feeling more and more pressure to achieve the high-stakes expectations laid out by the state and national governments (Andrews & Wilding, 2004). As these examinations have become more predominant, they have also become progressively more high-staked in nature. For example, it is not uncommon that statewide tests are used to determine graduation from high school. Moreover, recently these tests have been used to identify individuals who will be required to attend summer school or retained, even in elementary schools. Thus, more students are likely to have anxiety when taking these tests (Huberty, 2009).

Sadly, students also experience stress in many of their home situations as well. The reasons for this stress can vary from parental pressure to achieve academically, split

family homes, abuse and neglect, to lower Socio Economic Status (SES). Exposure to these added examples of stress can lead students to model these behaviors as recent polls suggest eight out of every 10 Americans are afflicted with daily stress (Saad, 2017). Being short on time and feeling stressed was much more commonly reported in employed Americans who were parents to children under 18 than when compared to other adults without these significant obligations (Saad, 2018), it is likely that elementary aged individuals see their parents experiencing signs of these strains.

Stressors are the proximal circumstances that tax or exceed an individual's resources (Gates, 2008). SES is a major factor that increases the risk that stressful situations occur. Living in poverty and having experiences with neighborhood violence, discrimination, high daily workload, and high household density represent specific stressors that happen (Gates, 2008). Thus, student stress levels appear to be on the rise. In a 2013 American Psychological Association report, "Stress in America", teenagers reported stress levels that exceeded those of adults (Lee, 2016). Students are feeling stress in all aspects of their lives and need to learn coping mechanisms that can help them manage and deal with it.

<div align="center">**Statement of the Problem of Practice**</div>

Teachers in the local setting have expressed concerns regarding all the stress that their students are experiencing. As a matter of fact, the teacher researcher even witnessed students in his physical education classroom becoming noticeably stressed when he called a running assessment "a test." The students spent some time then discussing concerns with the teacher researcher about having a test they have not prepared for and what would happen if they failed. They voiced their concern to him about how this

would affect their overall rating on their report card and how their parents would ground them if they didn't get a good grade. The teacher researcher assured them they would be fine, but it was noted that they had become extremely stressed at the mention of the word "test." If they were getting this tense over a running assessment, he wondered how these same students must react to classroom assessments and formal state testing situations. Therefore, the teacher researcher had a conversation with their teachers. They confirmed what was witnessed in the gym; they had seen similar reactions to otherwise trivial assessments. The other teachers also seemed worried about these students and the anxieties that might develop when the state tests arrive, and the students feel the extra pressures to perform.

That is because, like most schools, Southeast Elementary School (pseudonym) still overemphasizes the importance of standardized test scores, resulting in a high stress, high stakes atmosphere (Goldstein, 2008). Not only is third-grade the first grade that is required to take the state test at the end of the year, the score also determines who is retained at this grade level. This is according to the South Carolina's new "Act 284 (Read to Succeed) requirement that, beginning with the 2017-2018 school year, stated that a student must be retained in the third grade if the student fails to demonstrate reading proficiency at the end of third grade as indicated by scoring at the lowest achievement level on the state summative reading assessment SC READY" (2018, para. 8).

Ravitch (2016) reminds us that our goal as a nation is to instruct all children, not just the "winners" of a standardized test-tasking contest. She goes on to explain that a teacher's job it is to awaken a love of learning, which is ignored in a *Race to the Top*

mentality. Testing, furthermore, neglects attributes like originality, imagination, honesty, diligence, and courage that matter more for making a good life then the ability to guess the right bubble (Ravitch, 2016, p. xxvii). Favorable poll results for reducing testing requirements (Layton, 2015) and increasing participation in the Opt-Out Movement (Pizmony-Levy, 2018; Ravitch, 2016) show that parents are looking for less focus on standardized testing scores and more of a well-rounded education for their children. Although some schools have grown their curriculum to include a more holistic approach to education, sadly, it is still the outlier and not the norm in U.S. schools (Rudge, 2016).

As shown locally, students in third grade have added pressures to perform on the end of year high-stakes standardized testing. Students who encounter high levels of text anxiety, or who are unfamiliar with standardized test procedures, may fail to show their true potential on these types of measurement tools (Vogelaar, Bakker, Elliott, & Resing, 2016). Therefore, it is important to deemphasize these stresses, not only for their mental well-being, but for their academic performance as well. In conversations with teachers, many are hesitant to take away from the time that they are required to teach academics. Added pressures because of standardized testing morally require us to explore ways to teach coping skills for these elementary aged students to counterbalance the negative effects of stress.

Being a physical education teacher requires a heightened concern for all facets of the students' health, including their mental well-being. Awareness of the added stressors in students' lives, along with the lack of practical application of coping strategies in educational settings, has caused this teacher researcher to wonder about possible interventions.

Once students experience stressors, they can utilize coping responses to moderate short- and long-term effects of stress (Gates, 2008), but the practically of teaching these coping skills in a regular public-school atmosphere is in question. Upon deeper investigation into coping strategies, researchers have concluded that mindfulness training in elementary-aged students could help counter these stresses (Devcich, Rix, Bernay, Weijer-Bergsma, Langenberg, Brandsma, Oort, & Bogels, 2014). Mindfulness is the "practice of giving our full open-hearted attention to what is immediately occurring, physically and mentally, both within and around us" (Rix, Bernay, & Devcich ,2014, p. 228). Because students at Southeast Elementary (pseudonym) appear to display signs of stress during the school day, it is wondered if exposure to mindfulness practices could help students cope when taught these lessons. Decisions regarding theoretical frameworks and methodologies within this action research were all guided by this wonder.

Research Question

What impact will a series of mindfulness sessions have on the dispositions of eight third grade students at an elementary school in the Southeast region of the United States?

Purpose of the Study

The purpose of the study is to examine the impact mindfulness sessions will have on the dispositions of eight third-grade students at an elementary in the southeast region of the United States.

Kabat-Zinn (2003) describes mindfulness as the way that one pays attention, intentionally trained to the present moment, and masterly maintain an attitude of non-judgment (p. 145). The practice of strengthening mindfulness in an individual involves

two skillsets: self-regulation of attention and awareness of experiences in a nonjudgmental way (Metz et al., 2013). Specifically, the action theory that exists within the mindfulness framework is the idea that practices providing skills that help restore balance to life when strong emotions arise. For example, meditation-like practices in the classroom, such as taking small breaks from instruction, are thought to help increase focus and attention, while teaching student explicitly about parts of the brain and how they respond to stress (Cavazos, 2016).

*See the definition of terms at the end of Chapter One for definitions of mindfulness, mindfulness sessions, and dispositions used specifically for this study.

Methodology

This study applied an action research design to see what impact mindfulness coping practices had on the dispositions of eight third grade students. Through a systematic research framework, mindfulness techniques were implemented, and students' actions and attitudes observed for measuring effectiveness. Self-reported well-being and mindfulness measurement tools were used to create a base-line for comparison.

The teacher-researcher conducted this action research study at Southeast Elementary School (pseudonym). It is a semi-rural school located in South Carolina. The diverse school serves 605 students, 53% male and 47% female. Concerning ethnicity, 60% classify as white, 18% are Hispanic or Latino, 14% are African American, 4% identify as multi-racial, and 3% are Asian. The teacher-researcher has taught Physical Education to pre-kindergarten through fifth grade at this school for 14 years. Through a rotation with Music, Library, Art, Computer, and STEM Lab, each student has P.E. for

approximately 50 minutes every sixth school day. Curriculum focuses on building and strengthening fine and gross motor skills.

The focus of data collection over the six-week intervention was on eight randomly selected third-grade students in one homeroom class. For this study, mindfulness practices were conducted at the beginning of the school day in their regular classroom setting. It was operationally defined as a 15-minute session, implemented as a teacher-led intervention on Monday and Thursdays at 7:50 during a six-week period which began in March of 2019. During that time, the teacher-researcher completed lessons that were adapted from activities he participated in while completing the training of mindfulness educators through the Mindful Schools program (N.D) in December and January of 2018.

The teacher-researcher utilized a questionnaire with the concentration areas being on students' self-assessment of their attitudes towards mindfulness training, their emotional states during the lesson, and their interpretations of the lessons. During this time, students displayed their opinions of school, effectiveness of lessons, and classroom community. Pre- and post-intervention analyses were used to either support or reject the idea that structured mindfulness influences the students' attitudes regarding mindfulness and its practicality in their lives.

The teacher-researcher also had the student participants reflect using an exit slip administered through their Google classroom at the end of each week. The students, already being familiar with this application because of frequent use in their other classroom procedures at the school, were easily able to navigate through this instrument and report their opinions in a safe environment. Throughout the treatment, scheduled times immediately following the mindful practice was allowed for classroom reflections.

As an active observer, the teacher-researcher kept field notes reflecting on key observations he notices while students are participating in the treatments. This was done by setting time aside to re-watch video recordings to help him garner a deeper understanding of what was going on during the lessons. As themes emerged, the teacher could revisit the lessons and look for concepts that might not have developed initially. Through this process of analyzing and then reanalyzing the various data sources, themes were developed and eventually utilized to get a deeper understanding on students' perceived attitudes regarding classroom mindfulness practices in a classroom setting.

Significance of the Study

Deciding on the topic of action research, the teacher-researcher wanted to try and figure out something that could potentially benefit the most students. As a physical education teacher who has witnessed students becoming stressed during minor incidents, the teacher-researcher knew there was a need to help teach students coping strategies. Through discussions within the professional learning community or PLC, teachers are expressing concern for students' increased stresses as well, so mindfulness practices are a possible intervention that could help students cope. Devcich, Rix, Bernay, and Graham (2017) concluded that exposure to hour long mindfulness training could positively affect elementary student's well-beings. With busy schedules, hour-long sessions would not be possible. Can mindfulness practices still be effective when students are exposed to shorter, 15-minute mini lessons?

In education, there has always existed a progressive notion to never stop striving for innovative ideas. Researchers have historically tried to find new ways to help students and teachers succeed. Yet, prior to the introduction of action research, teachers

were considered "outsiders" in the research paradigms. While valuable insights into various practices and learning styles were discovered through the traditional research methods, they did not include the insight of the ones closest to the students, the classroom teachers (Dana & Yendol-Hoppey, 2014).

Educators, found in the trenches of education, are reporting the negative implications of over-testing in American schools. Stress levels and little creativity in curriculum develop have developed classrooms that lack character development and innovative thinking. Mindful trainings might help loose the stifling feeling of over-standardized learning environment. If mindfulness in schools were to cultivate moral and civic virtues, Simpson (2017) concludes that it will not only provide coping skills for the stressful world students live in but could also foster compassionate 'pro-social' action. Because Ravitch (2018) concluded that public education is the foundation of democracy, she also supports an educational institution that includes practices that reflect values other than what can be quantified on a standardized assessment. Therefore, practices, like mindfulness, might hold great value in widening the expectations of student growth to a more holistic approach for future school systems.

Positionality

John Dewey (1938) stated, "There is an intimate and necessary relation between the processes of actual experience and education" (p. 20). Through my experience and education, I have seen the importance of being able to teach the entire student. I want to use action research to demonstrate how teaching students coping mechanisms to deal with stress can be beneficial. Just as we talk about strengthening your heart by exercising and restraining from adding alcohol or tobacco into your body, this action research uses

mindfulness theory to help students underscore how their choices affect how they process and interpret the busy world around them.

My position as a male teacher in a predominant female job adds an extra importance to this study. The stereotype of the male physical education teacher tends to be one that exhibits physical, assertive, and aggressive behavior (e.g., aggressive, dominant, self-confident, and competitive) (Spittle, Petering, Kremer, & Spittle, 2012). Utilizing Albert Bandura's (1961) Social Learning Theory, I will be utilizing modeling of mindfulness practices to measure effects on student dispositions with an added benefit of shattering preconceived notions of how men "should" act.

Limitations of the Study

Herr and Anderson (2005) explain that "most insider action researchers are doing the inquiry while continuing to carry the rest of their workloads" (p. 78). Teachers, for example, are often reflecting on the needs of their students and constantly reevaluating the effectiveness of their instructional decisions. This insider position allows for many benefits as a deeper familiarity with the participates and the local problem are already established. Being conscious of any biases that develop because of this insider action research positionality will help strengthen the overall findings at the end of the study.

For instance, the Hawthorne Effect was a concern for this study because participants were the students in the teacher-researchers class. As an insider, it is possible that the students may have said what they thought I wanted to hear to please me. He continually encouraged students to give honest responses during discourse, journal writing and on surveys, reminding them that there were no consequences for their responses. He also reminded them that their accurate responses were important for the

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credibility of the research. There is also the possibility that his own biases, either positive or negative, toward some of the participants may have affected his judgment of the data (Mills, 2018).

Another potential limitation is the shortness of the length of study; it will only be six weeks long. The teacher-researcher can only see his classes two times a week during that period. Therefore, the amount of treatment that students are experiencing is limited, resulting in a decrease in internal validity. With only eight participants, the results can't be generalized for all students. Mertler (2016) also emphasizes that generalizations cannot be made because of the data limitations resulting from the action research framework.

Summary of the Findings

According to Katz and McClellan (1997), dispositions are frequent and voluntary habits of thinking and doing. Therefore, the instrument tools utilized in this study sought to measure the effects of the mindfulness unit of instruction on both the cognitive processes and behaviors of the third-grade student participants. The findings of the study indicate that student's dispositions were positively affected when they received lessons on mindfulness practices and coping strategies.

Specifically, the results indicated that students perceived an increased awareness of the value of having these types of experiences in the classroom because it helped produce a sense of calmness both within themselves and around them in the learning environment. Students overwhelmingly reported effectiveness of training in increasing their confidence of emotional regulations and frequently reported utilizing techniques in reducing anxieties outside of school. Because student participants found value in their

own lives, they concluded that educators should also be exposed to mindfulness to help them develop their own coping skills for the classroom.

The teacher-researcher also found value in the intervention's effects on the duration in which students could mindfully sit, concluding that further research should be conducted to find out how mindfulness could help with attention spans. Overall, the findings support the inclusion of practicing mindfulness sessions in elementary school to positively impact student dispositions.

Dissertation Overview

Chapter One of this dissertation included an overview of constructs and methodologies being studied in this action research leading to a defined Problem in Practice and research question. Chapter Two is a review of the scholarly literature, which provoke the theoretical framework that inform the study. The third chapter is an in-depth analysis of the methodologies used for data collection. Chapter Four is a discussion of the findings and thorough analysis of the data discovered from the study. In Chapter Five, conclusions are laid out with implications for future studies and an action plan is discussed.

Definitions of Terms

Action research: According to Mertler (2014), "Any systematic inquiry conducted by teachers, administrators, counselors, or others with a vested interest in the teaching and learning process or environment for the purposes of gathering information about how their schools operate, how they teach, and how their students learn." (p. 305)

Dispositions: According to Katz and McClellan (1997), dispositions are frequent and voluntary habits of thinking and doing. Katz and McClellan (1997) describe some social

dispositions, including "the tendency to be accepting, friendly, empathetic, generous, or cooperative as more desirable." (p. 7)

Interventions: The systematic process of assessment and planning employed to remediate or prevent a social, educational, or developmental problem: *early intervention for at-risk toddlers.* (Heritage Dictionary, 2011)

Mindfulness: Based on Jon Kabat Zinn: According to Jon Kabat-Zinn, "Mindfulness is the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" (Kabat-Zinn, 2003, p. 145).

Mindfulness Sessions: For this study, mindfulness sessions will be defined as a series of 15-minute sessions that will occur two days a week that focuses on respective aspects relative to the practice of mindfulness.

Mindful Schools: This was the online program the teacher-researcher participated in to help further deepen his understanding of mindfulness to better teach an adaptation to his students.

Student Health and Fitness Act: Introduced to the state senate April 18, 2005 and signed by the Governor on June 1, 2005. This act established nutritional and physical education standards for schools in South Carolina. (Students Health and Fitness Act of 2005, p. 3).

CHAPTER TWO

REVIEW OF LITERATURE

The teacher-researcher believes an awareness of both mental and physical health is important to teach students as he looks to teach in a more holistic fashion. The constitution of the World Health Organizations (WHO) *(*2006) declares, "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (p.1). The WHO declaration shows just how important having a healthy mind, body, and spirit truly is when they make this declaration. However, we know that the human condition is such that it is exposed to various stressors.

There are many causes for the stress and anxiety that people are feeling in society today. Waszczuk et al. postulate the importance of identifying individuals at an early age, because adolescence is a period of heightened brain plasticity (2015). It is theorized that mindfulness might be useful in preventing stress and anxiety in young people. To that end, this review will discuss why and how school-aged children are experiencing more stress-related symptoms and how educators are seeking to help them cope. This will look at the historical and theoretical ways in which people have tried to deal with stresses, more modern holistic approaches to education, and the role that mindfulness techniques can play in benefiting our students.

Stresses

The term "stress" was borrowed from the field of physics by one of the founders of Stress Research, Canadian physician, Hans Selye (1965). Merriam-Webster's (2017)

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definition of stress used in physics "is a force exerted when one body or body part presses on, pulls on, pushes against, or tends to compress or twist another body or body part; especially: the intensity of this mutual force commonly expressed in pounds per square inch (para. 1). Selye (1965) began using this term after completing medical school in the 1920s. He observed that all his patients had something in common; they all appeared sick and under what he described as "physical stress." Since then, the application of rigorous scientific methods to assess these vague clinical perceptions has made stress physiology, the study of how our body react to stressful events, a real discipline (Joshi, 2005). Today, there is an astonishing amount of physiological, biochemical, and molecular information available on how all sorts of intangibles in our lives, such as "emotional turmoil, psychological characteristics, our place in society, and the sort of society in which we live," can affect very real body events (Joshi, 2005, p. 21). While it is known that the human body induces a complicated physiologic response to emotional or physical stresses, little is still understood about the complexity of stress and how to fully combat it (Cool & Zappetti, 2019).

Nobody wakes in the morning with the goal of feeling "stressed out." Unfortunately, the growing trend in America is that we are feeling more and more pressures resulting in the increase in anxiety and stress levels in society today. According to a study conducted by the American Psychological Association, Americans are feeling more stress in their lives than in any point in time during the last ten years (Belar et al., 2017). Though, historically speaking, there have always been stresses, the ways in which individuals explain its theoretic perspectives and coping mechanisms have

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changed over the years as individuals and society seek a more harmonious relationship with the world around them.

Though there can be variants among the general population, statistically speaking, trends can be found amongst the data with correlations to higher stresses according to gender, marital status, socioeconomic status (SES), and race. While not evident in all situations, statistics can help heighten educators' awareness of populations with increased probabilities of stressful home lives and increased need for coping mechanisms. For instance, women are more likely than men to report higher levels of stress and physical symptomatic effects of it on their bodies, such as headaches or upset stomachs (Majumder, Nguyen, Sacco, Mahan, & Brownstein, 2017; Ta, Gesselman, Perry, Fisher, & Garcia, 2017). Also, the data analysis of a study by Ta et al. (2017) on singlehood and stresses in America concluded that those who were younger, female, had children, and identified as white reported higher levels of economy/money-related stress and stresses related to loneliness than respondents who were older, married, did not have children, and identified as nonwhite.

This means that children from these households have an increased chance of exposure to higher stress environments than their counterparts. Socioeconomic status can also negatively affect students' social, emotional, and cognitive abilities. Keenan, Shaw, Walsh, Delliquadri, and Giovanelli (1997) stated that one quarter of impoverished youth have social and emotional difficulties relative to their more economically advantaged peers (as cited in Mendelson, Greenberg, Dariotis, Gould, Rhoades, Leaf, 2010).

Theories of Stress

Krohne (2002) explained that theories that focus on the specific relationship between external factors, the stressors, and bodily responses, the stresses, can be grouped in two specific theories: approaches like Selye's (1976), which are based in physiology and psychobiology, and approaches such as Lazarus's (1990), that focus on established "psychological stress" within the field of cognitive psychology.

Physiology and Psychobiology: Selye's Theory

Selye (1965) began turning the abstract concept of "stress" into a common, everyday term in 1936 after using it to describe the non-specific physiological defense reaction he was observing in his experimental lab animals. During his experiments, Selye (1965) noticed the "syndrome of just being sick" (p. 98). Through the impure extracts and other damaging agents that were being tested on the lab rats, the adrenal enlargement, gastrointestinal ulcers, and thymic lymphatic involution were all objective indicators of stress in the test subjects (Selye, 1965). He explains, "It gradually became evident that any agent that demands an increased vital activity automatically elicits a nonspecific defense mechanism which raises resistance to stressful agents" (Selye, 1965, p.96).

The whole stress syndrome or general adaptation syndrome evolves in three stages: (1) the "alarm reaction," during which defensive forces are mobilized; (2) the "stage of resistance," which reflects full adaptation to the stressor; and (3) the "stage of exhaustion, which inexorably follows as long as the stressor is severe enough and applied for a sufficient length of time" (Selye, 1965, p. 98).

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Though there were many critics of Selye's Theory, one strong ally in his move from the laboratory to real world understanding was the military as they looked to find operational definitions of stress after World War II (Viner, 1999). Stress was now looked at as a weapon that could be used for psychological warfare in the fight against communism. The fascination with stress remained through the 1970s as evident of the vast research conducted on this topic, where over one third of all stress research was conducted within the U.S. military institutions (Viner, 1999).

For Hans Selye, civilization, on both the individual and societal levels, was disorderly and unhealthy. He saw "diseases of civilization" caused by poor adaptations to modern industrial life and shared the widespread concerns about the future of Western civilization in the face of perceived social instability, suggesting that Stress Theory offered a way of preventing "destructive, revolutionary, social activity" (Viner, 1999, p. 398).

Selye (1974), who tended to create new names and concepts, introduced the ideas of distress and eustress to distinguish whether the stress response was evoked by negative, unpleasant stressors, or positive emotions (Szabo, Tache, & Somogyi, 2012). It took Selye almost four decades to recognize that not all stress reactions are equal (despite the stereotypical neuroendocrine effects) because of the variances in the subject's perception and emotional reactions (Szabo, Tache, & Somogyi, 2012). Although not discussed in his early work, Selye and Tache (1985) eventually introduced the notion of coping as a way of "removing stressors from our lives, by not allowing certain neutral events to become stressors, by developing a proficiency in dealing with

conditions we do not want to avoid and by seeking relaxation or diversions from the demand" (as cited in Rice, 2012, p. 26).

His research helped open the discussions for the negative effects of stress in a person's life but had overall weaknesses in his theory. Much of the criticism of Selye's work evolved from the overly simplistic view of stressors as existing somewhere objectivity outside the person (Devonport, 2011). Therefore, the stimulus-based occurring with simultaneous environmental demands and individual susceptibilities developed in Lazarus's Theory of stress.

Psychological Stress: Lazarus Theory

While some thought of stress as a single variable that affects the biological wellbeing and behaviors of an individual, Gruen, Folkman, and Lazarus (1988) saw it as more of a "complex system of variables" (p. 744). They viewed stress as a product of numerous interactions with people and environmental antecedents, mediating processes, and short-term and long-term outcomes, each capable of influencing the other (Gruen, Folkman, & Lazarus, 1988). With this viewpoint, it can be rationalized why daily stressful events, or "daily hassles" do not have the same significance for each person. "Those hassles which reflect ongoing themes or issues of particular concern in the person's life should have more impact on the psychological and physiological economy of the person than others" (Gruen, Folkman, & Lazarus, 1988, p. 744). Describing it as transactional implies that no one component can be viewed as stress because each is viewed as relationally connected to all parts of the context within which the stressful encounter took place (Lazarus, 1990). Lazarus suggests that "we can turn our attention away from the troublesome concept of stress and embrace discrete emotions as better

expressing the nature of what it is individuals are experiencing" (as cited in Dewe, O'Driscoll, & Cooper, 2012).

Psychological stress is defined as the relationship between person and environment (Lazarus, 1990). While the relationship with stress can either tax or exceed the person's resources, the ongoing analysis of encounters are appraised by the individual as involving harm, the threat of harm, or a positive, eager attitude about overcoming obstacles which are called challenges (Lazarus, 1990). Once someone has appraised a transaction as stressful, coping skills are brought into play to manage the broken person-environment relationship (Lazarus, 1990).

Stresses in Children

There have been growing concern of stresses in childhood. Specifically, there has been an increased interest in a child's subjective wellbeing (SWB), defined as emotional, cognitive, and affective perceptions on the world around them (Kaye-Tzadok, Kim, & Main, 2017). Ben-Zur (2003) refines the definition to encompass several dimensions, including positive affect, distress (negative affect), and life qualities which could indicate satisfaction with life generally or with a specific area of life. The concept of well-being at first glance seems to be very theoretical in nature. The boundaries of this notion are elastic and abstract. It is usually thought of on a personal level for how it is best for the individual.

Stress can be such a significant factor in children's lives (Grant et al., 2006; Greder, Peng, Doudna, & Sarver, 2017). They are evident in rural (Greder et al., 2017) and urban (Browne, 2014-2015) communities. The level of stress can vary and stem from several things such as severe violence, death of loved ones, poverty and economic

hardships, and abuse (Grant et al., 2006; Goodman et al., 2011). Even experiencing

natural disasters can affect stress levels in children, often at much higher rates than in

adults (Lai, Beaulieu, Ogokeh, Self-Brown, & Kelley, 2017). Findings from other studies

often reveal that children report higher stress levels than parents, signaling a vulnerability

in youth that should not be ignored (Lai et al., 2017). As adults who interact with

children daily, we strive to help our students deal with stress before it consumes them.

Unfortunately, current American public-school practices are not designed to cope with

these significant needs (Browne, 2014-2015).

Albert Bandura's (1963) Social Learning Theory (SLT) emphasizes that children

learn through their observations of others' behaviors and the consequences that follow.

Children carefully observe those around them and imitate such behaviors, especially in

the modeling of adults. Bandura (1961) concluded this from his infamous "Bobo" doll

experiments in the 1960's where children modeled aggressive behaviors they had

witnessed enacted on a doll. In a perfect world, we would limit the amount of stress that

they are exposed too, and we certainly try to do this as mentors. Giving the students a

variety of mechanisms to cope with stress help them be able to process these events in a

healthy manner. Having the ability to regulate their emotions is associated with higher

levels of happiness and learning outcomes in children (Vickery & Dorjee, 2016).

Stresses in Academic Settings

In 2001, after growing concern that America's education system was falling

behind global competitors, Congress passed the *No Child Left Behind Act* (NCLB) with

overwhelming bipartisan support (Klein, 2015). With it came a huge shift in the

government's role in education. Pressures increased for schools to teach to the test as

mandates trickled down from Washington. According to the requirements, schools were obligated to bring all students' mastery of standardized testing materials to "proficient" level by the 2013-2014 school year. This resulted in overemphasis of test strategies and added teacher accountability on these scores.

When President Obama came into office, many advocates for public education were hopeful that positive changes could be made to reverse these crippling legislative decisions that were put in place during the Bush Era. Yet, these hopes were quickly demolished with his education policies created at the beginning of his first term. With *Race to the Top*, the government quickly set the tone for another era of over-testing for the sake of measuring school effectiveness. The administration advocated for standardized testing, school of choice, teacher merit pay, and tough accountability measures like school closings and created an education system where competition was viewed as an acceptable way to award federal funding (Ravitch, 2013). Because schools are being constantly pressured to meet higher and higher achievement goals as set forth by government policies, school districts have been implementing rigid assessment programs within their schools (Ayers, 2004; Darling-Hammond, 2010; Ravitch, 2010).

Testing anxiety in students is well documented and can manifest itself in many forms, from crying, yelling, and overeating, to not getting enough sleep, nervousness, anger, and isolation just to name a few (Sotardi, 2016; Triplett & Barksdale, 2005). On a normal basis, these are not emotions that educators would encourage students to associate with a school setting. Unfortunately, with the prominence that many put on high-stakes testing now, this is what is happening more and more frequently to our students.

Teachers can help proliferate these issues or can be the ones who give these students the tools to help remedy this matter (Harris & Coy, 2003).

Students in all three regions, the Western region (Finland, France, Germany, Great Britain, Italy, the Netherlands, Spain, and the United States), Southern region (Costa Rica, Mexico, Pakistan, Peru, South Africa and Turkey), and the Eastern/Asian region (Croatia, the Czech Republic, Estonia, Korea, Poland, and Russia), perceive school-related problems to be the most stressful for them (Persike & Seiffge-Krenke, 2012). This is conclusive with Baumeister, Bratslavsky, Finkensuer, and Vohs' (2001) findings that school related stresses have a strong impact on young people's life satisfaction.

Larson's (2011) concluded after his research that skilled leaders play delicate ''balancing acts'' between supporting the youth's experience of ownership and autonomy while supported just enough structure and guidance to keep youth "(a) from being blind-sided by the worst hits from the real world, (b) engaged with challenges that are not too far from their skills, and (c) on track with their work so they have outcomes to learn from" (p. 328). Therefore, it is imperative that educators know how to address stresses with self-efficacy interventions to help counteract the adverse effects of stress on future life chances (Burger & Samuel, 2017).

Bamber and Schneider (2016) emphasize the importance of schools focusing on identifying stresses in children and providing them with effective coping methods. They focused on 40 past studies, which they discovered while searching numerous databases. Looking for ones that measured stress or anxiety as outcomes while excluding those that did not test a mindfulness intervention (Bamber & Schneider, 2016). They summarized

their empirical study of research by saying that excessive anxieties and stresses in children can impede the intellectual development in students and can result in lower grades and academic performance (Bamber & Schneider, 2016).

If the government continues to hold schools highly accountable to the learning in their building, they cannot ignore the overwhelming research that correlates stresses to decreased performances in educational settings. So, whether governed by the moral obligation to help equip children with all the essential tools to protectively exist in a stressful society or by the desire to implement strategies in the building to improve academic performances and school report cards, practices should be incorporated into the school day to help students cope with stresses (Dariotis et al., 2017; Harris & Coy, 2003).

Although the research literature tends to fixate on the effects of single-variable stressors on children's development in real-life situations, children experience stress from multiple sources (Jewett, 2002). Home life, coupled with the over-fixation with performance-based assessment tools, uniquely develop complex situations that make it difficult in many cases to pinpoint the exact stressors. Plus, individuals react to stresses differently (Fléron, 2016) making it appear to be a very difficult topic to tackle. Childhood stress is a serious matter because it is a precursor to stress experienced as an adult but can be redirected if given positive coping skills (Napoli, Krech, & Holley, 2005).

Coping Theories

According to Compas, Champion, and Reeslund (2005), exposure to stress and the ways in which individuals cope with stress are of high importance for prevention of problems of adjustments during childhood. One of the most widely cited definitions with

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how it relates to coping is given by Lazarus and Folkman (1984) as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (as cited in Compas, Champion, and Reeslund, 2005, p. 141).

Stress responses can be broken down into two categories, engagement versus disengagement and voluntary versus involuntary. Coping refers to voluntary responses to stress; the skills that help an individual obtain a good quality of life and guarantee a healthy lifestyle (Rodriquez, Torres, Paez, & Ingles, 2016). Different circumstances call for unique coping techniques. Because coping is specific to the situation, the most effective coping behaviors are dependent on the characteristics surrounding the stressor (Compas, Champion, & Reeslund, 2005). Although different techniques exist, research suggests that individuals exposed to high levels of mindfulness training are characterized by a greater tendency to use certain adaptive coping strategies when responding to distress

Mindfulness for Stress

Since the publication of Lazarus' (1966) book titled *Psychological Stress and the Coping Process,* coping has become an important key word in the psychological world of understanding. Researchers in the clinical psychology field, as well as educators, have noticed an increased need for coping techniques for stresses. Though stresses and coping methods have been around for a long time, the way that we approach them have become more mainstream. Kabat-Zinn (1994) described mindfulness as a cognitive-based method that aims to educate people how to handle or cope with stress by focusing awareness to the present moment so that they have a nonjudgmental perspective on one's

thoughts and feelings. Therefore, one can take up a "balanced response" to emotionally challenging or strenuous situations (Kabat-Zinn, 1994; Potek, 2012). Specifically, in education, correlations have been made between high levels of well-being in children and high levels of learning outcomes in children (Mendelson, Greenberg, Dariotis, Gould, Rhoades, & Leaf, 2010)

While utilizing nature, Joshi (2005) concludes that the central concept in biology is the notion of a balance where all systems, both external and internal are maintained at a specific optimum level. The scientific term for this equilibrium is "'homeostasis' and is defined as the stability of physiological systems that maintain life" (Joshi, 2005, p. 24). Therefore, stresses are considered a threat to this homeostasis state found in the body. Coping strategies, in turn, try to help center the body back to equilibrium when unbalance exists. Specifically, Seiffge-Krenke (2013) used Lazarus, Averill, and Opton's (1974) definition of coping to better understand and frame the construct into an operational definition by stating that it is "problem solving efforts made by an individual when the demands he faces are highly relevant to his welfare… and where these demands tax his adaptive resources" (p.2). With the growing interest in ways to counteract the negative effects of stress on the body, mindfulness training has also grown in popularity.

Mindfulness-based interventions (MBIs) encompass several key components aimed at progressively orienting the participant to a consciousness of the essential connections and synergy between body and mind (Tang, Yang, Leve, & Harold, 2012). An empirical review of primary sources by Mendelson et al. (2010) concluded that "interventions involving meditation with youth have been reported to reduce distress,

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anxiety, and emotional and behavioral reactivity and improve self-awareness and sleep among youth" (p.986).

To emphasize the connect ability of these ancient practices to today's daily practices, a well-known German monk (1962) quote will suffice:

> This ancient way of Mindfulness is as practicable today as it was 2,500 years ago. It is as applicable in the lands of the West as in the East; in the midst of life's turmoil as well as in the peace of the monk's cell. Right mindfulness is, in fact, the indispensable basis of Right Living and Right Thinking-everywhere, at any time, for everyone (as cited in Skorupski, 2011, p.79).

Though practicable as Thera (1962) explained, mindfulness was considered a marginalized and mysterious practice. In the last 30 years, however, it has gained popularity in mainstream society.

Stresses and mindfulness practices could be found as focuses of more publications. Specifically, the American Mindfulness Research Association reported that in 2014, 773 articles were found on these topics, up exponentially from 0 in 1980 (as cited in Harrington & Dunne, 2015). In our western culture, mindfulness is a relatively new concept for many to try and understand. As Kabat-Zinn (2003) suggested, its foundations are set in Buddhism and therefore many people in Western society that would find its practices beneficial would reject it if it used Buddhist traditions or vocabulary. When Jon Kabat-Zinn and colleagues in the 1970's set out to better understand and study these mindfulness practices, they attempted to steer clear of the cultural and religious traditions. This increase in interest has, therefore, influenced the

programs currently available through a variety of institutions as they try to expose large

demographics to the mindfulness philosophies (Creswell, 2016).

Because stresses can be found in all populations and situations, the same can be

said for these mindfulness practices used to counteract it today. An operational working

definition of mindfulness is: "the awareness that emerges through paying attention on

purpose, in the present moment, and nonjudgmentally to the unfolding of experience

moment by moment" (Kabat-Zinn, 2003, p. 145). Implementation in clinical settings

have been used to counteract chronic pain, eating disorders, stresses, performance

anxieties, relationship problems, and depressions (Harrington & Dunne, 2015).

Though mindfulness can be used as a treatment, often it lends itself well to being

incorporated into preexisting treatments like cognitive-behavioral therapy and

counseling. Other institutions such as the military and school systems have attempted to

test the effectiveness of these calming practices with their populations. Stanley,

Schaldach, Kiyonaga, and Jha (2011) tested Mindful-Based Fitness Training (MBFT)

effects on a detachment of 30 marines who self-reported their levels of stress, perceived

mindfulness, and time spent engaged in the practice. After an 8-week course, which

consisted of 2-hour trainings each day with 45 minutes of "homework," it was concluded

that more time spent engaged in the practice correlated to a decrease in perceived stress.

Burnett (2011) sought to bring theoretical ideas of mindfulness, specifically with

an emphasis to Buddha's philosophies, into operational practice in a secondary school

system. While the framework focused on paying attention to the present with

nonjudgmental awareness, the first exercise of the eight-week Mindfulness Based Stress

Reduction (MBSR) course had participants eat a raisin, while focusing on the moment to

moment with the attention wholly absorbed to all the senses. Mindfulness activities, such as the one conducted in Burnett's (2011) study, "can teach an individual to become aware of moment to moment experiences" (Stuart, 2017).

It is important to consider that mindfulness may both be a state that arises naturally and one that is selected by the individual (Kiken, Garland, Bluth, Palsson, & Gaylord, 2015). Thus, an individual may display varying degrees of mindfulness at different points in time. Furthermore, some individuals may have a greater tendency to engage mindfully in their activities whether entering that state naturally or through choice. In this way, mindfulness can also be conceptualized as a trait. Individuals who are predisposed to be more mindful might show better performance on measures of attentional control and emotion regulation (Ortner, Kilner, & Zelazo, 2007). This is similar in concept as there are those in society who are more naturally gifted playing an instrument. However, these individuals still need to practice their craft to continue to develop and progress.

Mindfulness in Educational Settings

Besides increasing focus, studies have been conducted to consider the impact of mindfulness on behavioral issues in the classroom. Mindfulness approaches do not involve changing the content of one's experiences through cognitive restricting or thought stopping but instead it helps one change the nature of one's relationship with the present experience (Metz et al., 2013). Exposure to mindfulness programs should then allow for students to understand that they are in control of their emotions.

Take, for instance, a study conducted in a school setting to reduce the amount of suspensions in the school. Through implementation of the mindfulness treatments,

students were exposed to the understanding of the functions of the brain and how through training, they could control their actions (Cavazos, 2016). Teachers implemented techniques like the "90 second rule" where a cool off period was utilized by both the students and staffs as they waited the 90 seconds for the chemicals that course through the brain during stressful situation dissipate (Cavazos, 2016). During the intervention period, no suspensions were recorded, and number of office referrals decreased (Cavazos, 2016).

Mindfulness is associated with self-reported high levels of improvement within the areas of focus and emotional well-being. This becomes even more complex when we begin to talk about this belief in children. It not only envelopes the child in the "here and now" but also how the present influences effect their future and their future development (Ben-Arieh, 2014). Though studies of effects of mindfulness training is limited in childhood population, the emerging studies show that mindfulness can encourage an increase in positive well-being related outcomes in children (Vickery & Dorjee, 2016). A teacher in an American International School in Saudi Arabia, decided to experiment with starting her class each day with a simple 5-minute relaxation period: simple sitting, free of distractions, breathing mindfully (Estrada, 2017). After the intervention period, almost 90% of students reported that they felt calmer and nearly 80% said that the mindfulness practices helped them focus better in class (Estrada, 2017).

These results are conclusive and supported by other studies' findings of positive correlations to interventions and positive effects in children in the school setting (Foret et al., 2012; Nadler, Cordy, Stengel, Segal, & Hayden, 2017; Schonert-Reichl et al., 2015). Yet, Britton, Lepp, Niles, Rocha, Fisher, & Gold (2014) questioned the practicality of

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implementation of practices by classroom teachers during the regular school lessons. They thus created a study where sixth grade students were exposed during the regular school day to mindfulness practices for two consecutive years. Students participated in journal reflections and those and mindfulness were compared to the control groups. Britton et al. (2014) found that the intervention showed larger improvements than controls on measures of suicidal ideation and self-harming.

Effectiveness of Mindfulness in Schools

Executive functions (EF) can be defined as an individual's ability to adaptively regulate their own thoughts, emotions, instincts, and actions (Tang, Yang, Leve, & Harold, 2012). MBIs that concentrate on positively changing the awareness one has on their own thoughts, emotions, and actions have been shown to improve specific aspects of EF, including attention, cognitive control, and emotion regulation (Tang et al., 2012). Their study specifically used their neuroscience perspective to review effectiveness of mindfulness training in improving aspects of EF in individuals. When Tang et al. (2012) implemented eleven hours of a mindfulness-based intervention, integrative body-mind training (IBMT), over a 4-week treatment period to an intervention group, researchers observed an increased fractional anisotropy, which is the "index representing the integrity and efficiency of white matter in the corona radiata, an important white-matter tract connecting the anterior cingulate cortex (ACC) to other structures in the brain…." "Because deficits in activation of the ACC have been associated with many disorders, including mood disorders and substance abuse, the ability to strengthen cingulate connectivity through training could provide a means for improving EF and might serve as a possible therapy or prevention tool" (Tang et al., 2012, p. 364).

Though scientists and educational researchers have used their expertise to synthesize correlations between mindfulness practices and positive behavior effects, children can identify the benefits of these treatments just as well on their own. For example, heightened levels of self-reported calmness were identified in students ages 7-9 in the mindfulness practice condition only after one single 10-minute treatment in an afterschool program in London, Ontario (Nadler, Cordy, Stengel, Segal, & Hayden, 2017). Results of this study point to the idea that even a brief, classroom-friendly mindfulness practice can positively influence self-reported calmness in school-aged children.

Studies have helped to find evidence to support the idea that mindfulness training can be beneficial across age (Sibinga, Webb, Ghazarian, & Ellen, 2016), socioeconomic status (Sibinga et al., 2016) and geographical region (Mendelson et al., 2010). For instance, when yoga and mindfulness practices where implemented into an urban school 4 times a week for a 12-week intervention period, students in fourth and fifth grade showed enthusiasm, provided positive feedback, and expressed that they believed that these methods could help them in their day to day lives at the end of the treatment (Mendelson et al., 2010). As a result, Mendelson et al. (2010) suggested that a mindfulness-based intervention can be implemented in urban public schools to reduce problematic psychological and cognitive patterns of response to stress among youth. Not only can mindfulness counteract the negative effects of stress, it can also improve cognitive abilities.

In another study by Sibinga et al. (2016) of students from two Baltimore City Public Schools, students were part of a randomized active-controlled trial. Of the 358

subjects, 99.7% were African American and 99% were eligible for free and reduced lunch services. It was determined that school-based mindfulness instruction led to improved psychological functioning and lower levels of posttraumatic stress symptoms (Sibinga et al., 2016). "High-quality mindfulness instruction merits consideration as a primary prevention for mental and behavioral health problems in low-income, minority urban students" (Sibinga et al., 2016, p.8).

Though, many positive correlations exist in the research, one must be aware of bias and the "Halo Effect" when trying to measure the relationships of such abstract concepts. In Vickery & Dorjee's (2016) study of mindfulness training in primary school, students self-reported similar positive results saying that they liked the program (76%) and really enjoyed "feeling calm" (21%). Though students reported feeling like mindfulness was improved and teachers reported improvements in meta-cognition in children in the training groups, the reliability of findings is weak (Vickery & Dorjee, 2016). Although patterns were revealed in measures of mindfulness and emotional awareness and expression, the study could not find significant evidence of significant improvements in these areas (Vickey & Dorjee, 2016).

Because most of the studies looking to measure the effectiveness of mindfulness within a student population use self-reported results such as journaling and surveys, Eklund, O'Malley, and Meyer (2017) conducted a meta-analytic review of both published and nonpublished measurement tools for mindfulness in school-aged youth. Just like Vickey and Dorjee (2016), they found mixed results of effectiveness of intervention; "most available program effectiveness studies do not reach the standard of quasi-experimental or experimental designs, so causal outcomes of mindfulness-based

interventions remain unclear" (p. 111). After their analysis of past research, Eklund et al. (2017) concluded that many questions remain on both the broad topic of measuring mindfulness-based interventions and the more specific topic of measuring its effectiveness in the school setting and call for action to address the gaps within the researcher and practitioner fields.

Conclusion

Both theoretical and historical perspectives show the continual search for understanding of stresses and the effectiveness of coping mechanisms in the human species. Stresses have been found to have adverse effects on individuals, thus creating a need to combat it with coping mechanisms. Because students spend a large portion of their lives in the school system, some have suggested a more holistic approach to education as ways to encourage growth both physically and mentally in society. Cavazos (2016) also suggests the importance of exposing children for academic success by concluding that "the more teachers appreciate how crucial that is to have healthy, positive, nurturing relationships and extensive bonding and connecting and mentoring of their students, the more successful they'll be, the healthier their students will be and the better they'll learn" (p.16). Therefore, this action research seeks to better understand the effectiveness of mindfulness in the classroom to enhance the overall academic and emotional wellbeing of the students.

CHAPTER THREE

A<small>CTION</small> R<small>ESEARCH</small> M<small>ETHODOLOGY</small>

Problem of Practice

The teacher-researcher witnessed students during his physical education classes getting noticeably stressed when he used the word "test" to describe a fitness assessment. The overemphasizing of standardized tests scores has created a high stress environment in schools for teachers (Croft, Roberts, & Stenhouse, 2015; Stauffer & Mason, 2013). Many students are also exposed to negative emotions at home as new findings indicate that Americans are more likely to report symptoms of stress, which include anxiety, anger, and fatigue, than historically reported (APA, 2017). Social Learning Theory proposes that children may acquire behaviors through direct experience or by observing people around them (Bandura, Ross, & Ross, 1961). The researcher, therefore, wondered if modeling positive coping mechanisms, like mindfulness practices, as described by Kabat-Zinn (2003) (See p. 6), would have an impact on the dispositions of his students.

Research Question

What impact will mindfulness sessions have on the dispositions of eight third-grade students at an elementary school in the Southeast region of the United States?

Purpose of the Study

The purpose of this study was to determine the impact of mindfulness practices on eight third-grade students at an elementary school in the Southeast region of the United States during a six-week intervention.

Action Research Method

The idea of action research is not new. Efron and Ravid (2013) suggested that action research can be traced to early 20th century progressive educational leaders like Noffke and John Dewey who recognized the vital position of teachers in changing education. Action research should not feel imposed on us but rather conducted by teachers for themselves (Mills, 2018). Action research can be described as a systemic inquiry process which is conducted by stakeholders in the teaching/learning environment, with the goals being to effect positive change and improve student outcomes and the lives of all involved (Mills, 2018). In this way, being "insiders" who are intimately involved, the resulting changes to the education occurs from the bottom-up in a democratic process (Efron & Ravid, 2013). The teacher-researcher will therefore be implementing a qualitative approach to discover the impact of mindfulness practices on eight third-grade students in an elementary school in the Southeast.

Setting and Time Frame

Southeast Elementary school serves 605 students, 53% male and 47% female. Concerning ethnicity, 60% classify as white, 18% are Hispanic or Latino, 14% are African American, 4% identify as multi-racial, and 3% are Asian. The school serves free and reduced lunch to about 50% of the student body. Southeast elementary is a National Blue Ribbon and Palmetto's Finest School. It has earned "Palmetto Gold" statewide honors for student achievement and closing achievement gaps. The school leaders set high standards for themselves and the students each year. This additional pressure to live up to previous school accomplishments may be another aspect that is leading to current student stresses.

The time frame for this study was over six weeks during the spring semester in 2019. The pre-intervention questionnaire with open ended questions was completed during the week prior to the first lesson being implemented. Students responded to prompts utilizing Google forms following Thursday lessons, which the teacher-researcher posted on Google Classroom digital platform. The teacher-researcher collected observations and field notes during weeks one through six. Two days after the last lesson was taught at the end of week six the teacher-researcher collected the post-intervention questionnaire and gathered all the artifacts.

Participants

Selecting the participants for the action research was a very crucial step that was taken very seriously during the development of the study. According to Sargeant (2012), selecting individuals that will enhance the understanding of the intervention and which also continue to build upon the research questions, theoretical perspectives, and evidence informing the study are extremely important. The teacher-researcher kept these criteria in mind while selecting this third-grade classroom at Southeast Elementary. He had observed this class while administering the Pacer Test (an endurance test to measure their fitness by recording the laps that a student can achieve before the bell) in P.E., four of these third grade gifted, and talented girls started panicking. After further investigation, they explained that, even though they now knew that it was only requiring them to try their best and it was not graded, the concept of taking a "test" still stressed them out. The action-researcher decided that this was a class he needed to observe further with his study.

Being someone who believes in educating the "whole child," these types of situations were alarming. That is why this action research dissertation, guided by the principles of Bandura's Social Learning Theory (1978), Stress Theory (1999), and Jon Kabat-Zinn's (1994) MBSR, is important for the health and wellbeing of the students at the school. Being that the teacher-researcher is also the only permanent male teacher at Southeast Elementary school provides him a unique opportunity to allow students to see a male expressing and dealing with his emotions, while exploring the impacts of mindful training at a young age.

These participants were also selected because of convenience for the teacher-researcher. Convenience samples are often used in qualitative action research because of their ease of availability and willingness to participate (Rofofsky, 2008). Although convenience sampling cannot be representative of any population and should be avoided, educational settings often make it difficult to have an alternative option, because there are very few times that you are able to separate students during the school day (Fraenkel, Wallen, & Hyun, 2012). In return, validity for this type of sampling requires careful descriptions of student demographic and other characteristics of the sample studied (Fraenkel et al., 2012).

To protect the identities of the participants and setting, pseudonyms will be used throughout the study. The eight student-participants are described as follows:

- Anna is a Caucasian female who excels in all subjects. She is outspoken and participates often and is self-motivated.

- Bobby is a Caucasian male who was retained this past year. He appears to be introverted and shy.

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- Chad is an African American male. He has a pleasant demeanor and a sharp wit.

- David is a Caucasian male who has a lot of energy. He is a high achiever and likes to be noticed.

- Elise is a Caucasian female who was new to the class only a couple of weeks before the intervention began. She appears to be quiet but motivated.

- Fiona is a Latina female who is motivated and self-assured. She participates regularly in class discussions.

- Georgy is a Caucasian male. Often displays respectful behaviors who gets along well with everyone. In the last year he has appeared to become more introverted which could be a result of his parent's recent divorce.

- Heather is a Caucasian female. She is outgoing and loves to be the first one with her hand raised to answer a question.

Parental consent forms (See Appendix A) will be used because of the age of the students as well as student ascent forms (See Appendix B). Ethical issues will be addressed, like alterations to names of participants and school to avoid any privacy issues in the study (Durdella, 2018).

Research Methods

After speaking with the third-grade teacher and verifying schedules, it was determined that mindfulness intervention practices would work best on Monday and Thursday morning at 7:50. During the intervention, data collection and analysis was concurrently conducted to help guide future lessons and eventually measured for the effectiveness the mindfulness training had with the students. The four methods determined to be the best way to collect data for this qualitative action research study

were: a pre/post-intervention questionnaire, weekly exit slips utilizing multiple choice and open-ended questions, field notes, and digital video recordings. Because the teacher-researcher was an active participant observer and was leading the mindfulness lessons, he utilized an IPad to record the interventions for data collecting after the training was completed for the day. This type of digital recording, according to Mills (2018), allowed the teacher-researcher who is still actively engaged in teaching to fully capture classroom events and interactions to view and reflect upon later.

The 15-minute sessions were conducted twice a week in the third-grade classroom over the course of a six-week intervention period, for a total of twelve lessons. The lessons occurred every Monday and Thursday morning at 7:50 am. The data collection and analysis methods were guided by qualitative research principles and conducted over the course of the entire study.

Mertler (2016) emphasizes the importance of using a variety of instruments, methods, and sources to further support and enhance the validity of these findings. The teacher-researcher will be utilizing four different sources to triangulate the data (Mertler, 2017; Mills, 2016). Detailed descriptions of the pre/post-intervention questionnaire, weekly exit slips utilizing multiple choice and open-ended questions, field notes, and digital video recordings are provided to strengthen the internal validity of this action research study.

Student Pre- and Post-Intervention Questionnaires (See Appendix C & D)

Two days before the intervention began, the teacher-researcher administered a pre-intervention questionnaire (Appendix C), which he created to establish an understanding of the student's self-perceptions regarding mindfulness practices. Questionnaires, as

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Mills (2018) points out, are a great tool which allow the teacher researcher to collect data in a relatively short amount of time. Although Durdella (2018) explained that the need to include a survey or questionnaire in a qualitative dissertation is not necessary, the teacher researcher felt that utilizing multiple choice and open-ended questions allowed for a deeper understanding of the students' perceptions before starting the mindfulness intervention.

A similar post-intervention questionnaire (Appendix D) was given to the students two days following the last intervention to note the student's perceptions of mindfulness and if there were any changes. Questions mirrored that of those found on the pre-intervention instrument, so comparisons could be made to identify effects. Additional questions were also added at the end of the study to provide an opportunity for students to evaluate their experiences in mindful practice. Responses to the added items, such as "*Do you think I should teach mindfulness to other teachers, so they could use in their classrooms? Why or Why not?* and "*Would you like to continue learning mindfulness? Why or Why not?",* helped provide valuable insights into students' self-perceived value of mindful training at the end of the intervention.

Weekly Exit Slips (See Appendix E)

The intervention was administered every Monday and Thursday throughout the six weeks. Every Thursday, following the 15-minute intervention the students were given five-ten minutes to reflect and answer questions using their Google Classroom digital platform. The teacher-researcher created an exit slip using Google forms on his desktop. Age appropriate guided questions were used to help focus the students' reflections. These prompts (See Appendix E) were used to help encourage the participants to explain

their thinking regarding the mindfulness lesson and what they learned that day. Dunlap (2006) suggests that the use of reflective journals provides an opportunity for researchers to hear the voice of students as they progress through their learning experience. These exit slips on their Google Classroom required them to write down their thoughts pertaining to their personal understanding of the subject matter.

Informal Interviews

Because of the teacher researchers' insider positionality, a comfortable relationship already existed between the student participants and him. Therefore, conversations organically developed at various times of the intervention. For instance, stories about children utilizing the practices were shared during the regular P.E. class time or when a student would see the teacher researcher at the end of an afterschool club. Information shared that pertained to the current action research study were always annotated for analysis later.

Videotaping and Observational Field Notes

Mills (2018) suggests, implementing a digital video recording device as a tool to help in gaining a clearer sense of what was happening while the teacher-researcher was engaged with teaching. Therefore, for this study, an IPad was set up each in the corner of the classroom and left there for the duration of the lesson so the students to become acclimated to its presence. Upon entering the room, the teacher-researcher would press record to capture the daily lessons so that he could observe them later.

According to Derry (2007), technology is providing the educational research community with powerful ways of collecting, sharing, studying, and presenting detailed cases of practice and interaction for both research and instructional purposes. Like Derry

(2007), this teacher researcher also found value in the technology utilized for data collection. By studying the lessons in repetition, it provided an opportunity to analyze and reanalyze each lesson as the intervention proceeded. The as themes emerged, lessons were re-watched, and field notes created for future analysis.

Teacher-Researcher Observation/Field Notes

The teacher-researcher kept a reflective journal to write his field notes in following each interaction with the class. It was written in following each of the 15-minute interventions throughout the six weeks. Mills (2018) recommends using field notes to record and capture in as much detail. Immediately reflecting upon the mini mindfulness lessons helped the teacher researcher make the messiness of the research process more visible to himself and his readers (Ortlipp, 2008). The teacher-researcher was able to allocate 20 minutes following each session to write his field notes. These were analyzed after each class to help guide future instruction.

Observations while watching the lessons replay on the IPad also were added to strengthen the overall data from the lesson. While initial reflections of the mindfulness intervention were recorded immediately following the lesson, time away from school when the teacher researcher could carefully replay the lesson and record student behaviors was provided in the evening after each lesson. Both forms of observations found in the field notes were useful when looking for themes to emerge from the data.

<div align="center">

Procedure

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The goal of this qualitative study was to examine the impact mindfulness practices had on the dispositions of third-grade students. Sargeant (2012) suggested that qualitative research is intended to contribute to understanding and focuses on interpreting

the intervention and exploring questions like ''why was this effective or not?'' and ''how is this helpful for learning?'' The 15-minute interventions were completed with a third-grade class every Monday and Thursday beginning in March 2019. The intervention lessons lasted six weeks for a total of 12 sessions and were modified from the Mindful Schools (n.d.) curriculum, which the teacher-researcher had previously completed.

Two-days prior to intervention the students answered the pre-intervention questionnaire (Appendix C). The students were given a Google classroom code that the teacher-researcher provided. The students were familiar with this format because their homeroom teacher used it for some of their class assessments. The teacher-researcher had the weekly exit-slip questions (Appendix E) scheduled to load to the students during the intervention time so that the students could complete as soon as the intervention was finished. All the questionnaires and weekly exit slips he asked the students to complete were loaded to their classroom for them to answer at the appropriate time. This was organized so all the data that was collected could be contained in one place. To protect any sensitive information, the teacher-researcher kept his password safe so that only he could access the responses.

Upon entering the room, the teacher-researcher would go to the front of the class and welcome the students to their mindfulness session. The students would then begin to close their computers and prepare for the lesson to start. They stayed in their seat to begin the 15-minute guided mindfulness practice. Each of the twelve mindfulness lessons would begin with a quiet sit, in which the teacher-researcher and all student-participants would sit with their eyes closed for a set moment of time. The chime was used to signify the beginning of the sit. Next, the daily mindfulness objective (See Table

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3.1) would be discussed and practiced with the students. The sessions would end with a 30 second mindful sit, which was again signified by ringing the chime.

At the end of each Thursday intervention, the students responded in their Google classroom to the weekly exit slip. Lessons were also filmed and viewed later. This allowed the teacher-researcher to look at later and record further observations in his field notes. This helped him to observe any students displaying on-task or off-task behaviors during the sessions that he might have missed while administering the intervention. Two school days following the six-week intervention the students were given the post-intervention questionnaire (See Appendix D).

Table 3.1

Lesson Objective Outline for Six-Week Unit in Mindfulness Practices

	Lesson Objectives
Lesson 1 (Week 1) 3/12/19 7:50-8:05	Introduction to mindful bodies and listening: • Define Mindfulness • Mindful listening with a Zenergy Chime • Learning how to journal
Lesson 2 (Week 1) 3/14/19 7:50-8:05	Mindfulness of Breathing and finding your base • Review mindful bodies and listening • Introduce mindful breathing • 60 sec mindful sit • Anchor to our breath by focusing on bellies, chest, or nose
Lesson 3 (Week 2) 3/18/19 7:50-8:05	Heartfulness and Kind Thoughts • Extend how long we try to practice mindful breathing-90 second mindful sit • Kind thoughts for someone you see almost every day with hand on heart • Kind thoughts for yourself
Lesson 4 (Week 2) 3/21/19 7:50-8:05	Body Awareness • 90 sec mindful sit • Mindful Bodies and then help students do an inner scan of each part of their body (fingers, belly, hand, leg, head) • Discuss difference between thoughts and feelings and how each body part "feels".
Lesson 5 (Week 3) 3/25/19 7:50-8:05	Mindfulness of Breathing • 2 min mindful sit • Teach Anchor phrase "breathing in" and "breathing out" to help students stay focused on their breathing

Lesson 6 (Week 3) 3/28/19 7:50-8:05	Heartfulness-Generosity • 2 min mindful sit • Discuss what generous means and ways to be generous/giving in small meaningful ways while at school (opening a door, sharing a snack) and how that makes you feel
Lesson 7 (Week 4) 4/1/19 7:50-8:05	Thoughts • 2 min mindful sit • Discuss how our minds wonder to past/present/future thoughts • Discuss the important of noticing their thoughts and then refocusing on the present
Lesson 8 (Week 4) 4/4/19 7:50-8:05	Mindful Seeing • 2 min mindful sit • Mindful eyes help notice things you have never noticed before even though it has always been there
Lesson 9 (Week 5) 4/8/19 7:50-8:05	Emotions/Gratitude • 2 min mindful sit • Talk about emotions • Discuss how mindfulness can create a "space" between a strong emotion and our action so we can make an informed choice • Examples of things that we are grateful of and how we feel when thinking of that • Practice a mindful sit while reflecting on those happy thoughts and explain how we feel after. Can use this for an anchor.
Lesson 10 (Week 5) 4/11/19 7:50-8:05	Mindful Eating/Moving • 2 min mindful sit • Mindful standing and sitting • Take mindful steps to carpet and sit down • Discuss why and when useful to use mindful walk • Bring raisins and blueberries for the students to practice mindful eating and discuss different sensations and how it felt
Lesson 11 (Week 6) 4/22/19 7:50-8:05	Mindful Test Taking • 1 min mindful sit • Discuss how students feel when they must take a test • Pretest calming practices to help calm and relax • Techniques during testing used to help refocus
Lesson 12 (Week 6) 4/25/19 7:50-8:05	Ending Review • 2 min mindful sit • Discuss all the ways/situations we have learned to be mindful • Discuss how it's like 2+2 and once they have learned these practices they will never forget them, even if they don't think about it everyday

Data Analysis

Ortlipp (2008) identified the use of researcher reflective journals as a critical

component to having transparency in the research process and helping to provide a "trail"

for readers to follow. It is difficult to see everything that is happening in our classrooms

while being an active participant. That is why Mills (2018) suggests that recording our observations as an active participant is a crucial component of quality action research.

Detailed observations written in the teacher-researcher reflective journal, student questionnaires, student journal entries throughout the intervention, and field notes using video recordings of the daily interventions will be used to triangulate data and strengthen the rigor of this study. The teacher-researcher used all the data sources to discover themes throughout. Themes, as Ryan and Bernard (2003) suggest are at the heart of qualitative data analysis. Coding the data consisted of searching for repeating terms and/or phrases by the participants. Frequent terminology was separated by categories, or themes. The teacher-researcher used the coding to decipher the data for each participant and then as an overall analysis. Synthesized data will be presented through narrative text in Chapter Four.

Plan for Reflecting with Participants

It was apparent that the students who participated in the action research study had a personal connection to the learning. After analyzing all the data, the teacher-researcher plans to meet with the students to share the results. The student's data will remain anonymous as it is shared. Students will be allowed to share additional insights at this time as the teacher-researcher continues the reflection process. Allowing the students to share in the analyses could add additional insights that were not realized. This step could also strengthen credibility if they agree with the conclusions, and if they disagree, then I know to reevaluate.

Plan for Devising an Action Plan

The goal of action research is to understand what is happening at a local level and what might improve things (Mills, 2018). Therefore, an action plan needs to be developed and shared with others who might be interested, such as teachers and administrators (Mertler, 2017). Based on this study's results, the teacher-researcher sought to develop an individual action plan (Mertler, 2017) to implement in his physical education classroom, executing a 10-minute mindfulness lesson at the start of each class. The teacher-researcher also plans to share the results with the other educators and administrators in his school to determine if there are others who would like to implement the practice of mindfulness in their own classrooms.

CHAPTER FOUR

FINDINGS FROM THE DATA ANALYSIS

This research study examined the effectiveness of mindfulness sessions on the dispositions of eight third grade students. The PoP of the study was that students appeared to lack coping skills for dealing with daily stresses. Specifically, students at the local setting displayed signs of stress at the mention of assessments. Along with all the stressors students encounter in their daily lives, there is also added pressure to achieve on the state standardized test, which starts being administered in third grade. The study focused on observing students during these sessions to see if they developed an understanding of mindfulness and whether they valued the practice to help positively affect their outlooks. The teacher-researcher created a program designed to expose them to scaffolded mindfulness training over the course of the six-week study. The teacher-researcher conducted the intervention twice a week in their homeroom classroom setting to ensure an authentic learning environment. With Katz and McClellan (1997) binary definition of dispositions containing the habits of both thinking and doing, instruments were used to measure the cognitive and behavioral aspects of the students.

During the six-week intervention from March 12, 2019 – April 25, 2019, the teacher-researcher implemented mindfulness lessons twice a week from 7:50- 8:05 a.m. to determine the effect that it had on the student's dispositions. A pre- and post-intervention questionnaire and exit slips administered at the end of each lesson were designed to measure student's self-perceived levels of thinking and doing when it

came to mindfulness practices. To strengthen the findings, the teacher-researcher also videotaped each lesson and later created anecdotal notes for each session to better triangulate across instruments. With careful reading and rereading of field notes, student survey responses, and anecdotal notes from lesson videotaping, the teacher researcher was able to receive substantial details on the effectiveness of the mindful training on students' dispositions.

Research Question

What impact will mindfulness sessions have on the dispositions of eight third-grade students at an elementary school in the Southeast region of the United States?

Purpose of the Study

The purpose of this study was to determine the impact of mindfulness practices on eight third-grade students at an elementary school in the Southeast region of the United States during a six-week intervention.

Findings of the Study

According to Starks and Trinidad (2017), the researcher in a qualitative study becomes the instrument for analysis, making judgments about coding, theming, decontextualizing, and recontextualizing the data. Therefore, the teacher-researcher concluded that findings of this study should be presented in a narrative manner with intent to understand mindfulness and its value in an educational setting. To reiterate, student dispositions were viewed as both cognitive and behavioral and so instruments were created to try to quantify these two domains. Each individual data set was examined separately. After cycles of concept coding, where the teacher researcher extracted and

labeled the "big picture", smaller observable actions eventually added up to bigger and broader schemes (Saldaǹa, 2016).

To that end, each data set from the three measurement instruments was analyzed separately and then cross analyzed for identification of emerging themes. In this section, each data set was first described individually. First, pre- and post-intervention questionnaires were discussed. This was followed by information gained from the weekly exit slips. Finally, details from the teacher-researchers field notes and observations obtained from re-watching videotaped classroom sessions are provided. Because of the presentation of the individual data sets, three broad themes emerged and are highlighted at the end of this chapter.

Pre- and Post-Questionnaire Results

Questions administrated through a Google Classroom platform provided open-ended opportunities to achieve a deeper understanding of student's perceptions of mindfulness training and its value at the elementary level. Students, already familiar with the format from other third grade classroom procedures, responded independently to questions both the week before and the week after the intervention program was administered. The teacher researcher conducted a concept coding analysis of both sets of data. Reoccurring terms were extrapolated and then measured for frequency in the data set to better understand intervention effects. Through a pre- and post-data analysis, it can be determined that students' conceptual understanding of mindfulness increased. Students also showed increased value of mindfulness practices for both the student and teacher populations at Southeast Elementary School.

At the beginning of the study, student participants were asked if they had ever heard of mindfulness and then asked to define it in their own words. While 68% reported that "yes" they have heard of mindfulness before, students reflected that their understanding was narrowly focused on it as only a cognitive concept. Specifically, 65% of the responses associated it with academics while only 35% reflected emotional components. Maybe this was because of the classroom setting or a result of the students seeking linguistic interpretation based on the knowledge of the root and suffix words, "mind" and "ful". Regardless, pre-intervention data indicated that most students were unable to contextualize mindfulness training in an educational setting as anything other than helping them get "smart" and filling their head with "lots of questions" or new knowledge.
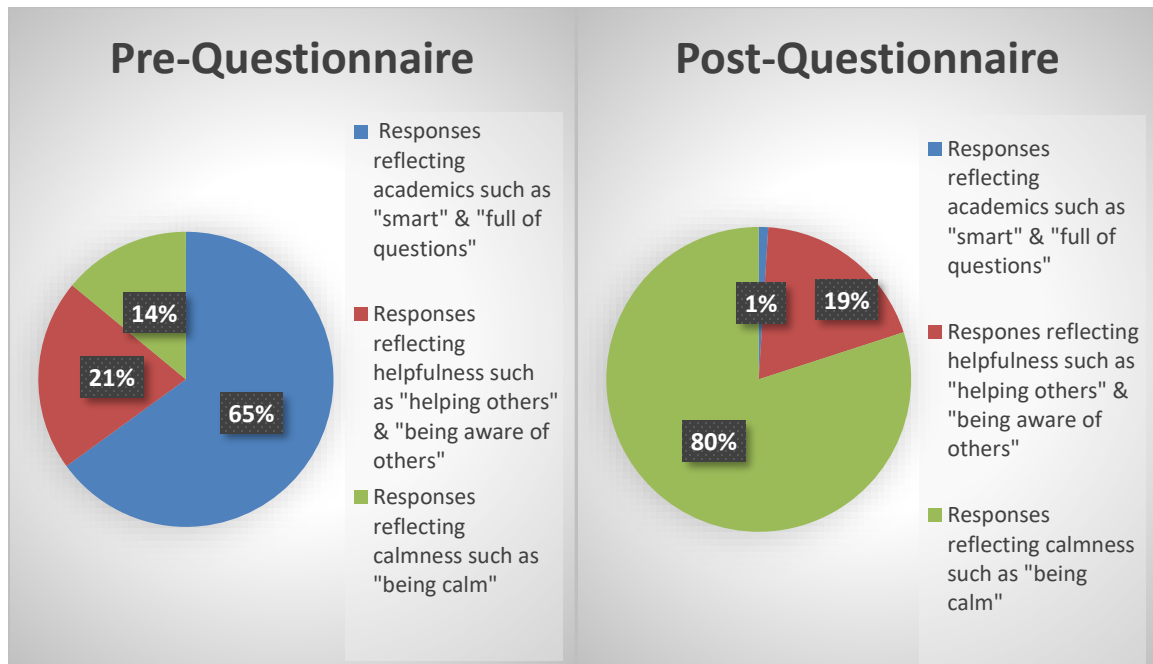

Figure 4.1. Student Responses to Pre- and Post-Question: What is Mindfulness?

Post intervention data for the same question, *"What is mindfulness?"* signaled a drastic shift in understanding. Students now responded almost completely in terms of

emotional applications. For instance, students responded that mindfulness was being "calm," "focused on the present," "open-minded," and "respectful." Students almost entirely lost the notion that a mindful person had to be associated with academics.

The broader understanding of mindfulness by the end of the intervention was also evident in the variety of situations reported during the question, "Tell me how you could use mindfulness?" In the pre-intervention questionnaire, six out of the eight responses responded that mindfulness would be used "on tests and quizzes," "when doing work," and "while learning." This is concurrent with their initial ideas that it must be associated with academics. At the end of this study, students again demonstrated an increased awareness of the transferability of these trainings across settings. Because students now connected mindfulness to helping them be "focused on the present" and "calmer", students found practicality across their daily lives. Five out of the eight students recognized that these techniques would be helpful during important events like "dance competitions" and "before baseball games against a hard team." Other students explained that they could use it "when they are mad," "walking down the hall," or "eating." This shows students understanding of the framework. Students recognized that emotional needs could be met both in high stress times or in their mundane daily activities.

The post-intervention survey revealed even more trends for students valuing the use of these mindful practices for themselves and other students. When asked if they would like to continue the lessons, all eight of the respondents answered yes. They all answered that it was fun, and they want to learn more. The students elaborated by providing examples of why they wanted to continue. Georgy said, "it helped me to

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concentrate better, and if I continue to practice, maybe it will help me become better at baseball." Elise and David both suggested that continuing to learn mindfulness could help them in being better siblings. David stated that he has two younger brothers that annoy him sometimes and that he has used mindfulness to not get as upset with them. Elise also mentioned she has gotten better about not getting mad as quickly when her sister takes her toys. Chad said, "that the more we practice something the better we can get at it, so we need to keep doing this."

All eight students recognized that other students could benefit from what they were being taught. The fact that the teacher-researcher should teach these sessions to the other students in the school was made clear in their post-intervention responses. They all thought the other students would have fun learning mindfulness. Heather said, "Mindfulness could help other kids learn to be present and focused during class time." Anna held that "it can help students be calm and relaxed, so everyone should learn this." Bobby simply put, "It was fun, and I think other kids would have fun learning this too."

Through concept coding analysis of the post-intervention survey, it was also detected that the students believed teachers would also benefit from being taught mindfulness. Again, all eight students responded that the teacher-researcher should do these sessions with the other teachers in the building. Various reasons were given, but one common theme emerged, mindfulness could help teachers be calm when they are mad or stressed. It is evident that these students observed the teacher's moods in the building and believe that mindfulness could be beneficial to them as well. Responses to the open-ended question, "Do you think I should teach mindfulness to other teachers, so they could use in their classrooms? Why or why not?" included "like the students, they

can use it when they are stressed," "because teachers should learn how to stay calm when they are frustrated or mad," and "yes, so they can be a better person." These student responses reflected their perceived value of training helping provide the individual with a sense of calmness and control.
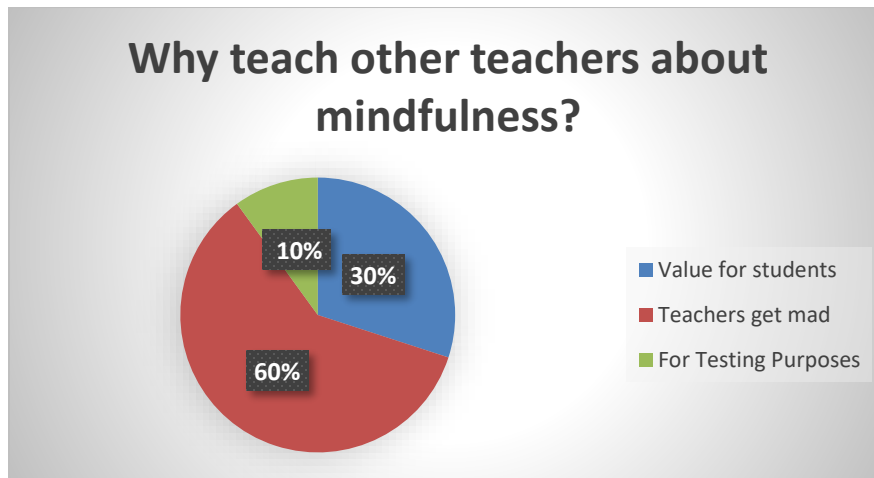
Figure 4.2. Responses to the Post-Survey Questionnaire Question.

Weekly Exit Slips (See Appendix E)

Students were exposed to mindfulness training on each Monday and Thursday over the course of the six-week intervention. Before each Thursday session, the teacher researcher would assign the ten-question exit slip through the students' Google Classroom platform. Immediately following the second lesson for the week, students were provided with ten minutes to complete the exit slip. During this time, individuals used the multiple choice and short answer responses format on the exit slip provided to help the teacher-researcher evaluate the effectiveness of mindfulness exposure based on student perceptions of the lessons. Questions, such as *Did you enjoy the mindfulness lesson this week? What was something you remember learning this week? Do you think you might use what you learned this week?* And *Do you think what we learned could help*

us be a better student? These questions were presented to help guide the students on their own reflections after the lesson.

Overall, students reported enjoyment levels during each weekly exit slip. Although lessons were all looking to introduce mindfulness concepts to third grade students, objectives across the unit changed as mindfulness practices focused on body awareness, breathing, moving, and eating. As applications were altered, self-perceived levels of enjoyment, effectiveness of becoming a better student, and the likelihood that they would use the technique again appeared to be affected differently.

For instance, percentages were figured according to each students' responses on the exit slips. To analyze for trends within these data sets, lessons were first studied to categorize by overall objectives. This was done by studying both the unit breakdown and student retention of pre-planned lesson content. Specifically, after cross analyzing student responses to the question, *What was something you remembered from this week's lessons?,* with the overall lesson objectives, the weekly lessons were categorized into six overall themes: the first week introduced mindfulness breathing; this was followed by mindfulness bodies and then lessons about generosity and heartfulness; the fourth week included mindfulness seeing and listening; mindfulness emotions/eating were introduced during week five; mindful test taking concluded the unit in the sixth week of the study.

Weekly data sets were then compared by looking at any trends that emerged across theme and response results. Students who reported "yes" to each question were totaled and then divided by the number of responses to help quantify students' perceptions of the objectives for each unit. Students that responded as "maybe," "neutral," or "no" to any of the questions were not reported. After calculating the overall

average of students responding positively, a comparative bar graph was created to help with analysis across thematic lessons.

Percentage of Students Responding Positively According to Lesson Objective

Questions from Exit Slip	Mindful Breathing	Mindful Bodies	Heartfulness	Mindful Seeing/Listening	Mindful Emotions/Moving	Mindful Test Taking
Did I enjoy?	89	95	64	67	90	73
Does it make me a better student?	83	67	72	50	70	73
Will I use again this week?	61	45	29	17	45	53
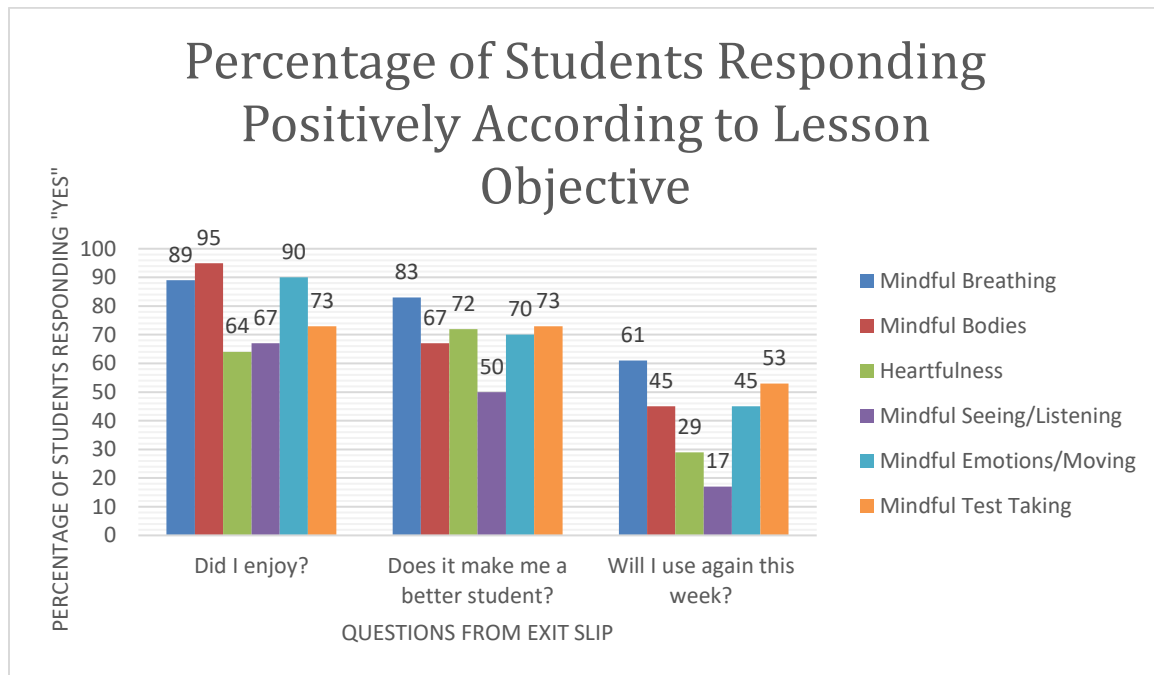
Figure 4.3: Findings from the Exit Slips.

Self-perceived levels of student impacts varied according to the objectives. For instance, when lessons included learning mindfulness bodies and breathing techniques, it produced the most overall positive results. Students reported enjoying learning how to scan their body and becoming more conscious of their processes. Georgy explained after the first week that the most memorable part of learning about mindful breathing was learning that when practicing these techniques, "you can feel the breath." Anna reported on her exit slip after the second week that she found it beneficial to learn how to "put our hand on our belly" and "close our eyes" during our body scans. Bobby expressed that he enjoyed learning how to be "mindful while I eat." Therefore, responses on the exit slips demonstrated that students enjoyed learning techniques which allowed them to become more self-aware of their body and its movements.

Lessons, on the other hand, which focused on objectives that had direct correlations with school setting appeared to develop less positive results. For example, lessons during the fourth week aimed to increase awareness to the surroundings through mindful listening and seeing techniques reported the lowest overall approval from students. While the teacher-researcher inferred that lessons like these would be beneficial for students as they find themselves in traditional classroom settings where information is often presented in visual and audio format, students did not concur. Exactly half of the students reported that lessons from that week could make them a better student and only 17% (See Figure 4.3) stated that they would do the practice again, the lowest reported findings of all subsets.

These findings suggest that students' enjoyment levels and self-perceived level of effectiveness on helping them become better students were swayed depending on the lesson objectives. Students enjoyed completing mindful breathing techniques, listening to the bell and using anchor words, and completing mindful body movements. On the other hand, students appeared to find less satisfaction in talking about mindful seeing and listening and discussions about generosity and heartfulness within the school settings. Although variations existed across lesson objectives, it can be concluded that overall student perceptions of mindfulness trainings were positive. Students generally all found enjoyment and saw value of learning these practices for improvement as an overall student. These findings are conclusive with field notes of observations collected while replaying videotaped lessons. Synthesized data helped construct themes of the overall findings for this study.

Videotaping and Observation Field Notes

The use of digitally recording the lessons was an integral part of this action research. The teacher-researcher could teach the lessons, make immediate observances in his field notes, and then review the lessons on the iPad at the end of the day. He could gather invaluable data that he would not have otherwise been able to collect. He meticulously tracked each student for off task behaviors during the introductory mindful sits each lesson, noting in his notebook exactly how long students could stay on task. He could use the video to also record student responses more accurately then trying to draw details only from memory.

As previously discussed, the teacher-researcher utilized the videotaped sessions to track the duration that the students could sit mindfully during the introduction sit. Each day the class would try to sit mindfully for two minutes and focus on the present moment. Even though two minutes was the target, the class did not always reach this goal. While watching the video the teacher-researcher would mark in his field notes the time that a student showed the first sign of losing focus or becoming distracted without being able to use one of the strategies that was taught. He watched for students opening their eyes to look around the room or moving excessively in their seat. He also noted if a student got up to move around the room. These behaviors were tracked for the second, sixth, and twelfth lessons.

While not all students were ever able to sit for the entire two-minute duration, all students did steadily improve (see Figure 4.4). David was one of the more energetic students in the study and was only able to sit for 31 seconds during the day two sit. Even though he couldn't sit for the entire two minutes during our last lesson, he showed a lot of

growth, by making it 98 seconds. The teacher-researcher also noted that even when he lost focus, he was still mindful of the students around him and sat quietly even though at this point he was looking around the room.
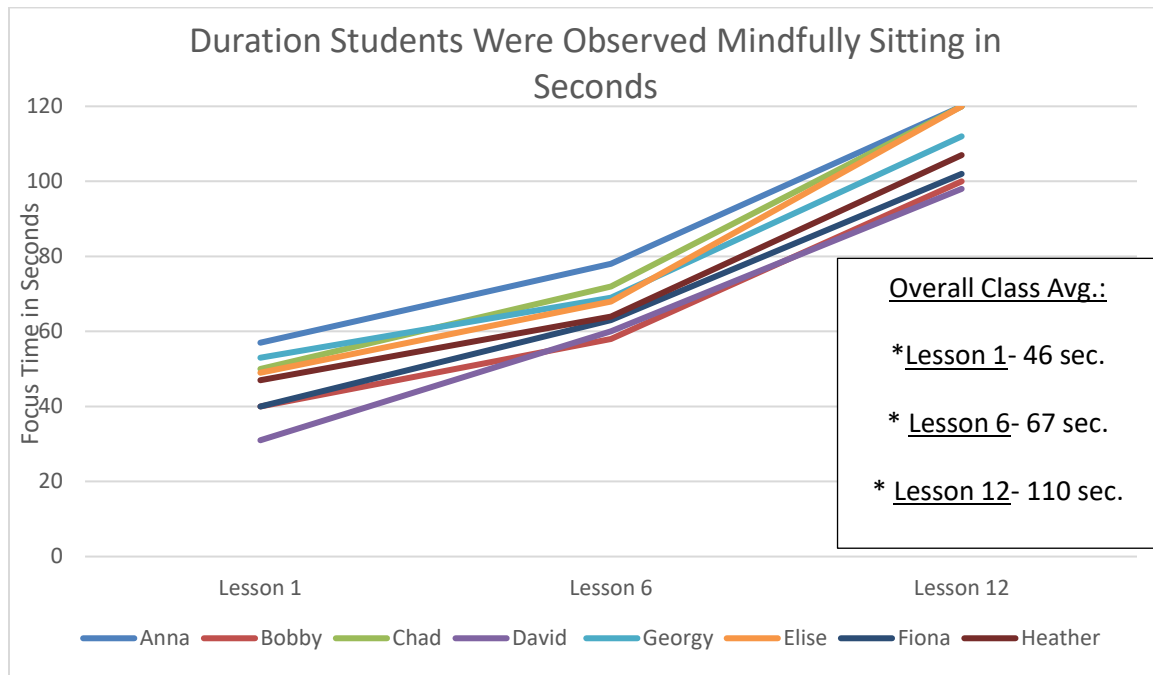
Figure 4.4: Results from Observations of On Task Behaviors During Mindful Lesson.

Three students did make the goal of sitting for the entire two minutes. The students were asked to explain what strategies they could use to achieve this. Anna, Chad, and Elise all discussed the techniques we had learned in earlier lessons. Chad noted, "I tried to focus on my breath by counting each time my belly filled up with air. This really helped me to keep my mind from wondering." The teacher-researcher also noted how this correlated to what he observed Chad doing in the video. Chad can be seen sitting with his mindful body as his right-hand rest on his belly for the entire two minutes. Anna and Elise both describe similar strategies of using an anchor word. Anna specifically described that she liked to say "breathing in and breathing out" each time she

took a breath. She stated, "This helped me to focus better and not get distracted from things that might be going on around me."

Besides contributing to careful analysis of on task behaviors over the course of the unit, reviewing the videotaped lessons also helped the teacher-researcher note an interaction he had with the students during the day six intervention. He asked them to describe the feeling of the room compared to the first few days of practice. Seven of the eight students responded with a common idea, that the room felt "better." Heather said, "the room is quieter for a longer time" and "that since my classmates are quieter I can sit for a longer as well." David mentioned that "we can sit longer because its calmer." The first couple days we could only make 30 or 40 seconds before students got noisy. This time the class sat for almost 90 seconds. That is way better!" It is evident that the students were aware, that through the practices being taught, there was a noticeable difference in the mood of the room.

Other students used calmness to describe how the classroom setting felt. When doing the guided mindful sits, that were practiced at the beginning of each daily intervention, both Georgy and Elise mentioned how calm the room felt. Georgy described the room as "feeling peaceful and calm." During the second intervention Elise stated, "how when we were sitting with our mindful bodies and eyes closed, that the room got silent and it was really calming." During the same lesson on mindful breathing, Bobby wrote, "Using my breath as an anchor to focus on, helped and the room felt more peaceful."

The teacher-researcher observed Chad transferring his mindfulness lessons into practical application relatively early in the intervention at school. The first three times

that the teacher-researcher entered the room, he would set up two stools at the front of the classroom. One for him to sit on and one for his notebook. On the fourth day of the intervention, he entered the room and both stools were set up and ready for him to use. He later asked the classroom teacher about the stools and she noted that Chad had done it a couple minutes before the researcher walked in. From that day forward, every morning of the intervention, Chad would grab both stools and have them ready to go. The teacher-researcher notes, that it is possible Chad would have done this on his own regardless of the lessons. However, he points to how this was a great example of a student being mindful to the world around him and the needs of others after only a few sessions.

As the intervention progressed, students pointed to how they could use their mindfulness techniques to help them when they are doing the state testing. During the lesson on test taking students were asked to share words that they associated with testing. Most students, like Georgy, Anna, Bobby, and Fiona replied with adjectives such as "nervous,' "anxious," "worried,' and "scary." David however replied "calm." The teacher-researcher followed up by asking him "why he used the word calm." David stated that "it was because they had been taught this mindfulness information which can help them be calm." Heather mentioned that "before the test begins how they could close their eyes and take a few deep breaths to help relax." Elise and David suggested, that if they get to a question on the test that they are struggling to answer, how they could set their pencils down and use the "breathing with eyes closed" technique to help refocus them.

The students also asked if the teacher-researcher could allow their homeroom teacher to keep the bell that they used to signify the start of their mindful sits each lesson.

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They wanted to continue practicing the two-minute mindful sits even after the intervention was complete. A couple of the students suggested that they could do some of the mindfulness techniques before the testing began. Anna wrote "that each morning before the SCReady test begins, we should have the teacher ring the bell, so we can close our eyes and get focused for the test, so we can do our best". Georgy said "it would be a good idea if in the middle of the test we took a break and rang the bell, so we could practice our mindful sit for a couple minutes. Because we aren't allowed to talk this would be a good way to take a mind break from all the hard thinking we have to do". The teacher-researcher gladly allowed them to keep the chime and told them that he thought these were some great ideas that they had. He encouraged their homeroom teacher to continue practicing with them.

Another example of the students using what they learned in other aspects of their school lives was utilizing the lessons on mindful seeing, movement, and tasting. They enjoyed these lessons as a departure from the norm, which had them sitting quietly at their seats with eyes closed. The students appreciated using the tasting lesson during lunch. Georgy said "I loved getting to eat mindfully at lunch. We normally rush through and barely taste what I eat. I focused on chewing my food and feeling the crunch of the apple. It was also really juicy." Chad talked about how he tried the mindful eating at lunch too, when it was pizza day. "I really looked at my slice of pizza and noticed how small the pepperonis were compared to how my mom's pizza is. Then I tasted the pizza and noticed how squishy the cheese was and crunchy the crust is." Fiona and Bobby both discussed how they tried it while drinking their milks at lunch time. Bobby went into further detail about the sensations he felt his body doing during the eating process. He

said "I noticed when I swallowed my milk how my throat muscles moved each time I took a drink. My tongue also moves in my mouth each time I swallowed something." It was very interesting how the students appeared to be noticing these feelings for the first time.

The final day of the mindfulness intervention, the teacher-researcher was doing the review/wrap-up lesson and discussing with the students their experiences and expectations moving forward. Heather and David expressed their feeling on how fast the six-week intervention had passed. They both exclaimed, "No way, the six weeks can't be done already. That was too fast!" Anna stated, "aww no way, can we keep doing it?" The teacher-researcher explained to the students, "Of course you can keep doing it. That is what these sessions were all about. Mindfulness doesn't just end because I'm not coming to your class anymore. You have been learning this, so you can use it whenever you want in many different situations."

Some of the students, like David and Fiona, discussed teaching what they had learned to their families. David mentioned that his family asked him what he had been learning at school. He told them about the mindful eating lesson and how he had enjoyed eating the blueberries slowly. He said that his Dad cooked up steaks that weekend and they all tried to eat the first few bites mindfully. He said that "my brothers said the steak tasted like smoke and was kind of chewy." He also said that his parents thought "it was a fun lesson and we should take more time to eat our food like this normally." The teacher-researcher pointed out, "David was like a teacher by instructing his family how to be mindful."

Fiona said her parents were very interested to hear about what she had been doing in the classes. She discussed how she taught her family about the mindful sits and the importance of using anchors, like words and our breath, to help focus her thoughts on the present moment. She said, "my family would try and sit together and practice for a couple minutes each night." She also noted how her mom liked counting her breaths. She said it helped her relax and not think about everything she had to do. Fiona did say "my little sister struggled the most with sitting still and focusing, but maybe that's because she is only four." She commented how she had a good time practicing with her family and how each week they got a little better just like her class.

Informal Interviews

Throughout the study, opportunities for the teacher-researcher to conduct informal interviews with the students arose organically. These conversations developed spontaneously both during mindfulness training, as observed in the videotaped lessons, and outside of the traditional classroom setting. This type of interview allowed for flexibility and impulsive construction of questions which led to a deeper understanding of the students' perceptions of the intervention (Turner, 2003). Comments across the intervention period contributed to themes of transferability across settings.

Throughout the students' weekly exit slips, pre- and post-questionnaires, and discussions with the students both during the lesson and in casual conversations, the students mentioned how and why continuing to learn about mindfulness would be a benefit to themselves, other students, and their teachers. Being able to transfer what the students learned in the mindfulness sessions into their lives outside of school was another theme which emerged from the data. After analyzing the information, the teacher-

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researcher tracked 29 separate instances, during class discussions in the videotapes and informal conversations, that the students mention the skills they learned in the daily lessons in situations outside of school. Fiona said, "I used mindfulness right before going onstage to dance with my team. I was really nervous to go out there in front of the large crowd. I closed my eyes and took a few deep breaths and focused on my chest rising and falling. This helped calm me." David stated, "I used mindfulness before my at bat during my baseball game. A couple deep breaths while I thought about how I was going to hit the ball helped me."

The teacher-researcher noted how half of the participants discussed issues with falling asleep and how they were using the techniques to help them. On a few different occasions students discussed this in informal interviews and on their weekly post-intervention questionnaires about how they used their mindfulness lessons. Elise, Anna, and Heather all pointed to instances where they were having trouble falling asleep at night. They discussed how their minds keep thinking about things while they are laying there. They all mentioned how they used the breathing and body scan technique to help slow their thoughts and relax them so that they could fall asleep. Elise specifically pointed to how "she counted breaths to help focus on the present moment while lying in bed. This was sort of like when my parents use to tell me to count sheep to fall asleep."

Anna, Georgy, Fiona, and Heather talked about how some of the teachers get mad and yell at the students. They suggested that these teachers would benefit from the mindfulness sessions because they could learn to focus on their breath and calm down before they start yelling. Georgy stated, "Because they might get angry at a student, so they can use it to calm down." Anna said, "Because they could get mad and it will calm

them down." Fiona thought, "Because teachers should learn how to stay calm when they are frustrated or mad." Heather explained, "Because if students are loud, teachers can do mindful breaths." David said, "Just like the students, teachers can use mindfulness when they are stressed."

Other suggestions as to why teachers need to learn mindfulness, ranged from helping teachers get ready for the day to helping the teacher-researcher teach it to all the students in the school. Chad said, "that way you wouldn't have to gather the whole school for one mindfulness practice." This was a thoughtful statement that showed how Chad knew this would be a lot of work for just one person. He also discussed that "having other adults that could teach the lessons would allow for more students to learn about mindfulness and could make them better." Bobby simply said, "It would be good for teachers to learn because it would help them be ready for their day. Mindfulness is a helpful resource to use in the future for their daily lives."

Interpretation of Results of the Study

Through thematic analysis and a careful examination of student questionnaires, informal interviews, video analysis, and observational field notes, three themes emerged: (a) universal understanding of mindfulness, (b) enjoyment, and (c) value of future practice. Each of these themes offered a unique perspective when evaluating the effectiveness of mindfulness and its impact on the dispositions of the participants. Because dispositions for this study were defined as the frequent and voluntary habits of thinking and doing (Katz & McClellan, 1997), various instruments were utilized in the effort to measure students' cognitive and behavioral processes during intervention. The themes that emerged demonstrated that the dispositions of the participants, both in

relation to their understanding of what mindfulness is and their behaviors and emotional reactions while doing it, were positively impacted through the implementation of the mindfulness lessons. While examining the themes, the teacher-researcher could draw on inferences from the research question about whether inclusion of mindfulness practices is beneficial in an elementary school setting.

Theme One: Universal Understanding of Mindfulness

One of the ways to identify themes is to look for word repetition (Ryan & Bernard, 2003). As the teacher researcher began to sort through all the data sets, he noticed that the students frequently repeated words or ideas. Rereading, revisiting and categorizing the various data sets allowed for the first theme to emerge. Over the course of the six-week intervention, it could be concluded that student participants increased their understanding of mindfulness from one that has only cognitive benefits to a practice that helps develop calmness across various settings.

Take, for instance, the shift in students' responses to the task of defining the practice of mindfulness. The initial responses from the pre-intervention questionnaire conclusively displayed a very narrow idea of mindfulness. Although 68% of the students reported having heard of mindfulness before, most of students defined this practice in terms of making someone smarter. Discussions at the beginning of the unit also demonstrated this narrowed assumption that mindfulness was about filling your brain with information such as "questions" or knowing "a lot in your head." Whether this is because of students attempt to break down the unknown word into suffixes and root words or because of their preconceived notion that it had to do with cognitive processing

because it was in a classroom setting, the students overwhelmingly thought that participating in mindfulness trainings would help them have a "mind that is full."

By the end of the study, students conclusively demonstrated a deeper understanding of the practice. Students, after completing the six-week intervention, defined mindfulness as a practice to instill a sense of calmness and increased awareness of the present moment and others. Throughout weekly exit slips, videotaped lessons, and informal interviews, data indicated that students now identified mindfulness as more of a holistic approach to nourishing the body, mind, and soul.

While initially exhibiting a narrow view of why a teacher might be teaching this practice in school, students during the intervention overwhelmingly reported their perceptions of effectiveness that these lessons had on making them better students. Most students reported that lessons that might not have immediate connections to their traditional roles as students, such as the ninth lesson on emotions and the tenth lesson on mindful bodies and eating, as still essential to helping them become better students. This alluded to the idea that students' awareness of how dispositions, the thinking and behaviors of an individual, are affected by their emotional tendencies. Mindful breathing proved also valuable to the students according to student responses over instrument types. Because mindfulness was now associated with regulating emotional tendencies and creating a feeling of calmness, students saw major benefits for them in the educational setting. For example, Heather concluded during the last lesson's classroom discussion that mindfulness is important because it taught techniques so now they can "take a few deep breaths to calm our minds" during testing. Fiona said that if they have trouble

concentrating, they could always use their anchor words to focus them back and help clear their minds.

Many of the students discussed, either informally during the intervention or in their written responses, that practicing mindfulness has led to a sense of calm. Based on the observation of field notes and reaffirmed through observing the videos the students mention the word "calm," "calmness," or "peaceful" 32 times. They further mention the idea of calmness another 41 times in their written responses. It was evident, as the weeks progressed, that the participants more frequently described an enhanced ability to concentrate, relax and deal with various distractions. In the student's final post-intervention survey, all eight of the participants responded to the question regarding "what mindfulness is?" with mentions of calmness. David wrote, "mindfulness is used to calm your emotions and mind when you start to get upset or distracted." Fiona mentions, "that mindfulness is taking deep breaths to calm down your heart when you are angry or frustrated." Four other students, Anna, David, Elise, and Heather, describe situations when having a sibling annoying them, they could use the technique's they learned to focus on their breath to help calm them down.

Not only were the students mindful of this sense of calmness, so too was their classroom teacher. During an informal conversation with her at about the half-way point of the intervention, she noted how she saw a change in the demeanor of her students. She commented how she noticed the students settle into a calmness upon my entering. Where before when the students saw me, they would get a little excited and worked up, now she noticed how the classroom would quiet and get calm. She mentioned how this would even happen when I entered at other times of the day, that weren't for the intervention.

Students, aware of the benefits of mindfulness training on their emotional regulations, saw transferability of practices into situations outside of their classroom setting. It was apparent from the student's comments in their weekly and post intervention surveys, as well as informal interviews that they had incorporated the teacher-researcher's lessons and transferred them into their daily lives. It was through these field notes the students demonstrated that they valued the practice of mindfulness through transferring their lessons into other aspects of their lives. Many practical examples were given and highlighted. A couple key instances were when the students discuss during informal interviews and classroom discussions how they used the mindfulness techniques before athletic events, music competitions, or drama performances. These events, which the students suggest cause feelings of nerves, demonstrated how they utilized the breathing and anchor word coping techniques to help calm them before these big moments.

Therefore, students, aware of the holistic benefits of mindfulness, recognized the benefit of implementing these practices across various settings. Over the course of the study, students expressed the value of having lessons like these to make them better students and recognized the impact that it had on emotional regulations outside of the school setting. The universal definition of calmness allowed for transferability and self-perceived necessity for all individuals.

Theme Two: Enjoyment

While students initially lacked awareness of mindfulness practices, students over the course of the study developed a universal definition of mindfulness as the practice of instilling calmness across settings. Triangulation across data sources indicated that as a

result, students found enjoyment in practicing mindfulness throughout this intervention. It became a sort of release from the structured environment of their typical classroom setting which typically only focused on cognitive abilities. Fiona stated it was a "relaxing way to start the day." Heather and Chad expressed their enjoyment of these lessons because it helped them feel like overall "better people."

Data from exit slips was also conclusive with the inference that enjoyment levels may be related to how mindfulness training differed from other lessons students had been exposed to in classroom settings. While many of the curriculum and instruction decisions are influenced by objectives of cognitive effect, students seemed to enjoy opportunities to learn in a more holistic approach. For instance, lessons about mindful breathing (89%), kind thoughts (95%) and gratitude (90%), and mindful moving/eating (90%), all produced higher self-reported levels of enjoyment in the student population than the lessons which talked about mindful listening (67%) and test taking (73%) (See Figure 4.3).

When asked if they would like to continue the lessons, all eight of the respondents answered yes. They all answered that it was fun, and they want to learn more. The students elaborated by providing examples of why they wanted to continue. Georgy said, "It helped me to concentrate better, and if I continue to practice, maybe it will help me become better at baseball." Elise and David both suggested that continuing to learn mindfulness could help them in being better siblings. David stated that he has two younger brothers that annoy him sometimes and that he has used mindfulness to not get as upset with them. Elise also mentioned she has gotten better about not getting mad as

quickly when her sister takes her toys. Chad said, "The more we practice something the better we can get at it, so we need to keep doing this."

Utilizing the post-intervention survey, all eight of the students wrote that they wanted to continue learning mindfulness. They were sad that the six weeks had passed so quickly and hoped that the lessons could continue. Georgy wrote, "We were just getting good. We can't stop now. I want to keep doing this."

Theme Three: Value of Future Practice

Contemplating the data collection results, the third theme that emerged as a product of receiving instruction was the student's recognition of calmness in mindfulness practices and the value that this has in educational setting. The findings from the different data concluded that students valued mindfulness lessons, not only for themselves, but for teachers and other students as well.

Utilizing the post-intervention survey and informal interviews, all eight of the students concluded that they wanted to continue learning mindfulness. Data revealed that the students saw the benefits of teaching the sessions to the rest of the students. Again, all eight students wrote that there was value in the teacher-researcher continuing these lessons with the rest of the school. They provided many examples of their reasoning for this. David summed it up best by saying, "everyone gets upset or mad or has a hard time focusing sometimes. The mindful lessons that we have learned to help us with these issues would be good to teach everyone else, so they have a way to deal with them." The specifics of the surveys confirmed that the students thought the sessions were valuable and that they were worthy to continue being taught to the rest of the school.

Students saw value in mindful training for producing a positive learning environment. For example, the teacher-researcher asked the students to describe the mood of the room before starting the first lesson. Students designated the room as busy, noisy, and loud. After the teacher-researcher provided a few lessons on mindfulness techniques, he asked the students to describe the room during the devoted mindful sit period. Elise discussed how the mindful sit practice was "nice, but only being able to last for a short time before others were making me lose focus." All the students pointed to how for a short time the room felt calm but then would transition back to being noisy.

As the intervention progressed through the lessons and the students were exposed to more and more mindfulness practice techniques, they became more attentive of what they deemed to be calmness or peacefulness. They also pointed out how much longer they could sit quietly without being distracted. The students were more aware of outside distractions but learned to utilize their mindfulness techniques effectively to help keep them focused on the present moment. Bobby and Georgy made mention during lesson nine that the room "felt calm." The teacher researcher also was conclusive with these observations. Over the 12 videotaped lessons, students' overall calmness in overt behaviors displayed during the activities increased (See Figure 4.4) as students were able to sit for longer durations of time during mindfulness practices.

During the fifth lesson, a student from another class entered to ask a question. In reviewing the video, the teacher-researcher noted that six of the eight students did not even open their eyes to look. Of the two students who looked, they both quietly went back to sitting with their eyes closed after a couple seconds. In a follow-up, the teacher-researcher asked them what they were doing, and they responded by saying "they noticed

the other student but then went back to focusing on their anchor breath." In the video the students can be seen with their hand on their belly while breathing in and out slowly. This was one of the first techniques the students were taught to help them focus. It was apparent from multiple instruments indicated that the students developed an increase awareness of calmness, thus, concluding the necessity for including lessons like this when looking to impact students and their learning environments.

The most striking discovery over inductive coding analysis was the students' value of practices for teachers in the building. Because students felt more competent in regulating their own emotions as this unit progressed, students verbalized through the post-questionnaire the value of also exposing staff at Southeast Elementary to the mindfulness training. While students discovered the benefits of mindfulness training on their own sense of calm, students expressed the importance of teaching adults these techniques as well. Classroom discussions at the end of the unit included students talking about teaching their family members what they had learned. Then, the post-intervention questionnaire provided valuable information about students' perceptions of the current climate at the school and their value and necessity of this type of training on emotional regulation in teachers.

Specifically, all students concluded that this teacher researcher should extend the mindfulness unit to other teachers in the building. While a couple students reported this to increase exposure of these experiences to other classrooms so both they and other students could participate in these activities after the intervention is completed, most expressed a different reasoning. Five out of the eight students concluded that mindfulness training should be taught to educators in the building because teachers get

mad and need techniques to help them learn how to calm themselves down. Elise wrote

on the post-questionnaire that "like the students, they can use it when they are stressed."

Anna, Bobby, and Georgy all reported that mindfulness training for other teacher is

imperative for a healthy learning environment because they "get mad" at students and it

"will calm them down." These student responses reflected their precepted value of

training in helping provide the individual with a sense of calmness and control. Student

participates saw the need for both training within the student and teacher populations

when trying to create effective and nurturing learning environments for the future.

Conclusion

Overall, three main themes emerged from the data. They were of student

development of a universal understanding of mindfulness, increased enjoyment levels,

and expressed understanding of the value of these practices in an elementary setting.

Data collected across instrument types highlighted the student's demonstration of positive

attributes which they credited to developing through the mindfulness intervention.

Mindfulness can help to identify situation that keep us trapped in feelings of self-doubt

and shame and learn instead how to embrace the peacefulness that stems from living in

the present moment (Kabat-Zinn, 2003). For far too long, education has relied on

structures, coursework, and instructional methods developed for a time that doesn't exist

anymore. The current definition of student success is to narrow. It is time to put students

first and rethink how students are taught. A more balanced approach, that includes

academics as well as physical and mental education is necessary. To this end, the findings

from this study support the inclusion of mindfulness lessons into an elementary student's

school routine to help them focus on the present moment by teaching them strategies to

help throughout their lives.

CHAPTER FIVE

DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Chapter Five begins by summarizing the findings of this qualitative action research, including describing the PoP and research question. A brief overview of the interventions data collection instruments and an interpretation of the findings of the study follow. Because Mertler (2014) states that action research is used to solve problems at the local level, an action plan is then described to share interpretations of findings and effect change with the rest of the staff at Southeast Elementary. This section concludes with suggestions for additional research for mindfulness trainings to help reach a deeper understanding of its affect across various classroom settings.

As a reminder, this action research study was created after the teacher-researcher witnessed students in his classroom displaying signs of distress at the mention of assessments. When discussing this with teachers at the local setting, they mentioned how these emotions were consistent with many other students. This led the teacher researcher to wonder what he could do to help students learn coping strategies to help with how they were feeling. Upon completing a literature review, the teacher-researcher concluded that mindfulness training could be beneficial to solve the problem at the local setting. The data analysis, as previously discussed during Chapter Four, allowed for three themes to emerge: (a) a universal definition of mindfulness, (b) enjoyment in practices, and (c) value in future trainings. With the interpretations of the findings, it was concluded that

educational institutions should further explore mindfulness training in the classroom

setting. Suggestions for future research are, therefore, provided at the end of this chapter.

Research Question

What impact will mindfulness sessions have on the dispositions of eight third-

grade students at an elementary school in the Southeast region of the United States?

Purpose of the Study

The purpose of this study was to determine the impact of mindfulness practices on

eight third-grade students at an elementary school in the Southeast region of the United

States during a six-week intervention.

Summary of the Study

The purpose of the study was to examine the impact of mindfulness strategies on

student dispositions at the third-grade level at Southeast Elementary. Students were

displaying signs of stress at the mention of a test during class time. Too often individuals

who experience testing anxiety are not sufficiently attending to their physiological needs,

such as reducing their usual amounts of sleep and not eating a balanced diet (Goonan,

2003). This was evident at the local level as well while the third graders discussed

having difficulty sleeping at night as the state testing dates neared. As a physical

educator, this teacher-researcher recognized the problem at the local level and found

value in seeking solutions in the classroom setting. Being someone that appreciates a

more holistic way of teaching, one that is conscious of the emotional concerns of the

students, this teacher-researcher began seeking ways to incorporate practices to help these

stresses in the classroom. Because Hyland (2009) established that a foundation in

mindfulness practices could help develop a nature of learning and educational activity

that can continue to cultivate as individuals grow, this action research study was created in attempt to bring the theoretical world to the practical one.

Therefore, a six-week unit was created and administered twice a week over the Spring semester of 2019. During each 15-minute lesson, students in a third-grade classroom at Southeast Elementary were introduced to mindfulness concepts of breathing, thinking, feelings, and doing. After the weekly activities were completed, students would complete an exit slip administered on their Google Classroom to help add rich data to the study. During this instrument type, the teacher-researcher was provided with data that helped cross analyze students' perceived levels of enjoyment and effectiveness on their dispositions with that of the observations made during the lessons. Pre- and post-intervention questionnaires and informal interviews were also utilized to help answer the research question developed for this study.

The synthesized results of the various data sources indicated that students' dispositions, in both thinking and behavior, were positively impacted with the exposure to mindfulness practices. The effect was realized through the previously discussed themes, which challenged students to find time to focus on the present moment. After the comparison of the data was completed, three distinct themes emerged: (a) universal understanding of mindfulness, (b) enjoyment, and (c) value of future practice.

Through the findings, the teacher-researcher found that these themes revealed a lot about student understanding of mindfulness and their ability to use the techniques for many situations. First, the students valued the practice of mindfulness for its capacity to help with calmness. Being calm and able to regulate emotions, are fostered using mindfulness because the bottom-up influences, such as stress and anxiety, are decreased

(Zelazo & Lyons, 2012). Evidence also showed that the students valued the worth of future practices, and transferability of mindfulness to all aspects of their lives. People who are mindful have been found to have an improved awareness about themselves, others, and their environment (Holas & Jankowski, 2013). These examples combined to demonstrate that the students in this research group found value and worth of practicing mindfulness at the local school setting. Therefore, students' responses across instruments indicated this value by concluding the need for mindful training for teachers because of their need for coping strategies when students make them mad.

Because dispositions are defined as frequent and voluntary habits of thinking and doing (Katz & McClellan, 1997), the instruments in this study aimed to also measure students' behaviors during the mindfulness practices. For instance, videotaping the lessons allowed for a richer data collection process as teacher could rewind and reevaluate the activities of the classroom based on new potential trends. To evaluate the effectiveness of the training on student behaviors, the teacher-researcher played back the lessons and recorded when students became fidgety during the two-minute mindful sit. By the end of the lessons, all students showed improvement on siting mindfully with a class average of a 64 second (See Figure 4.4) increase after the 12 trainings were administered. Therefore, through the various data sources it was concluded that mindfulness practices positively affected the students' dispositions and student perceived calmness in the room. Students found enjoyment and felt that the training was effective in helping them cope with their emotions. Values of these practices also where shown as most students found value of future lessons for other educators in the building to help them regulation their daily stressors.

Implications of Study

For several reasons, students and teachers are coming to school with historic

higher levels of self-reported levels of stress (Munsey, 2010; Plante, 2018; Ouellete et al.,

2018). Currently, 13.1 million American children live in households that struggle with

hunger (Patterson, 2017). High stakes standardized testing then adds anxiety to an

already difficult situation. These high stress issues all compound themselves into a

crushing situation in American educational systems that cannot be ignored. Schools must

look at how to constructively deal with the heightened emotional and behavioral states of

students and educators today. Mindfulness training should be considered when

institutions look to battle these complex challenges relative to the rise in stress among

students and educators. While generalizations cannot be made, the data in this study, in

fact, reveals that the notion of mindfulness is one way to confront our ever-increasing

stress-filled environments, including in the school setting.

Enjoyment levels consistently displayed by student participants over the course of

the intervention further suggests that mindfulness might be an important framework for a

holistic learning environment. Tapping into student enthusiasm, while

allowing for character development opportunities and coping strategies lends itself well

to a more meaningful "brain break" during instructional time. Srimaharaj, Chaising,

Temdee, Chaisricharoen, and Sittiprapaporn (2018) emphasize that spending a long time

during the class without a break can be counterproductive as it has been shown to

decrease the brain's learning ability. Therefore, taking "mental breaks every 45 minutes

is considered as stress reduction and prepared for better learning" (Srimaharaj et al.,

2018,). In that light, mindfulness lessons help with the development of the affective

domain, which is so often neglected in curriculum development, in a "fun," but "calming" environment.

Not only could mindfulness practices help students "develop social and emotional intelligence, resulting in self-awareness, less stress, and overall happiness and empathy" (Abrahams, 2018, para. 9); these practices could also be highly beneficial for educators with respect to the longevity of one staying in the profession. Indeed, learning coping strategies, or what is referred to as voluntary responses to stress, would help teachers obtain a good quality of life and guarantee a healthy lifestyle (Rodriquez, Torres, Paez, & Ingles, 2016).

A deeper understanding about mindfulness with respect to both teachers and students, especially in school settings that are under-resourced and those settings which are populated by students who have been historically marginalized, the notion of mindfulness is even more relevant. bell hooks (1994) emphasized the need for holistic teaching practices by concluding that effective educators must believe that their work "is not merely to share information but to share in the intellectual and spiritual growth of our students" (p. 13). Mindfulness training, as displayed during this action research study, appear to support hooks' (1994) notion that *Teaching to Transgress* requires a learning environment that "respects and cares for the souls of our students" (p. 13).

Action Plan

The findings of the study indicate that mindfulness practices could be beneficial in affecting positive results in student dispositions in a classroom setting. Students saw value in its impacts on the overall classroom environment as students described it as a calmer environment. The teacher researcher also inferred based on the synthesis of data

collected over the six-week intervention that the training positively impacted both the students' thinking and behaving in class. Because value was evident of including mindfulness in an elementary school setting, an action plan was created to help share the findings with others. The plan consists of three specific steps to (a) include more students in exposure to mindfulness training in the physical education classroom, (b) share with other educators at the school, and (c) conduct additional research based on questions that developed over the course of the study.

The first step of the action plan is to look for opportunities for implementation during the regular physical education class period. Students found the lessons in mindfulness to have value in their lives and expressed their enjoyment throughout the lessons. Thus, this teacher-researcher reflected on when these similar mindful trainings would fit into the current classroom procedure. On a normal day in the gym, students first begin warmup activities before they complete the lesson objectives for the day. Being that the activities are usually playful and high impact because of the physical education standards, students are active throughout the whole class. Upon further review, it might be beneficial to include mindfulness practices the last five to ten minutes of class. This could help present a framework to talk about such topics as kindheartedness as it pertains to sports, coping skills, and overall wellness. It could also help create a sense of calmness as they leave the gym and help them focus on the rest of their academic tasks for the day. Observations and reflections, as presented in the cyclical model of action research, will help guide the development of these types of additions into the teacher-researcher's daily classroom procedures.

The second step in impacting change at the local setting is including more educators in mindfulness practices. This could be completed by sharing the results of the study to the rest of the staff at Southeast Elementary. Students, having recognized the value of the mindfulness practices, expressed their desire for more teachers to be educated on the concepts. Their reasoning included their own desires to continue these activities after the intervention was completed, helping expose other students to the lessons, and helping teachers find ways to self-regulate their own emotions.

The third component of the action plan is to include opportunities for additional research on the PoP over various settings and longer durations of time. Mertler (2014) postulates that educational research, often occurring "in the ivory towers of higher education," creates a gap between the often overly descriptive and highly technical research methods and the supposed users of the research (i.e., teachers or other educational practitioners) (p. 258). The teacher-researcher actively engaging in the cyclical nature of an action research study is vital to the educational system as it becomes the missing link between the theoretical and practical world of education (Mertler, 2014, p. 258).

Longer exposure to mindfulness practices, larger demographic makeups, and various settings are all valuable components to future research in understanding the PoP at the local level. Further research and replication of the current study will help find the practicality of mindfulness in the elementary classroom. By sharing the findings and suggestions for future studies with the rest of the staff at Southeast Elementary, educators can feel empowerment as they explore together during the action research process to help gain additional insight into the topic under investigation.

Suggestions for Future Research

As each educational reform is introduced and continues to fail because of the lack of participatory involvement by educators at the local setting, teachers increasingly "work in isolation on narrowly defined tasks with neither the time nor the opportunity to address learning as a whole" (Greenwood, 1999, p. 236). By insisting on participation and collaboration, the action research process tries to break these disempowering practices. Therefore, an integral part of the procedure requires reflection for future research from both the teacher-researcher and other educators working collaboratively to obtain a deeper understanding of the PoP.

Because of careful reflections in a cyclical system, several questions emerged during the development, data analysis, and conclusions portions of this study which suggest future research ideas to better understand the effectiveness of mindfulness practices in an elementary school setting. One specific question that developed was one of duration of the intervention. Having very limited time, due to the restraints within university expectations and the fact that the teacher-researcher had to coincide the study duration with another teachers' schedule, this study had inherent limitations and challenges that should not be ignored.

Studies are usually short and will often show small gains in characteristics such as non-judging and acting with awareness, but longer trials could be warranted to understand the overall impacts of mindfulness (Bakosh, Snow, Tobias, Houlihan, & Barbosa-Leiker, 2015; Steiner, Sidhu, Pop, Frenette, & Perrin, 2013). The concepts of mindfulness do not integrate into the mind immediately and the practice takes a while to

instill, so a study that lasts longer than the customary eight to ten-week course would be useful for understanding long-term effects.

An important finding during the videotaping analysis suggested that other potential benefits of mindfulness in a classroom setting might exist besides coping skills and increased enjoyment levels in individuals. Specifically, findings concluded that students' duration of time that students display mindful sitting almost tripled by the end of the training (See Figure 4.4). This could be important information for teachers interested in optimizing attention during regular classroom lessons. Additional research utilizing a mixed methods comparative approach could see if these findings are duplicated across different settings and if the attention spans could be transferable to class time lessons after the mindful practices have been completed.

Another question developed because of the teacher-researcher's positionality as a physical education teacher at the school. Students often associate physical education as a fun activity. Did this preconceived notion of fun effect some of the students opinion regarding the more structured academically focused mindful lessons? Students enjoyed completing mindful breathing techniques, listening to the bell and using anchor words, and completing mindful body movements. On the other hand, enjoyment levels decreased when lessons pertained to "being a better student." For example, children appeared to find less satisfaction in talking about mindful seeing and listening and discussions about generosity and heartfulness within the school settings. This study, duplicated by other teachers in the building, ones that students already correlate to helping with their cognitive processing in more traditional settings, would help develop a richer understanding of the intervention's effects on the PoP.

Conclusion

Littky and Grabelle (2004) conclude that our addiction to standardized testing binds us to what we hold valuable as a society, because it now dictates what we deem as important lessons for our children to learn. Ask parents and employers what they want for students in a school setting and overwhelmingly conclude that experiences should spark creativity and develop thinking through innovation (Herbart, 2018). Yet, fixations on testing emphasis rote learning practices in high stakes and stressful learning environments.

The increased focus on test prep and the need to quantify academic achievement for the purposes of political and financial acknowledgement from government officials has profoundly negative impacts on the quality of education (Mulholland, 2015). Observations from the students and teacher-researcher at the local level conclude that stress levels appear to be high. Although other factors could contribute to the increase in stresses reported in the classroom, many concur that high-stake testing is having negative effects on individuals (Gannon Tagher & Robinson, 2016; Skybo, 2007). These observations at Southeast Elementary sadly follow national trends which report increased stress levels in both the teaching professionals (Gonzalez, Peters, Orange, & Grigsby, 2017; Saeki, Segool, Pendergast, & von der Embse, 2018) and their students (Flannery, 2018; Skyboo, 2007). This issue should not be ignored.

Action research, defined as "the systematic inquiry conducted by teachers, administrators, counselors, and others with a vested interest in the teaching and learning process" (Mertler, 2014, p. 14), should be used for empowerment of educators as they "create meaningful and authentic change" (Vaughan, Boerum, & Whitehead, 2019).

Teachers are less often allowed a role in establishing behavioral policies, engaging in school improvement plans, and determining appropriate professional development programs (Ingersoll, Sirinides, & Dougherty, 2018). Therefore, sharing and disseminating the current research study with others allows for an opportunity to encourage others to participate for the sake of collaboratively working on solving this issue of stress and over-testing in American schools today.

The rich foundation of research, along with an increased body of supporters, are fueling the momentum behind mindfulness as a strategy for combating stress levels in education (Cassani Davis, 2015). Kabat-Zinn (2003) describes mindfulness as the way that one pays attention, intentionally trained to the present moment, and masterly maintaining an attitude of non-judgment (p. 145). The practice of strengthening mindfulness in an individual involves two skillsets: self-regulation of attention and awareness of experiences in a nonjudgmental way (Metz et al., 2013).

With the increased attention of mindfulness as a potential framework for combating stresses, this action research study was created to evaluate the practicality of implementing mindfulness trainings in a classroom setting. Through triangulation of data sets, it can be concluded that students agree that mindfulness trainings should be included in educational settings because of the level of enjoyment and the effectiveness that they saw in creating a sense of calmness around them.

These results, in conjunction with previously discussed benefits in the literature review, should encourage further exploration into the application of mindfulness practices in an elementary setting. Although the initial problem at the local level regarded testing anxieties, interpretations suggest broader reasoning as to why mindful

training would benefit students and staff at Southeast Elementary. For instance, students who reporting an increase in competency and enjoyment levels in learning about coping skill to manage their emotions also saw the value this training would have on educators.

When teaching and learning are viewed as problem solving processes, the decisions within the educational system emphasize developing environments that allow for educators and learners to collaborate. Littky and Grabelle (2004) postulate that the best possible environment for this to occur in "is one where people feel safe, supported, and respected, and where kids *and* adults are excited and passionate about learning." Because action research utilizes collaborative efforts for solving local problems, this framework helped create a supportive environment for meaningful dialect between the teacher-researcher and students at Southeast Elementary.

In conclusion, the U.S. education system's focus on cognitive intelligence, through the form of mandated standards and state testing, undermines the development of equally dynamic forms of non-cognitive intelligence. These intelligence, ignored in the world of "bubbled" answers, involves dimensions of the mind that are problematic to quantify. These neglected dimensions include the "foundation of good character, resilience, and long-term life fulfillment. It is this part of the mind that mindfulness seeks to address" (Cassani Davis, 2015). Therefore, it can be inferred that implementation of mindful practices can help students and educators alike develop coping skills for the stressful world they live in. But, more importantly, it can help them recognize and value parts of the individual that are currently being ignored in the narrow-minded, standardized curriculum found in American classrooms today.

REFERENCES

Abrahams, M. (2018). Mindfulness in the classroom; Stress is fast becoming the

common denominator that all of us suffer, but now it's affecting our children, too,

writes Marchelle Abrahams. *Daily News (South Africa).* Retrieved from

https://advance-lexis-com.pallas2.tcl.sc.edu/api/document?collection=news

&id=urn:contentItem:5RKG-W1F1-F091-R12V-00000-00&context=1516831

Ayers, W. (2004). The standards fraud. In A. S. Canestrari & B. A. Marlowe (Eds.),

Educational foundations: An anthology of critical readings (pp. 195–198).

Thousand Oaks, CA: Sage.

Andrews, B., & Wilding, J. M. (2004). The relation of depression and anxiety to life

stress and achievement in students. *British Journal of Psychology (London,*

England :1953), *95*(Pt 4), 509–521. https://doi.org/10.1348/0007126042369802

Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and

empirical review. *Clinical Psychology: Science and Practice*, *10*(2), 125–143.

https://doi.org/10.1093/clipsy/bpg015

Bagdi, A., & Pfister, I. (2006). Childhood stressors and coping actions: A comparison

of children and parents' perspectives. *Child & Youth Form, 35*(1), 21-40.

Baker, J. D. (2016). The Purpose, Process, and Methods of Writing a Literature Review.

AORN Journal, *103*(3), 265-269. https://doi.org/10.1016/j.aorn.2016.01.016

Bakosh, L.S., Snow, R., Tobias, J., Houlihan, J., & Barbosa-Leiker, C. (2015).

Maximizing mindful learning: An innovative mindful awareness intervention

  improves elementary school students' quarterly grades. Mindfulness. Retrieved

from http://meditationfreedom.com/wp-content/uploads/2015/10/Bakosh-

Houlihan-2015-Maximizing-Mindful-Learning.pdf

Bandura, A. (1971). Social learning theory. In *Social Learning Theory* (pp. 1–46). New

York City: General Learning Press.

https://doi.org/10.1111/j.14602466.1978.tb01621.x

Bandura, A. (1978). "Modeling theory: Some traditions, trends, and disputes". *In Parke,*

R.D. Recent trends in social learning theory. New York, NY*: Academic Press,*

Inc.

Bandura, A. (1978). The self system in reciprocal determinism. *American Psychologist*,

33(4), 344–358.

Bandura, A., Ross, D., & Ross, S. A. (1961). Transmission of aggression through

imitation of aggressive models. *Journal of Abnormal and Social Psychology*,

63(3), 575–582. Retrieved from https://doi.org/10.1037/h0045925

Bandura, A., Ross, D., & Ross, S. A. (1963). Imitation of film-mediated aggressive

models. *Psycnet.Apa.OrgSign In*, *66*(1), 3–11. Retrieved from

https://doi.org/10.1037/h0048687

Bamber, M., & Schneider, J. (2016). Mindfulness-based meditation to decrease stress

and anxiety in college students: A narrative synthesis of the research. *Educational*

Research Review, 18, 1-32.

Baumeister, R., Bratslavsky, E., Finkenauer, C., & Vohs, K. (2001). Bad is stronger

than good. *Review of General Psychology, 5(4),* 323-370.

Belar, C., Nordal, K., Ballard, D., Bufka, L., Diaz-Granados, J., Beatty, L., & Lewan, E.

(2017). *Stress in America: Coping-With-Change.* Retrieved from

https://www.apa.org/news/press/release/stress/2016/coping-with-change.pdf

Ben-Arieh, A., Casas, F., Frones, I, & Korbin, J. (2014). *Handbook of Child Well-Being*.

New York, NY: Springer

Ben-Zur, H. (2003, April). Happy adolescents: The link between subjective well-being,

internal resources, and parental factors. *Journal of Youth and Adolescence, 32(2),*

67-79.

Bradshaw, J., Martorano, B., Natali, L., & De Neubourg, C. (2013). Children's subjective

well-being in rich countries. *Child Indicators Research, 6*(4), 619-635.

https://doi.org/10.1007/s12187-013-9196-4

Britton, W. B., Lepp, N. E., Niles, H. F., Rocha, T., Fisher, N., & Gold, J. S. (2014). A

randomized controlled pilot trial of classroom-based mindfulness meditation

compared to an active control condition in sixth-grade children. *Journal of School*

Psychology, 52(3), 263-278.

Brown, K., Creswell, D., & Ryan, R. (2015). *Handbook of Mindfulness: Theory,*

research, and practice. New York, NY: The Guilford Press.

Browne, L. (2014-2015). Toxic stress among children in urban schools. *Delaware*

Lawyer, 32(4), 16-19.

Burger K., & Samuel, R. (2017). The role of perceived stress and self-efficacy in young

people's life satisfaction: A longitudinal study. *Journal of Youth and*

Adolescence, 46(1), 78-90.

Burke, E. (2016). What stresses me out and what helps me feel better: Voices of

children and adolescents from around the world. *PsycCritiques, 62*(20).

Buss, R., & Zambo, D. (2014). A practical guide for students and faculty in CPED

    influenced programs working on action research dissertation in practice, 83.

    Retrieved from https://cpedinitiative.org

Butler, G. (1993). Definitions of Stress. Occasional Paper *(Royal College of General*

    Practitioners), (61), 1-5.

Cassani Davis, L. (2015). When mindfulness meets the classroom. *The Atlantic*.

    Retrieved from

    https://www.theatlantic.com/education/archive/2015/08/mindfulness-education-

    schools-meditation/402469/

Cavazos, B. (2016). Schools combine mediation and brain science to help combat

    discipline problems. *The Education Digest,* 10-16.

Chen, D. D., & Pauwels, L. (2014). Perceived benefits of incorporating yoga into

    classroom teaching: Assessment of the effects of "Yoga Tools for Teachers."

    Advances in Physical Education, *4*, 138-148.

    http://dx.doi.org/10.4236/ape.2014.43018

Cohen, S., Janicki-Deverts, D., & Miller, G. E. (2007). Psychological stress and disease.

    Journal of American Medical Association, *298*(14), 1685-1687.

Cohen, S., & Williamson, G. M. (1991). Stress and infectious disease in humans.

    Psychological Bulletin, *109*(1), 5–24. https://doi.org/10.1037//0033-2909.109.1.5

Cool, J., & Zappetti, D. (2019). *The physiology of stress.* In D. Zappetti & J. Avery (eds),

    Medical Student Well-Being (pp. 1-15). Thousand Oaks, CA: Springer.

ChamCoyne, J. C., & Downey, G. PSYCHOPATHOLOGY: Stress, social support, and

    coping processes. *Annual Review of Psychology*, *42*, 401–425.

Creswell, J. D. (2016). Mindfulness interventions. *Annual Review of Psychology*, *68*(1), 491-516. Retrieved from https://doi.org/10.1146/annurev-psych-042716-051139

Dariotis, J. K., Mirabel-Beltran, R., Cluxton-Keller, F., Gould, L., Greenberg, M. T., & Mendelson, T. (2017). A qualitative exploration of implementation factors in a school-based mindfulness and yoga program: Lessons learned from students and teachers. *Psychology in the Schools*, *54*(1), 53-69. https://doi.org/10.1002/pits.21979

DePaulo, B., & Morris, W. (2005). Singles in society and science. *Psychological Inquiry, 16*(2 & 3), 57-83.

Derry, S. J. (2007). *Guidelines for video research in education. Recommendations from an expert panel.* Chicago, IL: Data Research and Development Center. Retrieved from https://drdc.uchicago.edu/what/video-research-guidelines.pdf

Devcich, D., Rix, G., Bernay, R., & Graham, E. (2017). Effectiveness of a mindfulness-based program on school children's self-reported well-being: A pilot study comparing effects with an emotional literacy program. *Journal of Applied School Psychology, 33*(4), 309-330.

Devonport, T. (2011). *Managing stress: From theory to application.* Hauppauge, NY: Nova Science Publishers, Inc.

Dewe, P.J., O'Driscoll, M., & Cooper, C. (2012). Theories of psychological stress at work. In R. J. Gatchel & I. Z. Schultz (Eds.). *Handbook of occupational health and wellness.* New York, NY: Springer.

Dunlap, J. C. (2006). Using guided reflective journaling activities to capture students' changing perceptions. *Techtrends: Linking Research & Practice to Improve*

Learning, 50, 20–26. http://doi:10.1007/s11528-006-7614-x

Durdella, N. (2018). *Qualitative dissertation methodology: A guide for research design and methods.* Thousand Oaks, CA: SAGE Publications.

Eccles, J. S., & Gootman, J. A. (2002). Community programs to promote youth development. *Committee on Community-level Programs for Youth.* Washington, DC: National Academy Press.

Efron, S. E. & Ravid, D. (2013). *Action research in education: A practical guide.* New York, NY: Guildford Press.

Estrada, J. D. (2017). Mind gains: An experiment becomes practice and reveals the tangible benefits of mindfulness in the classroom. *Independent School, 77(1),* 12-16.

Flannery, M. E. (2018). The epidemic of anxiety among today's students. *neaToday.* Retrieved from http://neatoday.org/2018/03/28/the-epidemic-of-student-anxiety/

Fléron, B. (2016). *Stress and coping mechanisms: Manage your stress and live a happier life.* Retrieved from 50Minutes.com.

Forbes, S. H. (1996). Values in holistic education. *Education, Spirituality and the Whole Child,* 1-9.

Foret, M., Scult, M., Wilcher, M., Chudnofsky, R., Malloy, L., Hasheminejad, N., & Park, E. R. (2012). Integrating a relaxation response-based curriculum into a public high school in Massachusetts. *Journal of Adolescence, 35(2),* 325-332.

Gannon Tagher, C., & Robinson, E. (2016). Critical aspects of stress in a high-stakes testing environment: A phenomenographical approach. *Journal of Nursing Education, 55*(3), 160-163.

Gates, G. S. (2008). Emerging thought and research on student, teacher, and

administrator stress and coping. Charlotte, N.C.: Information Age Publishing.

Garruto, J., Heiser, P., Simidian, G., Albert, D., Catucci, D., Faustino, P., & Caci, K.

(2015). *Anxious for success: High anxiety in New York's schools*

Goldstein, L. S. (2008). Preparing preservice teachers for success in NCLB's

kindergartens: Learning from experienced teachers' strategies for managing

Gonzalez, A., Peters, M., Orange, A., & Grigsby, B. (2017). The influence of high stakes

testing on teacher self-efficacy and job-related stress. *Cambridge Journal of

Education, 47*(4), 513-531.

Goodman, S. H., Rouse, M. H., Connell, A. M., Broth, M. R., Hall, C. M., & Heyward,

D. (2011). Maternal depression and child psychopathology: A meta-analytic

review. *Clinical Child and Family Psychology Review*, *14*(1), 1–27.

Goonan, B. (2003). Overcoming test anxiety: Giving students the ability to show what

they know. In J. E. Wall & R. Walz (Eds.), *Measuring up: Assessment issues for

teachers, counselors, and administrators (*pp. 257-272).

Grant, K. E., Compas, B. E., Thurm, A. E., McMahon, S. D., Gipson, P. Y., Campbell, A.

J., & Westerholm, R. I. (2006). Stressors and child and adolescent

psychopathology: Evidence of moderating and mediating effects. *Clinical

Psychology Review*, *26*(3), 257-283. doi.org/10.1016/j.cpr.2005.06.011

Greder, K., Peng, C., Doudna, K., & Sarver, S. (2017). Role of family stressors on rural

low-income children's behaviors. *Children & Youth Care Forum, 46*(5), 703-720.

Greenwood, D. J. (1999). *Action research: From practice to writing in an international

action research development program.* Amsterdam: John Benjamins Publishing

Co.

Gruen, R. J., Folkman, S., & Lazarus, R. (1988). Centrality and individual differences

    inthe meaning of daily hassles. *Journal of Personality, 56*(4), 743-762.

Hare, J. (2010). Holistic education: An interpretation for teachers in the IB programmes.

    International Baccalaureate Organization.

Harris, H. L., & Coy, D. R. (2003). Helping Students Cope with Test Anxiety. Eric

    Digest. *Eric Counseling and Student Services Clearing House.* Retrieved

    fromhttp://eric.ed.gov/?id=ED479355

Herbart, P. (2018, April 17). Column: Standardized tests dull learning. The Detroit

    News. Retrieved from

    https://www.detroitnews.com/story/opinion/2018/04/17/standardized-tests-

    dull/33935993/

Herr, K., & Anderson, G. (2015). *The action research dissertation: A guide for students*

    and faculty. Thousand Oaks, CA: SAGE Publications.

Herrington J., Reeves T. C., & Oliver R. (2014). Authentic learning environments. In J.

    Spector, M. Merrill, J. Elen, & M. Bishop (Eds.). *Handbook of Research on*

    Educational Communications and Technology. New York, NY: Springer.

Holas, P., & Jankowski, T. (2013). A cognitive perspective on mindfulness. *International*

    Journal of Psychology, *48*(3), 232-243. doi:10.1080/ 00207594.2012.658056

Holzel, B.K., Lazar, S.W., Gard, T., Schuman-Olivier, Z., Vago, D.R., & Ott, U. (2011).

    How does mindfulness meditation work? Proposing mechanisms of action from a

    conceptual and neural perspective. *Perspectives on Psychological Science, 6*,

    537–559.

Huberty, B. T. J. (2009). Test and performance anxiety. *Principal Leadership, 10(1),* 12-
    16.

Hyland, T. (2009). Mindfulness and the therapeutic function of education. *Journal
    ofPhilosophy of Education*, *43*(1), 119-131.

Ingersoll, R., Sirinides, P., & Dougherty, P. (2018). Leadership matters: Teachers' roles
    in school decision making and school performance. *American Educator, 42*(1),
    13-17. Intervention. (n.d.) *American Heritage® Dictionary of the English
    Language, Fifth Edition*. (2011). Retrieved from
    http://www.thefreedictionary.com/intervention

Jarrett, O. S. (2013). A Research-Based Case for Recess. Retrieved from
    www.usplaycoalition.clemson.edu

Jensen, E. (2005). In *Teaching with the Brain in Mind,* (2nd Ed.) (p. 184). Alexandria,
    VA, USA: ASCD. Retrieved from
    http://www.ascd.org/publications/books/104013/chapters/Movement-and-
    Learning.aspx

Jensen, P. S., & Kenny, D. T. (2004). The effects of yoga on the attention and behavior of
    boys with Attention-Deficit/Hyperactivity Disorder (ADHD). *Journal of
    Attention Disorders, 7*(4), 205-216.
    https://doi.org/10.1177/108705470400700403

Jewett, J. (2002). *Stress and young children*. Champaign, IL: ERIC Clearinghouse on
    Elementary and Early Childhood Education.

Joens-Matre, R. R., Welk, G. J., Calabro, M. A., Russell, D. W., Nicklay, E., & Hensley,
    L. D. (2008), Rural–urban differences in physical activity, physical fitness, and

overweight prevalence of children. *The Journal of Rural Health, 24*, 49–54.

https://doi:10.1111/j.1748-0361.2008.00136.x

Joshi, V. V. (2005). *Stress: From burnout to balance*. New Delhi: Sage Publications Pvt.

Ltd.

Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in

everyday life.* New York, NY: Hyperion.

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and

future. *Clinical Psychology: Science and Practice*, *10*(2), 144–156.

https://doi.org/10.1093/clipsy/bpg016

Kabat-Zinn, J. (2011). Some reflections on the origins of MBSR, skillful means, and the

trouble   with maps. *Contemporary Buddhism: An Interdisciplinary Journal*,

12(1), 281-301. https://doi:10.1080/14639947.2011.564844

Katz, L.G., & McClellan, D. (1997). *Fostering children's social competence: The

teacher's role.* Washington, DC: NAEYC.

Kaye-Tzadok, A., Kim, S., & Main, G. (2017). Children's subjective well-being in

relation to gender—What can we learn from dissatisfied children? *Children and

Youth Service Review, 80*, 96-104.

Kelland, M. (2014). *Personality Theory. A multicultural perspective*. Scotts Valley, CA:

CreateSpace Independent Publishing Platform.

Kiken, L., Garland, E., Bluth, K., Palsson, O., & Gaylord, S. (2015). From a state to a

trait: Trajectories of state mindfulness in mediation during intervention predict

changes in trait mindfulness. *Personality and Individual Differences, 81*, 41-46.

Kim, B. K, Ko, I. G., Kim, S. E., Kim, C. J., Yoon, J. S., Baik, H. H, Jin, B. K, Lee, C. Y,

Baek, S. B., & Shin, M. S. (2013). Impact of several types of stresses on short-term memory and apoptosis in the hippocampus of rats. *International Neurourology Journal, 17*(3), 114-120.

Klein, A. (2015, April 10). No Child Left Behind: An Overview. *Education Week.* Retrieved from http://www.edweek.org/ew/section/multimedia/no-child-leftbehind-overview-definition-summary.html

Krohne, H. W. (2002). Stress and coping theories. *The International Journal on the Biology of Stress, 22,* 15163-15170. https://doi.org/10.1016/BO-08-043076-7/03817-1

Ladd, H. F. (2017). No Child Left Behind: A deeply flawed federal policy. *Journal of Policy Analysis and Management*, *36*(2), 461-469.

Lai, B., Beaulieu, B., Ogokey, C., Self-Brown, S., & Kelly, M. (2015). Mother and child reports of hurricane related stressors: Data from a sample of families exposed to Hurricane Katrina. *Child & Youth Care Forum, 44*(4), 549-565.

Lantz, P. M., House, J. S., Mero, R. P., & Williams, D. R. (2005). Stress, life events, and socioeconomic disparities in health: results from the Americans' Changing Lives Study. *Journal of Health and Social Behavior*, *46*(3), 274–288. https://doi.org/10.1177/002214650504600305

Larson, R. W. (2011). Positive development in a disorderly world. *Journal of Research on Adolescence, 21*(2), 317-334.

Lawlor, M. S., Schonert-Reichl, K. A., Gadermann, A. M., & Zumbo, B. D. (2014). A validation study of the Mindful Attention Awareness Scale adapted for children. *Mindfulness, 5*(6), 730-741.

Layton, L. (2015, August 23). U.S. schools are too focused on standardized tests, poll

    says. *The Washington Post.*

Lee, J. (2016, May 12). So we know students are stressed out…now let's talk about it.

    NPR. Retrieved from https://www.npr.org/sections/ed/2016/05/12/474083552/so-

    we-know-students-are-stressed-out-now-lets-talk-about-it

Lengel, T., & Kuczala, M. (Eds.). (2010). *The kinesthetic classroom: Teaching and*

    learning through movement. Thousand Oaks, CA: Corwin Press.

Leung L. (2015). Validity, reliability, and generalizability in qualitative research. *Journal*

    of family medicine and primary care, *4*(3), 324–327.

    https://doi.org/10.4103/2249-4863.161306

Littky, D., & Grabelle, S. (2004). *Big picture: Education is everyone's business* (3rd

    edition). Alexandria, VA: Association for Supervision and Curriculum

    Development.

Magee, R., & Jones, B. (2012). An instrument to assess beliefs about standardized

    testing: Measuring the influence of epistemology on the endorsement of

    standardized testing. *Australian Journal of Educational & Developmental*

    Psychology, *12,* 71-82.

Mahmoudi, S., Jafari, E., Nasrabadi, H. A., & Liaghatdar, M. J. (2012). Holistic

    education: An Approach for 21st Century. *International Education Studies*, *5*(3),

    178-186. doi.org/10.5539/ies.v5n3p178

Majumder, M. S., Nguyen, C. M., Sacco, L., Mahan, K., & Brownstein, J. S. (2017,

    September 12). *Risk factors associated with election-related stress and anxiety*

    before and after the 2016 US Presidential Election. Retrieved from

psyarxiv.com/u4hns

Martin, R. A. (2002). *Alternatives in Education: An Exploration of Lerner-Centered,*
Progressive, and Holistic Education. Paper presented at the Annual Meeting of
the American Educational Research Association, New Orleans, LA. Retrieved
from https://eric.ed.gov/?id=ED466453

Mayer, J. (2007). Creating a safe and welcoming school. *United Nations Educational,*
Scientific, and Cultural Organization. Retrieved from
http://www.ungei.org/Practice_16.pdf

McLeod, S. A. (2011). *Albert Bandura | Social Learning Theory | Simply Psychology*.
Retrieved from http://www.simplypsychology.org/bandura.html

Melrose, M. J. (2001). Maximizing the rigor of action research: Why would you want?
How could you? *Field Methods, 13*(2),160-180.

Mendelson, T., Greenberg, M., Dariotis, J., Gould, L., Rhoades, B., & Leaf, P. (2010,
May 4). Feasibility and preliminary outcomes of a school-based mindfulness
intervention for urban youth. *Journal of Abnormal Child Psychology, 28*, 985-
994.

Mertler, C. A. (2016). *Action research*: *Improving schools and empowering educators*
Learning to teach and teaching to learn through practitioner inquiry. (3rd ed.).
Thousand Oaks, CA: Corwin Press.

Mertler, C.A. (2017). *Action research: Improving schools and empowering educators.*
(5th ed.). Thousand Oaks, CA: SAGE Publications.

Metz, S., Frank, J., Reibel, D., Cantrell, T., Sanders, R., & Broderick, P.C., (2013). The
effectiveness of the learning to BREATHE program on adolescent emotion

regulation. *Research in Human Development, 10*(3), 252-272.

Miller, R. (1997). What are schools for? *Holistic Education in American Culture.*
Retrieved from http://great-ideas.org/SchoolsSample.pdf

Mills, G. (2018). *Action Research: A guide for the teacher researcher* (6th ed.). New
York, NY: Pearson.

Mindful Schools (n.d.) Retrieved from https://www.mindfulschools.org/

Mulholland, Q. (2015, May 14). The case against standardized testing. 2019 Harvard
Public Opinion Project. *Harvard Political Review*. Retrieved from
https://harvardpolitics.com/united-states/case-standardized-testing/

Munsey, C. (2010). The kids aren't all right. *Monitor on Psychology*, *41*(1), 1-22.

Nadler, R., Cordy, M., Stengel, J., Segal, Z. V., & Hayden, E. P. (2017, Feb.). A brief
mindfulness practice increases self-reported calmness in young children: A pilot
study. *Mindfulness, 8*(4), 1088-1095.

Napoli, M., Krech, P. R., & Holley, L. C. (2005). Social skills assessment and
intervention. *Journal of Applied School Psychology*, *21*(September), 21–38.
https://doi.org/10.1300/J370v21n01

National Institute of Mental Health (2016). ADHD Definition. Retrieved from
https://www.nimh.nih.gov/health/topics/attention-deficihyperactivity-disorder-
adhd/index.shtml#part_145444

No Child Left Behind Act of 2001, Pub. L. No. 107.110. (2002). *NPR.* Retrieved from
http://www.npr.org/sections/ed/2016/05/12/474083552/soweknow-students-are-
stressed-out-now-lets-talk-about-it

Nelson, H. (n.d.). Testing more, teaching less. What America's obsession with student

testing costs in money and lost instructional time. *A Union of Professionals.*

Retrieved from https://www.aft.org/sites/default/files/news/testingmore2013.pdf

Ortlipp, M. (2008). Keeping and using reflective journals in the qualitative research

process. *The Qualitative Report, 13*(4), 695-705. Retrieved from

https://nsuworks.nova.edu/tqr/vol13/iss4/8

Ortner, C. N. M., Kilner, S. J., & Zelazo, P. D. (2007). Mindfulness meditation and

reduced emotional interference on a cognitive task. *Motivation and Emotion,*

31(4), 271–283. doi.org/10.1007/s11031-007-9076-7

Ossola, A. (2015, Oct. 9). High-stress high school. What's the balance between preparing

student for college and ensuring they aren't killing themselves in the process? *The*

Atlantic. Retrieved from

https://www.theatlantic.com/education/archive/2015/10/high-stress-high-

school/409735/

Ouellet, R., Frazier, S., Shernoff, E., Cappella, E., Mehta, T., Marinez-Lora, A., Cua, G.,

& Atkins, M. (2018). Teacher job stress and satisfaction in urban schools:

Disentangling individual-, classroom, and organizational-level influences.

Behavior Therapy, 49(4), 494-508.

Patterson, T. (2017). Why does America have so many hungry kids? *CNN*. Retrieved

from https://www.cnn.com/2017/06/09/health/champions-for-change-child- hunger-in-

america/index.htm

Paul, G., Elam, B., & Verhulst, S. (2007). A longitudinal study of students' perceptions

of using deep breathing meditation to reduce testing stresses. *Teaching and*

Learning in Medicine, 19(3), 287-292.

Peck, H. L., Kehle, T., Bray, M. A., & Theodore, L.A. (2005). Yoga as an Intervention

for Children with Attention Problems. *School Psychology Review*, *34*(3), 41-45.

Persike M., & Seiffge-Krenke, I. (2012). Competence in coping with stress in adolescents

from three regions of the world. *Journal of Youth and Adolescence, 41*(7), 863-

879.

Perera, T., Frei, S., Frei, B., & Bobe, G. (2015). Promoting physical activity in

elementary schools: Needs. *Journal of Education and Practice, vi*(15), 55-64.

Peterson, J., Duncan, N., & Canady, K. (2009). A longitudinal study of negative life

events, stress, and school experiences. *Gifted Child Quarterly*, *53*(1), 34-39.

Petty, L. (2010, Aug. 20). Single? You're not alone. *CNN*. Retrieved from

http://www.cnn.com/2010/LIVING/08/19/single.in.america/index.html

Phillippi, J., & Lauderdale, J. (2017). A guide to field notes for qualitative research:

Context and conversation. *Qualitative Health Research*, *28*(3), 381-388.

Retrieved from https://doi.org/10.1177/1049732317697102

Pizmony-Levy, O. (2019, Oct. 18). Opinion: The Opt Out movement is gaining ground,

quietly. *The Hechinger Report*. Retrieved from

https://hechingerreport.org/opinion-the-opt-out-movement-is-gaining-ground-

quietly/

Plante, T. (2018). Americans are stressed out, and it is getting worse. *Psychology Today*.

Retrieved from https://www.psychologytoday.com/us/blog/do-the-right-

thing/201812/americans-are-stressed-out-and-it-is-getting-worse

Goldstein, L. (2008). Professional relationships with colleagues and parents. *Journal of

Early Childhood Teacher Education*, *29*(3), 222–236.

https://doi.org/10.1080/10901020802275278

Randolph, J. J. (2009). A guide to writing the dissertation literature review. *Practical Assessment, Research, & Evaluation*, *14*(13), 1-13. Retrieved from https://doi.org/10.1306/D426958A2B26-11D7-8648000102C1865D

Ravitch, D. (2010). *The death and life of the great American school system: How testing and choice are undermining education.* New York, NY: Basic Books.

Ravitch, D. (2016). *The death and life of the great American school system: How testing and choice are undermining education* (2nd Edition). New York, NY: Basic Books.

Ravitch, D. (2013). *Reign of error*. New York, NY: Vintage Books.

Rawls, J. (2001). *Justice as fairness: A restatement*. Cambridge, MA: Harvard University Press.

Reed, J. A. (2009). *Active education: Lessons for integrating physical activity with language arts, math, science and social studies.* New York, NY: Nova Science Publishers, Inc.

Rice, V. H. (2012). Theories of stress and its relationship to health. *Handbook of stress, coping, and health: Implications for nursing research, theory, and practice*. (pp. 22-42).

Rix, G., Bernay, R., & Devcich, D. (2014). Mindfulness as a core strategy for promoting mental health and increasing positive (flourishing) states of well-being. *Proceedings of the New Zealand Population Health Congress*. Retrieved from https://mindfulnesseducation.nz/wp-content/uploads/2017/11/Mindfulness-as-a-core-strategy.pdf

Rodriquez, F. M. M., Torres, M. V. T, Paez, J. M., & Ingles, C. J. (2016, Nov.).

Prevalence of strategies for coping with daily stress in children. *Psicothema,*
28(4), 370-376.

Rofofsky, S. (2008). The Sage Encyclopedia of qualitative research methods. *Library*
Journal, *20*, 162. Retrieved from

https://login.pallas2.tcl.sc.edu/login?url=http://search.ebscohost.com/login.aspx?d
irect=true&db=edsglr&AN=edsgcl.191513789&site=eds-live

Rudge, L. T. (2008). *Holistic education: An analysis of its pedagogical application.*
Columbus, OH: Ohio State University.

Rudge, L. T. (2016). Holistic pedagogy in public schools: A case study of three
alternative schools, *5*(2), 169–195.

Ryan, G., & Bernard, R. (2003). Techniques to identify themes. *Field Methods, 15*(1),
85-109.

Saad, L. (2017, Dec. 20). Eight in 10 Americans afflicted by stress. *Gallup.*
Retrievedfrom https://news.gallup.com/poll/224336/eight-americans-afflicted-
stress.aspx

Saeki, E., Segool, N., Pendergast, L., & von der Embse, N. (2018, April). The influence
of test-based accountability policies on early elementary teachers: School climate,
environmental stress, and teacher stress. *Psychology in the Schools*, *55*(4), 391-
403.

Sagor, S. (2000). *Guiding school improvement with action research.* Retrieved from
http://www.ascd.org/publications/books/100047/chapters/What-Is-Action-
Research%C2%A2.aspx

Sargeant, J. (2012). Qualitative research part II: Participants, analysis, and quality

    assurance. *Journal of Graduate Medical Education*, *4*(1), 1–3. Retrieved from

    http://doi.org/10.4300/JGME-D-11-00307.1

Sazhin, S. S. (1997). Teaching mathematic to engineering students. *International Journal*

    Engineering Education, *14*(2), 145-152.

Sc *cation, 37(1),* 19-42.

Srimaharaj, W, Chaising, S., Temdee, P., Chaisricharoen, R., & Sittiprapaporn, P. (2018,

    Nov.). Brain cognitive performance identification for student learning in

    classroom. *2018 Global Wireless Summit (GWS) Global Wireless Summit (GWS),*

    102-106.

Stanley, E. A., Schaldach, J. M., Kiryonaga, A., & Jha, A. P. (2011). Mindfulness-based

    mind fitness training: A case study of high-stress predeployment military cohort.

    Cognitive and Behavioral Practice, 18(4), 566-576.

    https://doi.org/10.1016/j.cbpra.2010.08.002

Starks, H., & Brown Trinidad, S. (2007). Choose your method: A comparison of

    phenomenology, discourse analysis, and grounded theory. *Qualitative Health*

    Research, *17*(10), 1372–1380. doi.org/10.1177/1049732307307031

Steiner, N. J., Sidhu, T. K., Pop, P. G., Frenette, E. C., & Perrin, E. C. (2013). Yoga in an

    urban school for children with emotional behavior disorders: A feasibility study.

    Journal of Child and Family Studies, *22*, 815-826.

Stress (n.d.). In Merriam-Webster Dictionary (2017). Retrieved from

    https://www.merriamwebster.com/dictionary/stress.

Stringer, E. (2007). *Action research* (3rd ed.). Thousand Oaks, CA: Sage Publication.

Szabo, S., Tache, Y., & Somogyi, A. (2012, Sept.). The legacy of Hans Selye and the

origins of stress research: A retrospective 75 years after his landmark brief

"letter" to the editor of *Nature. Stress, 15*(5), 472-478.

Ta, V., Gesselman, A., Perry, B., Fisher, H., & Garcia, J. (2017). Stress of singlehood:

marital status, domain- specific stress, and anxiety in a national U.S. sample.

Journal of Social and Clinical Psychology, 36(6), 461-485.

Tang, Y. Y, Yang, L., Leve, L., & Harold, G. (2012). Improving executive function and

its neurobiological mechanisms through a mindfulness-based intervention:

Advances within the field of developmental neuroscience. *Child Development

Perspectives, 6*(4), 361-366.

Thoits, P. A. (1995). Stress, coping, and social support processes: Where are we? What

next? *Journal of Health & Social Behavior*, *36*, 53–79. doi.org/Article

Tracy, S. (2010). Qualitative quality: Eight "Big-Tent" criteria for excellent qualitative

research. *Qualitative Inquiry*, *16*, 837-851.

Triplett, C. F., & Barksdale, M. A. (2005). Third through sixth graders' perceptions of

high-stakes testing. *Journal of Literacy Research*, *37*(2), 237–260.

doi.org/10.1207/s15548430jlr3702_5

Turner, C. (2016, Dec. 30). Teachers are stressed, and that should stress us all. *NPR*.

Retrieved from https://www.npr.org/sections/ed/2016/12/30/505432203/teachers-

are-stressed-and-that-should-stress-us-all

Turner, D. W. (2010). Qualitative interview design: A practical guide for novice

investigators. *The Qualitative Report*, *15*(3), 754-760. Retrieved from

https://nsuworks.nova.edu/tqr/vol15/iss3/19

UNICEF (2011). FACT SHEET: A summary of the rights under the Convention of

    Rights of the Child, *1,* 1-4.

Vaughan, M., Boerum, C., & Whitehead, L. (2019, Jan.). Action research in doctoral

    coursework: Perceptions of independent research experiences. *International*

    Journal for the Scholarship of Teaching and Learning, 13(1), 1-8.

Vickery, C., & Dorjee, D. (2016, Jan.). Mindfulness training in primary schools decreases

    negative affect and increase meta-cognition in children. *Frontiers in Psychology,*

    6, 1-13. https://doi.org/10.3389/fpsyg.2015.02025

Viner, R. (1999). Putting stress in life: Hans Selye and the making of stress theory. *Social*

    Studies of Science, 29(3), 391-410.

Vogelaar, B., Bakker, M., Elliott, J., & Resing, W. (2016). Dynamic testing and test

    anxiety amongst gifted and average-ability children. *British Journal of*

    Educational Psychology, 87(1), 75-89.

Walker, T. (2014, Nov. 2). NEA Survey: Nearly half of teachers consider leaving

    profession due to standardized testing. *NEA Today.* Retrieved from

    http://neatoday.org/2014/11/02/nea-survey-nearly-half-of-teachers-consider-

    leaving-profession-due-to-standardized-testing-2/

Walker, T. D. (2016, Oct. 7). Stress plaguing American teachers. *The Atlantic*. Retrieved

    from https://www.theatlantic.com/education/archive/2016/10/the-

    disproportionate-stress-plaguing-american-teachers/503219/

Walker, T. (2019, April 3). Teacher shortage is 'real and growing, and worse than we

    thought'. *NEAToday.* Retrieved from http://neatoday.org/2019/04/03/how-bad-is-

    the-teacher-shortage/

Waszczuk, M. A., Zavos, H. M. S., Antonova, E., Haworth, C. M., Plomin, R., & Eley, T.

    C. (2015). A Multivariate twin study of trait mindfulness, depressive symptoms,

    and anxiety sensitivity. *Depression and anxiety, 32*(4), 254-261.

    https://doi.org/10.1002/da.22326

Weijer-Bergsma, E., Langenberg, G., Brandsma, R., Oort, F., & Bogels, S. (2014, June).

    The effectiveness of a school-based mindfulness training as a program to prevent

    stress in elementary school children. *Mindfulness, 5*(3), 238-248.

Weslake, A., & Christian, B. J. (2015). Brain breaks: Help or hindrance?, *Teach*

    Collection of Christian Education, *1*(1), Retrieved from

    http://research.avondale.edu.au/teachcollection/vol1/iss1/4

White, L. S. (2012). Reducing stress in school-age girls through mindful yoga. *Journal of*

    Pediatric Health Care, *26*(1), 45-56. https://doi.org/10.1016/j.pedhc.2011.01.002

Willis, J, (2015) (eddigest.com) Sharpen kids' memory to raise test scores, p.23

World Health Organization. (2006). Constitution of The World Health Organization.

    Basic Document Forty-Fifth Edition, (January 1984), 1-18. Retrieved from

    https://doi.org/12571729

Zelazo, P. D. & Lyons, K. E. (2012). The potential benefits of mindfulness training in

    early childhood: A developmental social cognitive neuroscience perspective.

    Child Development Perspectives, *6*(2), 154-160. Retrieved from

    https://doi:10.1111/j.1750-8606. 2012.00241.x

APPENDIX A

CONSENT TO BE A RESEARCH SUBJECT

THE IMPACT OF MINDFULNESS PRACTICES ON THE DISPOSITIONS OF EIGHT THIRD-GRADE ELEMENTARY STUDENTS' AT AN ELEMENTARY SCHOOL IN THE SOUTHEAST REGION OF THE UNITED STATES.

Dear Parent or Guardian,

I, Jakob Lauffer, will be implementing a special curriculum over six weeks, during the student's normal school day, to gather information about the impact mindfulness coping practices have on the dispositions of third grade students. For this study, mindfulness sessions will be defined as a series of 15-minute sessions that will occur two days a week which focus on respective aspects relative to the practice of mindfulness. Through a systematic research framework, mindfulness techniques will be implemented, and students' actions and attitudes observed for measuring effectiveness. This information will be used in my dissertation in practice for my doctoral degree at the University of South Carolina. Your agreement and your child's participation in the study are completely voluntary. Please read the following information about the study and sign the form below:

PROCEDURES:

If you agree to allowing your child to participate in this study, they will do the following:

1. Complete a questionnaire about awareness of mindful practices and emotional regulation skills.
2. Exposure to fifteen-minute mindfulness training twice a week for eight weeks in their homeroom class.
3. Complete post questionnaires and surveys.

Survey Content

The survey gathers information on and about your child's attitudes toward mindfulness sessions.

It is Voluntary

Participation in this study is voluntary. Your child is free not to participate, or to stop participating at any time, for any reason without negative consequences. Participation, non-participation, and/or withdrawal will not affect your child's grades.

It is Anonymous and Confidential

The survey and all information related to this study will be kept confidential and anonymous (no names will be recorded and/or attached to the survey forms or data—Students cannot be identified).

BENEFITS:
Taking part in this study may benefit your child personally as it looks to find ways to help with emotional regulation. This research also seeks to help educators understand the effects of including mindfulness components into a holistic educational system.

Potential Risks
There are no known risks of physical harm to your child. Your child will not have to answer any questions unless s/he wants to.

Survey Review or for Further Information
Beginning March 4th, a copy of the survey will be available for previewing by contacting Mr. Jakob Lauffer.

If you **do not** want your child to participate in the data collection aspect, please sign and return to me by Wednesday, March 6, 2019.
If no form is returned, then you are fine with your child participating. Thank you.
_____

Name of Child_____

Yes, I would like my child to participate: _____
                                        Parent/Guardian signature   Date

No, I do **not** want my child to participate: _____
                                        Parent/Guardian signature   Date

APPENDIX B

ASSENT TO BE A RESEARCH SUBJECT

THE IMPACT OF MINDFULNESS PRACTICES ON THE DISPOSITIONS OF EIGHT THIRD-GRADE
ELEMENTARY STUDENTS AT AN ELEMENTARY SCHOOL IN THE SOUTHEAST REGION OF THE
UNITED STATES.

I am a researcher from the University of South Carolina. I am working on a study about mindfulness training in elementary schools and I would like your help. I am interested in learning more about how this training effects your attitudes and actions. Your parent/guardian has already said it is okay for you to be in the study, but it is up to you if you want to be in the study.

If you want to be in the study, you will be asked to do the following:
> • Answer some questions concerning your attitudes about mindfulness.
> • Participate in the 15-minute trainings with your classmates twice a
week.

Any information you share with me will be private. No one, except me, will know your answers to the questions.

You do not have to help with this study. Being in the study is not related to your regular class work and will not help or hurt your grades. You can also drop out of the study at any time, for any reason, and you will not be in any trouble and no one will be mad at you.

Please ask any questions you would like to about the study.

Signing your name below means, you have read the information (or it has been read to you), and that your questions have been answered in a way that you can understand, and you have decided to be in the study. You can still stop being in the study any time. If you wish to stop, please tell the researcher or study team member.

_____   _____
Print Name of Minor   Age of Minor

_____   _____
Signature of Minor   Date

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PRE-INTERVENTION SURVEY

Pre-Intervention Survey

Please answer all questions to the best of your ability. Spelling doesn't matter. This is not a grade. There are no wrong answers.

Name *

Short answer text

How are you feeling today? *

Short answer text

Have you heard of mindfulness? *

☐ Yes

☐ No

What do you think mindfulness is? *

Short answer text

Why do you want to learn about mindfulness? *

Long answer text

Tell me how you could use mindfulness? *

Long answer text

Should we include mindfulness practice at school? *

◯ Yes

◯ No

◯ I don't know

Do you want to learn more about mindfulness? *

◯ Yes

◯ No

◯ Maybe

POST-INTERVENTION SURVEY

Post-Intervention Survey

Pleas answer all questions to the best of your ability. Spelling doesn't matter. This is not for a grade. There are no wrong answers.

* Required

1. **Name** *

_____

2. **How are you feeling today?** *

_____

3. **Have you heard of mindfulness?** *
   Check all that apply.

   ☐ Yes

   ☐ No

4. **What is mindfulness?** *

_____

_____

_____

_____

_____

5. **What was your favorite lesson during our mindfulness unit?** *

_____

_____

_____

_____

_____

6. **Was there something you did not like about our practice?** *

_____

_____

_____

_____

7. **Tell me how you could use mindfulness? ***

_____

_____

_____

_____

_____

8. **Should we include mindfulness practice at school? ***
Mark only one oval.

◯ Yes

◯ No

9. **Do you think I should teach mindfulness to the other students? ***
Mark only one oval.

◯ Yes

◯ No

10. **Why or Why not? ***

_____

_____

_____

_____

_____

11. **Do you think I should teach mindfulness to other teachers so they could use in their classrooms? ***
Mark only one oval.

◯ Yes

◯ No

12. **Why or why not? ***

_____

_____

_____

_____

13. **Would you like to continue learning mindfulness? ***
Mark only one oval.

◯ Yes

◯ No

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14. Why or Why not? *

_____

_____

_____

_____

_____

15. Did you ever use mindfulness practices during school when I wasn't there? *
Mark only one oval.

◯ Yes

◯ No

16. If yes, give an example? *

_____

_____

_____

_____

_____

17. Did you ever use mindfulness outside of school? *
Mark only one oval.

◯ Yes

◯ No

18. If yes, how? *

_____

_____

_____

_____

_____

19. Tell me anything you would like me to know? *

_____

_____

_____

_____

_____

APPENDIX E

EXIT SLIP

We just finished our first 2 practice lessons. Pleas take a couple moments and answer the following questions. Remember there is no right or wrong answers. This is not graded and spelling doesn't matter. Thank you!

Name *

Short answer text

How did you feel before we started this week?

Description (optional)

How did you feel before starting our mindfulness practice lesson? *

☐ Happy

☐ Neutral

☐ Sad

☐ Mad

☐ Other...

Daily Questions

Please answer as honestly as you can. There is no wrong answer. This is not being graded. Spelling does not matter.

⋮⋮⋮

Did you participate to the best of your ability this week? *

☐ Yes

☐ Neutral

☐ No

Did you enjoy the mindfulness lesson this week? *

☐ Yes

☐ Neutral

☐ No

What was something you remember learning this week? *

Long answer text

Do you think you might use what you learned this week? *

☐ Yes

☐ Maybe

☐ No

Do you think what we learned could help us be a better student? *

☐ Yes

☐ Maybe

☐ No

How did you feel after completing our mindfulness practice this week? *

☐ Happy

☐ Neutral

☐ Sad

☐ Mad

☐ Other...