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Improving the Classroom Experience by Providing Teachers with a Mindfulness Intervention

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IMPROVING THE CLASSROOM EXPERIENCE BY PROVIDING TEACHERS WITH A MINDFULNESS INTERVENTION

A Dissertation

by

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ABSTRACT

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The purpose of this study was to improve the classroom environment for teachers by providing them with a mindfulness-based intervention. This experimental study evaluated the outcomes of an eight-week stress and mindfulness prevention intervention (SPAM) created specifically for teachers. The current study measured the following variables: mindfulness, stress, self-efficacy, job satisfaction, and well-being. This study used a four-way ANOVA (2 X 3 X 2 X 5) with two between subjects' factors, groups and levels, and two within subjects/repeated measures factors, pre-test-posttest and scales. There were 14 teacher participants in the experimental group and 19 teacher participants in the control group. Although the study did not show any significant effects for mindfulness, stress, self-efficacy, and well-being for either group, teacher participants in the control group demonstrated significantly lower levels of job satisfaction compared to the experimental group from pre-post outcomes. Future directions related to mindfulness-based interventions are discussed and recommendations for researchers, educators, and education administrators are provided.

Keywords: teachers, mindfulness, stress, job satisfaction, self-efficacy, well-being

DEDICATION

Este logro de mi vida es dedicado a mi mejor amigo y compañero de vida, Camilo. Gracias por tu inmenso apoyo, amor y constantes palabras de aliento. Sobre todo, gracias por ayudarme a crecer y creer en mi misma. Has llenado mi alma de vida, esperanza y motivación. Nada de esto seria posible sin ti.

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CHAPTER I

INTRODUCTION

According to the *Economic Policy Institute* (García & Weiss, 2019), teacher shortages across American schools ranging from kindergarten through grade 12 (K-12) are significant and worse than anticipated. Data from the National Center for Education Statistics (NCESa, 2018) showed in the 2015-16 school year, there were 3.8 million full- and part-time public-school teachers, including 1.9 million elementary school teachers and 1.9 million secondary school teachers. Approximately 77% of public school teachers were female and 23% were male, with a lower percentage of male teachers at the elementary school level (11%) than at the secondary school level (36%). Almost all public-school teachers were white (80%), nine percent were Hispanic, seven percent were Black, two percent were Asian, and one percent were of two or more races; those who were American Indian/Alaska Native and those who were Pacific Islander each made up less than one percent of public-school teachers (NCES). While higher educational attainment is correlated with salary, from the 1999-2000 academic school year to the 2015-16 school year, the average base salary for full-time public school teachers decreased from $57,190 to $56,140 (NCES).

Currently, there is an estimated 125,000 teacher shortage in the U.S. (Carver-Thomas & Darling-Hammond, 2017). Given the excessive shortage of teachers and the highly disproportionate number of racial/ethnic minority teachers across the U.S., the factors contributing to these teacher shortages necessitate exploration. The instability in the teacher workforce and high attrition rates has reduced teacher quality and increased the use of economic resources in the U.S. education systems to compensate for teacher shortages. According to Garcia and Weiss (2019), the current costs of annual teacher turnover exceeds eight billion dollars. The current teacher shortage and costs also make it challenging to create a stable teaching profession, creating continuously high attrition rates within the teaching profession (Garcia & Weiss) and making it difficult to meet the teacher demand even when there are enough available teachers in the market (Carver-Thomas & Darling-Hammond). The most significant driving factor contributing to teacher shortages is high teacher attrition rates (Garcia & Weiss; U.S. Department of Education, 2015).

Currently, the teaching profession has an eight percent annual attrition rate, which equals approximately 90,000 teachers available for employment in the U.S. each year (Carver-Thomas & Darling-Hammond, 2017). Carver-Thomas and Darling-Hammond reported one third of all attrition rates are due to retirement and two thirds are due to teachers choosing to leave the profession. According to the Carver-Thomas and Darling-Hammond, the number of teachers who leave the profession has been in the same percentage range over the last 10 years; however, despite this percentage of teacher stability, findings indicate a 75% to 100% teacher demand continues among the teaching profession. Teacher attrition rates have only decreased .70% since 2005, placing the U.S. with double the attrition rates for teachers compared to other countries such as Finland, Singapore, and Canada (Carver-Thomas & Darling-Hammond).

Research suggests high attrition rates among teachers are due to a lack of administrative support (Carver-Thomas & Darling-Hammond, 2017), pressure for standardized testing (Garcia-Arroyo et al., 2019), excessive workloads (Oberle & Schonert-Reichl, 2016), lack of training and experience (Darling-Hammond, 2010), and maladaptive student behavior (Reiser & McCarthy, 2018). According to Carver-Thomas and Darling-Hammond, standardized testing and discontent with school administration support make up almost 50% of the dissatisfaction among all teachers. Additionally, turnover rates among teachers are found to be associated with specific factors: turnover rates are 70% higher among teachers who work with students of color than those who work with a white student population (Carver-Thomas & Darling-Hammond) and turnover rates are higher in elementary than in secondary education (Iancu et al., 2018). A lack of administration support, pressure for standardized testing, excessive workloads, and a lack of training have all been identified risk factors for attrition among the teacher profession; however, it is unlikely these factors will change any time soon. As such, developing strategies that can help to support teachers and alleviate some of their stress is paramount to reducing the excessively high teacher attrition rates in our public school system.

High attrition rates among teachers negatively affects student learning; however, high attrition rates among teachers have also been correlated with high levels of dissatisfaction among teachers and teacher burnout (Iancu et al., 2018). High levels of stress among teachers decrease job satisfaction (Carver-Thomas & Darling-Hammond, 2017), lower physical and mental well-being among teachers (Huk et al., 2019), lower academic achievement among students, and a reduce teachers' sense of classroom management (Klusman et al., 2016). Teacher burnout symptoms often lead to less involvement in lesson planning and less beneficial behavior toward students. Furthermore, occupational teacher stress can lead to reactive responses and drastic

classroom management strategies, causing students to have unmet emotional needs which often manifest into troublesome behaviors (Oberle & Schonert-Reichl, 2016). Klusman et al. also found teacher characteristics such as self-efficacy, competence, and well-being to be positively correlated with student achievement. For example, findings indicate students score lower in English language, art, and mathematics when their school or grade level is correlated with high teacher turnover rates. Alarmingly, these effects are stronger when working with ethnic minorities (Ronfeldt et al., 2013) or language minority students (Klusman et al.).

Statement of the Problem

As noted by the National Center for Education Statistics (NCES, 2015), turnover rates among teachers is occurring at alarming rates. High turnover rates among teachers leads to the need for contracting new teachers, which typically requires considerable investment within school districts in the hiring, training, and professional development of new teachers (Ryan et al., 2017). Carver-Thomas and Darling-Hammond (2017) reported there is an estimated $20,000. cost to replace just one teacher who leaves a school. As such, maintaining teacher longevity is an important factor for a school's economy since the less attrition rates and longer time spent teaching means less expenses for the school's districts (Ryan et al.). Gray and Taie (2015) noted over 18% of teachers will leave the profession after the first five years, making this profession one with the highest turnover rates for new teachers. Teacher attrition has increased by 50% in the last 15 years. Stress (Reiser & McCarthy, 2018), national and state assessments (Garcia-Arroyo et al., 2019), perceived lack of administrative support, and maladaptive classroom behavior of students (Tlouloupas et al., 2010) are factors that contribute to teachers leaving the profession (Carver-Thomas & Darling-Hammond). For example, 17% of teachers who left the teaching profession reported not having enough support to prepare students for assessments,

eight percent reported not being compensated with a stipend for positive student performance outcomes, 14% reported not having enough autonomy in the classroom, and 13% believed they lacked influence over their school's policies and practices (Carver-Thomas & Darling-Hammond).

Stress

Reiser and McCarthy (2018) noted teachers have an exceptionally important place in our community as they are creating and teaching our youth and ultimately impacting future generations. In the last 20 years, the U.S. government has focused much of their attention on education platforms, models, and teachers. Many education program models were developed with the purpose of enhancing student learning and increasing support for teachers. However, these education models and scripted curricula created high levels of stress and increased job dissatisfaction among teachers. Stress is one of the most popular variables researched in the educational literature because of its associations with high teacher attrition rates. Prilleltensky et al. (2016) noted stress is often exhibited through negative feelings, behaviors, and thoughts. Research indicates teachers who perceive their classroom demands as greater than their resources are more susceptible to stress than teachers without such discernments (Reiser & McCarthy). Teacher stress has also been correlated with school climate and has been shown to affect the quality of teaching, student learning, and decision-making in the classroom setting (Collie et al., 2012). School climate can be defined by the relationships and interactions between individuals within the school setting (e.g., type of teaching and learning that takes place, collaboration between teachers, and support from administrators). Teacher stress has been positively correlated with negative student behavior and demanding workloads, causing a reduced sense of teaching efficacy and job satisfaction (Collie, et al.; Reiser & McCarthy). Furthermore, chronic stress

among teachers is associated with negative mental well-being such as having anxiety and/or depressive symptoms (Iancu et al., 2018).

Assessments

Teachers are often overworked by managing daily time demands and constantly addressing disruptive student and classroom behavior and are regularly dealing with a lack of resources and support. Therefore, chronic stress and dissatisfaction are common factors among teachers in the U.S. and are considered some of the main reasons why many teachers leave the profession (Reiser & McCarthy, 2018). Recent research on teacher stress indicated test-based accountability, a current and highly used method of measuring teacher quality and school effectiveness in the U.S., is a significant factor contributing to teacher-related stress and attrition rates (Ryan, et al., 2017). For example, 25% of teachers who left the teaching profession reported they left due to assessment and accountability issues (Carver-Thomas & Darling-Hammond, 2017). In addition, 65% of teachers reported test scores formed a great part of their yearly teacher evaluations teachers (Ryan, et al.).

School Administrative Support

High levels of stress have not only been recorded among teachers but also among school administrators and education policy makers, affecting schools' climates. School climate has been shown to influence the type of relationships, collaboration, and support taking place between all of its members (Collie et al., 2012). According to Prilleltensky et al. (2016), feelings of isolation and inadequacy are common among new teachers, often placing them at risk for stress. Moreover, most schools do not offer many opportunities for teachers to interact with one another. According to Prilleltensky et al., teachers, in their first three years of work, reported four crucial needs to feel supported (1) practical information about policies of their school, (2)

opportunities to share and discuss ideas with their co-workers, (3) opportunities to find solutions to their own teaching problems, and (4) emotional support and guidance.

Classroom Management

The amount of professional training teachers receive has also been linked to the type of work experience they will have throughout their teaching career. If teachers are not prepared for teaching and managing a classroom when hired, it is likely they will have a negative experience at work and eventually quit their jobs (Darling-Hammond, 2010). Classroom management has been described as taking up teachers' energy, time, and effort. The absence of classroom management and disruptive student behavior can leave teachers feelings they lack authority (Skaalvik & Skaalvik, 2017). Teachers' lowered sense of teaching efficacy and reduced job satisfaction can affect their use of successful teaching strategies, their classroom management, and the well-being for both the teacher and the student (Collie et al., 2012). Turnover rates among teachers are more than two times higher for those who serve in Title 1 schools which are schools that serve low-income students. For example, there is 70% higher turnover rates for teacher in which schools have mostly minority students (Carver-Thomas & Darling-Hammond, 2017). It has also been noted schools with predominantly students of color will hire teachers who are often new to the teaching field and lack experience. Additionally, schools with high numbers of minority students often encounter additional responsibilities and barriers with the students, including responding to food insecurities, environment risk factors such as pollution, and health-related issues (Carver-Thomas & Darling-Hammond). The incapacity to positively cope with emotional events can lead to chronic stress, detachment toward the job, feelings of teaching inefficacy (Iancu et al., 2018), and increased classroom mismanagement among teachers (Huk et al., 2019). Although teachers can interpret and experience negative student behavior differently,

disrespectful behaviors toward the teacher or failure to complete assigned work can lead to stress-related symptoms among teachers (Huk, et al.). Orble and Schonert-Reichl (2016) also found students had high levels of stress hormones (namely cortisol) when they perceived high levels of stress in their teacher.

Purpose

The purpose of this experimental study was to explore the impact of an eight-week, mindfulness intervention designed to (1) increase mindfulness, (2) reduce stress, (3) improve self-efficacy, (4) increase job satisfaction, and (5) increase mental well-being among elementary, middle, and high school teachers. The ultimate purpose of the study was to create a positive change among teachers with the goal of improving the classroom experience for both teachers and students.

Research Questions and Hypotheses

The current study addressed the following research question and 15 null hypotheses:

Does the *Stress Prevention and Mindfulness* (SPAM) intervention increase mindfulness, reduce stress, increase self-efficacy, increase job satisfaction, and increase well-being among elementary, middle, and high school teachers?

$NH_{1:}$ There is no difference between the treatment and non-treatment groups.

$NH_{2:}$ There is no difference among educational levels.

$NH_{3:}$ There is no interaction effect between groups and educational levels.

$NH_{4:}$ There is no interaction effect between pre and posttests.

$NH_{5:}$ There is no interaction effect between pre-post tests and groups.

$NH_{6:}$ There is no interaction effect between pre-post tests and educational levels.

$NH_{7:}$ There is no interaction effect between pre-posttests, groups, and educational levels.

$NH_{8:}$ There is no difference among scales.

$NH_{9:}$ There is no interaction effect between scales and groups.

$NH_{10:}$ There is no interaction effect between scales and educational levels.

$NH_{11:}$ There is no interaction effect between scales, groups and educational levels.

$NH_{12:}$ There is no interaction effect between pre-posttests and scales.

$NH_{13:}$ There is no interaction effect between pre-posttests, scales, and groups.

$NH_{14:}$ There is no interaction effect between pre-posttests, scales, and educational levels.

$NH_{15:}$ There is no interaction effect between pre-posttests, scales, groups, and educational levels.

Operational Variables and Definitions

Mindfulness: "A moment-to-moment, nonjudgmental awareness, cultivated by paying attention in a specific way, that is, in the present moment, and as non-reactively, as non-judgmentally, and as open heartily as possible" (Kabat-Zinn, 2015, p. 1481).

Stress: "When an individual's appraisal of external or internal demands tax or exceeds his or her resources" (Lazarus, 1995, p. 5).

Teacher Job Satisfaction: "Teachers' satisfaction with their job, role, opportunities for professional development, and work environment" (Caprara et al., 2003, p. 20).

Self-Efficacy: "A person's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that influence their lives" (Bandura, 1994, p. 2).

Mental Well-being: "A person's psychological functioning, life satisfaction, and ability to develop and maintain mutually benefiting relationships. Psychological well-being includes the ability to maintain a sense of autonomy, self-acceptance, personal growth, purpose in life, and self-esteem" (Stewart-Brown & Janmohamed, 2008, p. 2).

Anticipated Limitations of Study

Any generalizations of this study should be considered with caution since the sample characteristics are different from other samples of teachers in the U.S., other Hispanic/Latino descent, and/or other geographical locations. The geographical area where this study was conducted is comprised of 85% Hispanics (U.S. Census Bureau, 2018) and the three schools used for this study were comprised of between 91% to 97% of Hispanic/Latinx students. Therefore, the sample used in this study may not be representatives of other racial/ethnic groups.

Other potential limitations of this study are the method and reasons for participation. All teacher participants were informed of the intervention in a presentation, e-mail, and a flyer format and teachers were invited to join the intervention if interested. Therefore, teachers in the experimental group were those who willingly volunteered, and the results could be biased since teachers who were in the experimental group were those who willingly participated in the study or were interested in the intervention topic. Another limitation of this study is the day and time of the week in which the intervention was taking place. Each group of teachers had a different day and time of the week scheduled for their one-hour intervention. It is uncertain as to whether having the intervention on a Monday vs. a Thursday or a morning vs. an afternoon might have affected the results.

CHAPTER II

LITERATURE REVIEW

Stress can be recognized in various ways, such as engaging in negative feelings, behaviors, or thoughts (Prillestensky et al., 2016). Teachers are expected to have positive interactions with their students by improving students' academic performance, teaching students interpersonal skills, and solving any academic problem the student might have. However, interpersonal relationships among teachers and students can be complex since teachers need to continuously maintain classroom discipline, supervise student behavior, oversee parent-teacher communication, and cultivate relationships with their colleagues. Feelings of isolation among teachers are common, especially among novice teachers (Prillestensky et al.). Schools usually do not provide an opportunity for teachers to share their unpleasant feelings and experiences with one another. This isolation can lead to a sense of disconnect in teachers' careers and confusion regarding the value of their own work. The need for information in policies and operations of the school, opportunity to share ideas between colleagues, opportunities to find solutions to everyday conflicts, and developing support systems have been identified as important factors to reduce stress among teacher (Prillestensky et al.). Doubts about work performance, heavy workloads, grading issues, and solving student conflict are factors that add to teacher stress. Discrepancies between expectation and reality in the teaching profession can cause teachers a great deal of stress. Inexperience can increase teachers' anxiety levels and the way teachers react and interpret

student behavior (Prillestensky et al.). According to the National Center for Education Statistics (NCESb, 2018), the percentage of public school teachers with a post baccalaureate degree has increased 10% in the last 10 years yet stress is considered the primary cause for attrition among teachers (McCarthy et al., 2016).

Stress

The transactional model of stress (Lazarus & Folkman, 1984) is one of the most well-known models of stress to be researched across many different settings (Mark & Smith, 2008). For many years before this model was developed, researchers focused on the cognitive, emotional, and behavioral responses to stress (Perrewé & Zellars, 1999). According to Lee and Poole (2005) and the transactional model of stress, stress is an individual's cognitive appraisal of an event.

The transactional model of stress identifies two appraisal processes: the cognitive appraisal and coping (Folkman et al., 1986). The cognitive appraisal is defined as, "The process of categorizing an encounter and its various facets with respect to its significance for well-being" (Lazarus & Folkman, p. 31). The event or encounter that can trigger stress is described as an interaction between the person and the environment; the cognitive appraisal is noted as being unique to the individual. The person's beliefs and type of event are factors used to appraise the event (Lee & Poole, 2005). The primary appraisal is completed on the stressor and the secondary appraisal focuses on one's available coping mechanisms. For example, during the primary appraisal, a person will evaluate if anything is at stake or at risk during this encounter. The secondary encounter is used to evaluate what can be done to prevent harm or improve benefit (Folkman et al.). The event can be assessed in three forms: irrelevant, benign-positive, and stressful. An irrelevant appraisal is one that has no effect on one's well-being, a benign-positive

appraisal is one that enhances one's well-being, and a stressful appraisal is one that is perceived as a threat or challenge to one's well-being. When the primary appraisal is considered a stressful event, then one will move into the second appraisal and consider coping strategies that will be useful for the situation (Lee & Poole).

According to Lazarus and Folkman (1984), coping is defined 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" (p. 141). Emotion and problem-focused coping entail different types of methods an individual can engage in to manage the demands with which they are being challenged. Research suggests in stressful situations, both types of coping are present. However, failure to cope effectively is likely to create stress and negative consequences in one's well-being. Considerable research on the transactional model of stress has been conducted in factors relating to stress in the work setting. According to Lazarus (1995), workplace stress interventions often fail because participants are not treated individually and are instead treated as a whole. It is suggested that personality is an important factor that will affect how an event or situation is perceived and, as such, individual personalities should be considered and addressed when discussing work-related stress interventions (Mark & Smith, 2008). The transactional model of stress (Lazarus & Folkman) is illustrated in Figure 1.

Figure 1: Transactional Model of Stress and Coping (Lazarus & Folkman, 1984).

SPAM Stress Response Cycle

The present study used the *Stress Prevention and Mindfulness* (SPAM) intervention adapted from several programs and tailored specifically for teachers. The overall goal of the SPAM intervention is to increase teachers' resources for preventing and managing stress. The stress cycle in the SPAM intervention was adapted for teachers but was created using the transactional model of stress and coping theory (Lazarus & Folkman, 1984; Reiser, 2017).

The stress response cycle in the SPAM intervention begins with stress and moves into automatic thoughts. Within this stress cycle, automatic thoughts are created based on personal attitudes, beliefs, and assumptions. Stress-related automatic thoughts trigger psychological symptoms such as negative mood or emotions. Negative mood and emotions then create negative physical symptoms and/or maladaptive behaviors which in turn lead to ineffective communication styles. Maladaptive behavior, in turn, triggers additional stress and the cycle continues. Reiser (2017) noted the SPAM intervention focuses mainly on taking control of automatic thoughts by practicing different mindfulness exercises. If teachers can manage and control their thoughts, then the stress response cycle can be broken and transformed into a more positive experience (Reiser). According to Reiser and McCarthy (2018), the first goal of the SPAM intervention is to increase knowledge and understanding of the stress process. The SPAM intervention highlights the practice of mindfulness and its techniques as tools for teachers to become more aware of their thoughts, emotions, and behaviors. Creating positive thoughts will lead to positive emotions, positive behavior, and effective communication, making a more positive and manageable environment (Reiser). The SPAM Stress Response Cycle (Reiser) is illustrated in Figure 2.

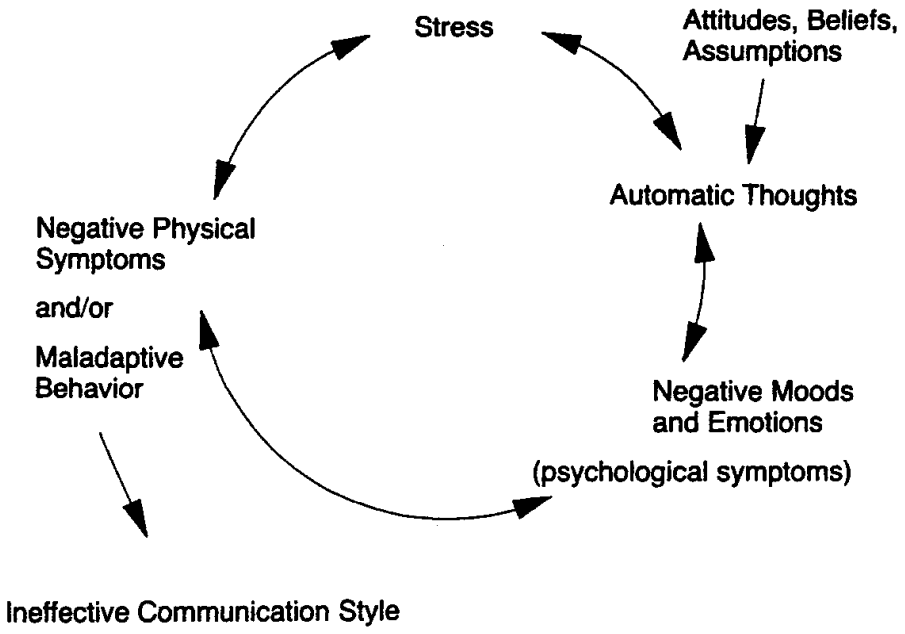

Figure 2: SPAM Stress Response Cycle (Reiser, 2017).

Mindfulness

Wars were crucial events in the field of psychology since they shaped the focus and purpose of the field. The goal of psychology before wars was to *cure* mental illnesses and make human lives more fulfilling. However, after World War II, psychologists focused their studies on treating mental illnesses and fixing human damages. Lopez et al. (2018) noted how some areas of psychology continued to focus on human weaknesses for many years (e.g., damaged brain, damaged childhood, and damaged habits). In recent years, a new psychology field known as positive psychology emerged and has become a field in which value is placed on human's strengths and well-being while simultaneously acknowledging their pain and suffering. According to Lopez et al., positive psychology, "is a scientific and applied approach to uncovering people's strengths and promoting their positive functioning" (p. 3). The term positive psychology was first termed by Abraham Maslow but credited to psychologist Martin Seligman's research and work. Many emotional states, behaviors, and constructs such as emotional intelligence, well-being, spirituality, compassion, and mindfulness have been attributed to positive psychology.

The present study used a mindfulness-based approach, with the goal of improving overall well-being among teachers. Jon Kabbat-Zinn introduced mindfulness in the U.S. in 1979 and his mindfulness philosophy and techniques have grown exponentially around the world (Kabbat-Zinn, 2015). Mindfulness is explained as a state of being and/or an exercise in which awareness and breathing are key to reaching a mindful physical and mental state (Paulson, et al., 2013). The mindfulness movement arose from Buddhist and Zen teachings. Countries such as Cambodia, Thailand, India, Tibet, and Mongolia are a few examples of where teachings of vipassana or "insight meditation" are currently still practiced (Kabbat-Zinn). Additionally, mindfulness is

known as the “practice of insight” and follows the four virtues of Buddhism which are: loving and kindness, compassion, sympathetic joy, and equanimity. The first three foundations have many similarities such as the idea of unselfish care. The equanimity foundation is a concept which provides the insight necessary to experience open-heartedness and appreciation for human equality (Cullen, 2011; Silananda, 2002). Although mindfulness originated from Eastern philosophies and shares similar practices with Buddhism, the literature maintains mindfulness is not exclusive to Buddhism or any religion, making mindfulness a universal, non-religious practice (Kabbat-Zinn,). According to the developer of mindfulness, Jon Kabbat-Zinn, mindfulness should be viewed as way of “being” rather than a type of religious practice (Kabbat-Zinn). Additionally, Lopez et al. (2015) noted how the Western type of mindfulness focuses on external awareness and stimuli whereas the Eastern type of mindfulness places greater emphasis on internal awareness.

Mindfulness can exist in every moment that arises (Creswell, 2017). Lopez et al. (2015) contemplated the enjoyment and meaningfulness that can be achieved by connecting to everyday life. The U.S. is known to be a fast-paced and future-focused culture in which awareness to present moments are often dismissed (Lopez et al.). As such, one’s mind is easily distracted by the future, ideas, opinions, and memories, all of which can lead to negative feelings and judgmental thoughts. (Paulson et al., 2013).

The increased attention or awareness used in the mindfulness approach allows a person to identify distorted types of thinking (Lopez et al., 2015). According to Kabbat-Zinn (2015), during this heightened state of awareness, a pause should be placed on judgements. While engaging in mindfulness, one is practicing letting thoughts just be and sitting with them, while slowly letting them drift away. The process of mindfulness is completed by *not* attempting to

change or deny any of the feelings and/or thoughts a human can experience but rather trying to understand the nature of these experiences. Langer (2009) noted the importance of defining mindfulness in terms of what it is and what it is not in order to fully understand its meaning. Langer stated, "When we are mindful, we become sensitive to context and perspective; we are situated in the present. When we are mindless, we are trapped in rigid mindsets. When we are mindless, our behavior is a rule and routine governed. When mindful, we are actively changing the stimulus field" (Langer p. 279). Mindfulness also requires acceptance and openness toward one's full body experience and thoughts, to include body sensations, emotional reactions, mental images, mental self-talk, and perceptual experiences (Creswell, 2017). Lopez et al. noted different types of activities in which people can use mindfulness to increase their awareness (e.g., emotions, eating, stretching exercises, breathing, and sitting). Attending to one's awareness has been described as the most important behavior in mindfulness practice compared to the breathing, body posture, or other techniques used in mindfulness. With practice, mindfulness experts suggest one can reach a state of mind in which there is increased control over mental space and attention (Paulson, et al., 2013). For example, one can be present without having to focus on a certain object.

Mindfulness-Based Stress Reduction

Mindfulness-based stress reduction (MBSR) was developed by Kabbat-Zinn in 1979 when he worked at the University of Massachusetts Medical Center. Many mindfulness programs have since branched out from MBSR and include *Mindfulness Child-Bearing and Parenting*, the *Stress Management and Relaxation Technique* (SMART) *Educational Mindfulness*, *Cool SMART* (for teenagers), *A Still Quiet Place* (for children), *Mindfulness-Based Relapse Prevention*, *Mindfulness Art Therapy*, and *Mindful School* (Cullen, 2011). Mindfulness-

based interventions, specifically MBSR interventions, have been shown to reduce stress, depression, and anxiety. Additionally, MBSR interventions have been associated with increased levels of job satisfaction (Reiser et al., 2016).

MBSR interventions entail three types of formal practices (1) engaging in mindful movement, (2) body scanning, and (3) sitting in meditation. In current MBSR interventions, participants are asked to reflect on mindfulness in different aspects of their lives, to include their relationships, work, stressors, and sometimes even what they eat (Cullen, 2011). Haydon et al. (2019) described the core components of MBSR interventions as body scans, guided imagery, calm breathing, and nonjudgmental observations. Findings also show the sections of the brain most highly benefited from MBSR interventions are those that identify and regulate emotions, sections that increase memory and learning, and areas that regulate the ability to make decisions. Therefore, MBSR interventions have also demonstrated an increased ability for teachers to manage stressful situations and exert increased control over their responses to student behaviors (Haydon et al.). In addition, research has shown teachers not only benefit while completing mindfulness interventions, but they continue using the MBSR techniques after the intervention has ended (Haydon et al.).

Factors Associated with Teacher Stress

Teachers are often pressured into maintaining a positive classroom environment and preserving student engagement while maintaining good concentration, emotional regulation, confidence, and resilience (Braun et al., 2019) and difficult student behavior in the classroom has been associated with high levels of stress among teachers. Additionally, Feng (2010) noted teachers with one to three years of experience are often given larger class sizes with students with disabilities, including learning disabilities, intellectual disabilities, and/or autism spectrum

disorder, all of which require individualized education plans (IEPs) and place teachers at a heightened risk for stress. School policy and demands of teachers have also changed in recent years. Reiser et al. (2016) reported teachers are overwhelmed with high levels of stress. Stressors such as disruptive students, lack of support from administrators and colleagues, continuous performance evaluations, and student testing are factors associated with teacher stress (Harmsen et al., 2018; Steinhardt et al., 2011). The aforementioned factors are noted as having such a significant effect on teachers that leaving the profession in order to maintain their well-being has become a likelihood for many teachers.

Teacher stress has also been positively correlated with negative teacher-student relationships. Feelings of connectedness has been linked to increasing teacher engagement and reduced stress. Teachers' relationships with their students and co-workers have been found to be a protective factor to combat stress. (Klassen, 2010; Prillestensky et al., 2016). Researchers have noticed teachers with high levels of stress also reported low levels of job satisfaction and reduced professional commitment (McCarthy et al., 2016). Teacher turnover rates in the U.S. are the highest in the South as compared to Northeastern schools where the pay is reported to be higher. Teachers in the North also have smaller numbers of students in the classroom and Northeast regions have been reported to invest more money into their education systems (Carver-Thomas & Hammond, 2017). Schanzenbach (2014) also found increased numbers of students in classes increases levels of stress and creates a negative impact on student achievement.

Chronic levels of stress can lead to burnout and can have a negative effect on teachers' health. For example, Steinhardt et al., (2011) found almost 20% of teachers who reported feeling unbearable levels of stress also reported feeling exhausted, which, in turn, negatively affected their classroom performance. Student behaviors that warrant teacher discipline (e.g.,

distractibility, hyperactivity, disobedience, and hostile aggression) have been linked to feelings of emotional exhaustion among teachers, a feeling known to create burnout (Tsouloupas et al., 2010). Teachers who have reported feeling emotionally exhausted also reported distancing themselves from colleagues and work in order to cope with feelings of exhaustion. Additionally, teachers have reported being unable to meet the needs of their students and not being able to identify positive feelings toward their job because of chronic stress and feelings of exhaustion (Steinhardt et al.).

Constant redirection of negative behavior among students can also lead to discouraged teachers who question their ability to manage their students and their classroom. A study completed among 610 elementary, middle, and high school teachers found a correlation between perceived student misbehavior and emotional exhaustion among teachers (Tsouloupas et al., 2010). The way teachers regulate their emotions has been linked to how teachers experience emotional exhaustion. Emotional exhaustion is described as a crucial factor among teachers as it affects their performance and is correlated with negative well-being and reduced emotional health (Tsouloupas et al.). Teacher stress has also been correlated with reduced health and job satisfaction (Prilleltnsky et al., 2016). Findings suggest different risk factors such as personal attributes (e.g., ability to cope with stress), interpersonal relationships (e.g., colleagues, students, and family) and organizational facets (e.g., school and district) can affect teacher stress. Research findings also have shown novice teachers' most common risk factor are feelings of anxiety, loneliness, and inadequacy (Prilleltnsky et al.). As such, interventions that can reduce stress among teachers, especially new teachers who may be at increased risk for stress, is important for enhancing teacher satisfaction and self-efficacy.

Teacher Job Satisfaction and Self-Efficacy

Between 2011 and 2013, eight percent of public school teachers left the teaching profession and 10% of those who transferred to a different campus transferred due to classroom management issues, salary concerns, or student-related factors such as negative behaviors (National Center of Education Statistics, [NCES] 2015). From 2011 to 2013, 21% of public-school teachers moved to a different school or left the profession entirely (NCES) and job dissatisfaction has been identified as one of the leading factors in the high of attrition rates among teachers. According to Watson et al. (2010), 23% of teachers reported they would change careers if given the opportunity to choose again. Based on NCES (2018a) findings, teachers who have two to four years of experience in teaching are paid an average of $43,590. per year. Elementary and female teachers are paid less than secondary and male teachers in public schools. Hispanic teachers are also reported as having a base salary less than Asian and White teachers but more than Black and American Indians teachers. In addition, the high numbers of teachers leaving the teaching profession is not only affecting our education system economically, the educational quality is also impacted.

A lack of job satisfaction is associated with feelings of anxiety and depression (Klassen, et al., 2009) and perceptions of self-efficacy have been correlated with job satisfaction across many professions (Malinen & Savolainen, 2016). Pas et al. (2012) described teacher self-efficacy as having the ability to create a safe learning environment and being able to deliver instructions. Locus of control, a concept closely related to self-efficacy, has also been shown to affect teachers' perception of efficacy as teachers are often pressured to control the learning and behavior occurring in the classroom setting. Malinen and Savolainen suggested teachers who have higher levels of self-efficacy have increased success in methods of dealing with

problematic student behavior. Across different types of research, stress among teachers has been highly correlated with teacher turnover rates, reduced student engagement, reduced self-efficacy, and poor teacher effectiveness (e.g., lack of acknowledgement, reduced ability to remain calm) (Emerson et al., 2017). As such, enhancing self-efficacy can lead to higher job satisfaction and less attrition among teachers.

Current findings show self-efficacy also plays a crucial role in students' academic achievement (Zee & Koomen, 2016). Overall, self-efficacy perceptions among teachers has shown to affect the self-efficacy of teachers in the classroom. For example, Klassen, et al. (2009) found teachers who reported low self-efficacy also reported feeling less able to redirect students' problematic behavior in a positive manner (e.g., coaching students through conflict, encouraging cooperation, and role modeling positive communication and positive social behavior). Jennings and Greenberg (2009) argued teacher stress can influence their social and emotional ability. A study (Braun et al., 2019) completed among 58 teachers demonstrated teachers' mindfulness skills affected their interactions with their students and reduced burnout. Teacher effectiveness has also been associated with high levels of self-esteem (Reilly et al., 2014). Research conducted by Johnson and Birkeland (2003) determined teachers make career decisions based on their perception of how effective they are with students. When teachers have high beliefs of their teaching capabilities, they tend to demonstrate less burnout symptoms (Harmsen et al., 2018; Tsouloupas et al., 2010). As shown in the academic literature, teacher self-efficacy, job satisfaction, and self-esteem are highly correlated with teacher turnover rates and their ability to be effective in the classroom. Thus, providing teachers with proper tools and coping skills to create a positive work environment can reduce levels of dissatisfaction and improve the classroom experience.

School Support and Teacher Training

Previous studies (e.g., Harmsen et al., 2018; Prilleltensky et al., 2016) have demonstrated with advanced training and professional support, teachers felt increasingly capable of dealing with students' negative behavior, felt more competent, and reported high job satisfaction. Pas et al. (2012) determined close relationships among co-workers can lead to a stronger sense of commitment to work. Conversely, a lack of resources and support from school administration can lead to high levels of stress and disengagement from work among teachers. Teachers who perceive their school as a healthy organization tend to have high levels of work commitment (Pas et al.). Furthermore, when principals address and support school issues, high levels of efficacy are sometimes reported among school staff (Pas et al).

Much of the research related to teacher stress and burnout has been focused on external factors. According to McCarthy et al. (2016), there is a lack of research focusing on the interpersonal factors which can influence and protect against teacher stress. Teachers use mental energy when dealing with complex work-related situations. The challenges teachers face daily with their students can require emotional work; therefore, teachers can create a strong bond with their students. The emotional work put into the classroom can be both positive and negative and can vary throughout the day (Chang, 2009). In addition, positive relationships between teachers and students can lead to positive classroom environments (Chang).

High levels of stress among teachers can be detrimental for both the teacher and employers since research has shown stress is correlated with negative general well-being. The high numbers of health care costs attributed to dealing with stress among employees has generated wellness programs and stress management workshops to help prevent burnout (Klatt et al., 2009). There has also been increased research on mindfulness interventions and their positive

effect on both physical and mental health outcomes. Additionally, mindfulness interventions and practices are not only being used in clinical settings but are being introduced in all types of institutions, including schools, the workplace, and military facilities (Creswell, 2017). As such, researchers have noticed the benefits mindfulness interventions can have when working with different populations and within different settings. According to Creswell, chronic stress, chronic pain, depression, and addiction have all been outcomes wherein mindfulness interventions have demonstrated effectiveness. Because teachers are at risk for stress and burnout, techniques such as mindfulness interventions can be used to generate increased job satisfaction and reduced attrition rates.

A lack of support has been reported as a factor affecting teachers and often leading to high levels of stress. Although teacher stress has been identified as a risk factor among teachers, there are a lack of interventions designed to reduce teacher stress in school settings (Prilleltensky et al., 2016). The lack of prevention of stress among teachers can a significant effect on teacher's well-being as well as in the classroom environment. As such, effective stress reduction interventions should be further explored and completed among teachers. Mindfulness interventions have recently been highly researched in school and other workplace settings and have been shown to be an effective method of improving job-related satisfaction (Braun et al., 2019; Jamieson & Tuckey, 2017). Professional development, engagement in well-being activities, a mindful mindset, improved classroom management, regular communication, and compassion are factors for teachers which have been identified as protective factors for reducing teacher stress. Moreover, promoting other types of protective factors among teachers can significantly increase teachers' sense of competence (Prilleltensky et al.). Although different types of online resources and tools are reported to be as effective tools for coping with stress

(e.g., American Psychological Association Modules), there is still a lack of support and delivery of professional development trainings for teachers (Prilleltensky et al.).

Contributions of the Study

Teachers Mindfulness Trainings

Research findings suggest school administrative support is one of the most important factors associated with teachers staying in the profession (e.g., Tickle et al., 2011). Research on mindfulness effects in the workplace have been shown to enhance individuals' attention, stability, control, and self-efficacy. These factors can, in turn, influence workplace outcomes, performance, relationships, experiences, and overall well-being (Jamieson & Tuckey, 2017). According to Jamieson and Tuckey, mindful employees will be able to better identify external situations and internal reactions without having their thoughts and emotions control their responses. Mindful skills are correlated with employees who make less work-related mistakes that come from automatic processing. Frank et al. (2016) found mindfulness skills in teachers increased their ability to self-regulate their behaviors. It is these self-regulated behaviors and this awareness that increases teachers' ability to be more attentive to their classrooms as well as to their students' needs and students' behaviors without being distracted by work-related stress and other situations (Frank et al.).

Mindfulness-based stress reduction (MBSR) interventions increase brain activity in the amygdala, hippocampus, and prefrontal cortex, all of which are brain areas known to regulate emotions, process decisions, and increase memory (Haydon et al., 2019). A study conducted among 605 teachers that examined teachers' mindfulness traits and quality of occupational life showed teachers' mindfulness was negatively correlated with workload stress appraisal and positively correlated with work satisfaction. These results reinforce the job demand and resource

model, which describes job demands as physical and psychological aspects of work whose energy-depleting creates stress, fatigue, and burnout. However, the way one perceives stress (e.g., cognitive appraisal) will determine how much stress the demand impacts the body. As suggested by previous research (e.g., Guidetti et al., 2019), teachers with higher levels and practice of mindfulness and its techniques will perceive work-related stress in a more positive way. Moreover, (Guidetti et al.). suggests MBSR interventions results in other studies indicated a significant effect and increase on mindfulness levels in teachers. Reiser (2017) also reported the SPAM intervention (the intervention used in the present study) to have higher levels of mindfulness and increasing teachers' feelings of universality and group cohesion (Reiser & McCarthy, 2018).

Reduction of Stress

Recent research suggests the awareness and introspection created while practicing mindfulness can promote relaxation, improve stress management and coping skills, and promote health by decreasing disease risks (Creswell, 2017). According to Paulson et al. (2013), in mindfulness-based stress reduction trainings, individuals will have more activity in the midline of the cerebral cortex, which has been found to piece things together about lived experiences (e.g., completing a breathing exercise while increasing awareness of sensations in one's body such as air going into the nostrils or air touching one's face). Additionally, after going through a MBSR training, individuals will have increased activity in the temporal lobe (also known as the "experiential network") which allows for a different perception of self and one's surroundings (Paulson et al.). This type of awareness allows the individual to exercise increased control of their surroundings, experiences, and relationships. Mindfulness seems to have a buffering effect on physical diseases and stress, both of which affect the body. Some of the stress-related

physical health consequences shown to benefit from mindfulness interventions are chronic pain and immune system functioning (Creswell). Sevinc et al. (2018) also reported MBSR interventions have an effect on an individual's awareness, self-compassion, and salience while being an effective method for reducing stress. According to Guidetti et al. (2019), when individuals feel competent, have needed resources and tools, and feel reduced stress, they will demonstrate high levels of overall well-being.

Health

Mindfulness interventions and practices have been highly researched in the past 10 years and have been found to be negatively correlated with depression and anxiety (Creswell, 2017). Mindfulness-based stress reduction programs have also been found to be an effective method of helping employees who are dealing with chronic stress (Klatt, et al., 2009). Additionally, long-term physical health conditions are prevalent among those people with mental health issues such as depression and anxiety. Findings also suggest there are correlations between meditating and strengthening humans' immune systems (Ruff & Mackenzie, 2009). In addition, mindfulness-based interventions have been shown to promote well-being, prevent disease, treat chronic pain, and improve quality of life (Ruff & Mackenzie). It is reported promoting the body's innate capacity to heal (e.g., mindfulness practices) is a cost-effective and successful way to create a sustainable health care system in the U.S. Mindfulness-based intervention delivery is an inexpensive way of providing preventative health care since no diagnosis or technology is needed when using these types of interventions. Mind-body medicine has been found to reduce heart disease events by 75%, reduce the cost for people with chronic disease by $750 per person, reduce blood loss during surgery by 45%, and it leads to the early discharge of premature babies from hospitals (Ruff & Mackenzie). Ruff and Mackenzie also reported mindfulness interventions

can reduce the costs of health care by approximately two trillion dollars per year. Mindfulness based interventions do not inly promote well-being but act as preventive interventions to increase well-being among different populations.

Mindfulness-based interventions have also been shown to increase emotional competence among teachers. Garner et al. (2018) found teachers who participated in mindfulness interventions showed an increase in emotionally effective way of displaying rules for students. Specifically, teachers in a mindfulness-based intervention showed higher abilities to control their emotions and to express their emotions in more constructive ways than teachers who did not participate in the mindfulness intervention. It has been surmised that emotion regulation skills can facilitate teacher resilience and, in turn, can positively increase teachers' ability to perceive, understand, and respond to students' behavior and needs Other finding have shown mindfulness skills are a great strategy for increasing teachers' emotional health and life satisfaction (Mansfield et al., 2016).

CHAPTER III

METHODOLOGY

Research Design

The present study consisted of an experimental design comprised of an experimental group which took pre-post surveys and participated in an eight-week mindfulness-based intervention developed for teachers and a control group that took a pre-post surveys. Although the control group did not receive the eight-week mindfulness intervention, they were provided with the intervention PowerPoint slides and activities once both the groups completed their post-survey measures. The eight-week mindfulness intervention was used to assess the variables of mindfulness, stress, self-efficacy, job satisfaction, and well-being among teachers.

A pre-assessment package was given to both experimental and control groups, and it included one demographic questionnaire and five measures to assess mindfulness, stress, self-efficacy, job satisfaction, and well-being. Once the experimental group completed their eight-week sessions, both groups were provided with their post package surveys. The post package included the same five measures; however, the experimental group received an additional page with three post intervention reflection questions to assess the application of mindfulness techniques and skills in the teacher's life (e.g., applying techniques at home, at work and if they will use them in the future).

This study followed a pre-and posttest design and used primary data. Primary data was used since the data to be collected was new data which allows the primary investigator to choose their population (Jacobsen, 2017). Although both groups took pre and post-test, only the experimental group received the eight-week mindfulness-based intervention. Experimental studies are completed to compare outcomes among participants (Jacobsen). In the present study, comparisons were seen between the intervention and control groups.

Sample Selection

This study was conducted with the assistance of a school district located in a large southwestern city. A convenience sample was used due to limited accessibility to the target population. Convenience samples are used when an entire population is easily identified and accessible for data collection purposes (Jacobsen, 2017). The teacher participants in this study were drawn from three different schools located in the same school district and city. The sample consisted of teacher participants from one elementary, one middle, and one high school. Each school had a sample of teacher participants in the experimental group and a sample of teachers in the control group, creating a total of six groups. Participation was voluntary and all the teachers in the three schools were invited to participate in the study.

E-mails and flyers were sent out to the three different schools assigned by the school district via e-mail and/or in person (e.g., staff meetings). The school's principals were asked to forward the principal investigator's informational/recruitment e-mail to all teachers on campus for intervention participation. The e-mail and flyer included an overview of the intervention and information on topics to be discussed in sessions, length of the intervention, dates of sessions, and times and locations in which the sessions would take place. The same information was presented by their administrators to teachers in their first annual meeting of the school year. All

teachers who agreed to participate in the study were provided with 12 continuing education units as an incentive once they completed the eight-week training. Those who did not participate in the intervention but were assigned to the control group were provided with two hours of continuing education as an incentive for their time for completing the pre-post measures.

Once the teachers for the study were recruited, they were designated to the grade level they currently taught in (i.e., elementary, middle, and high school). Each teacher grade level group had a control and an experimental group, meaning both the experimental and the control groups had three educational levels of teachers (elementary, middle, and high school). The present study had a total of six groups; three in the experimental group and three in the control group. The experimental group received the eight-week mindfulness-based intervention while the control group only received a pre and post-test consisting of a demographic questionnaire, mindfulness, stress, self-efficacy, job satisfaction and well-being surveys. Both the experimental and control groups were estimated by using G*Power 3.1. statistical analysis, which indicated a total of 54 teacher participants needed for this study in order to obtain a power level of .95, an alpha level of .05 and medium effect size of .25. There were three educational levels/groups for the experimental group and three educational levels/groups for the control group. Considering the number of educational levels, scales and trials, 15 participants were recruited for each group to account for potential attrition in this study.

Setting

The school district for this study has a total of three high schools, two junior high schools and eight elementary schools. Additionally, the three schools used for this study are all considered Title I schools. Carver-Thomas and Darling-Hammond (2017) defined Title I schools as those schools that have high number of low-income students and receive federal funding to

help students meet academic standards. Findings indicate Title I schools have 50% higher turnover rates for teachers than non-Title I schools (Carver-Thomas & Darling-Hammond.). The teacher participants for this study were drawn from three different schools from the same school district. The present study used one high school, one middle school, and one elementary school. Schools were randomly assigned to the researcher by the school district. The mindfulness intervention was delivered in different locations within the school (e.g., library, classroom, and conference room), depending on the school's space availability and number of teacher participants in each group.

Instruments and Measurements

There were five dependent variable standardized surveys and one demographic survey used in the data collection process for this study (1) a demographic measure, (2) the *Five-Facet Mindfulness Questionnaire* (FFMQ) (Baer, Carmody & Hunsinger, 2012), (3) the *Perceived Stress Scale* (PSS) (Cohen, 1983), (4) the *Teacher Self -Efficacy Scale* (TSES) (Tschannen-Moran & Hoy, 2001), (5) the *Job Satisfaction Scale* (JSS) (Spector, 1994), and (6) the *Warwick-Edinburgh Mental Well-Being Scale* (WEMWBS) (Stewart-Brown & Janmohamed, 2008). A demographic measure was created by the principal investigator; however, the other measures have been used in both mental health and school settings and have established psychometric properties. The FFMQ, PSS, TSE, JSS, and the WEMWBS provided ordinal data. Ordinal types of variables are those variables that use, "an ordered ranked series that assigns a rank to responses but for which the numbers assigned are not meaningful" (Jacobsen, 2017, p.189). The demographic measure was developed with a set of questions intended to obtain background and relevant teacher participant information. Questions such as age, gender, educational level,

education major, and years of experience in the field of teaching are examples of the questions asked in the demographic measure which consisted of 11 questions.

Dependent Measures

Mindfulness. The *Five Facet Mindfulness Questionnaire* (FFMQ-15) (Baer, Carmody, & Hunsinger 2012), is a 15-item scale that measures five aspects of mindfulness. The five facets of mindfulness being measured are *observed*, *describing*, *acting with awareness*, *non-judging or inner experience*, and *non-reactivity to inner experience*. Responses are rated on a 5-point Likert scale ranging from "*never or very rarely true* = 1" to "*very often or always true* = *5*". Higher scores indicate higher levels of mindfulness. This questionnaire is a version of the five-facet mindfulness questionnaire which has 39 items (FFMQ-39). However, both questionnaires measure the same constructs. Scores of reliabilities for the constructs in the FFMQ-15 ranged from (a = .64-.83), which is consistent with previous research (Baer et al., 2012). Other findings suggest the constructs used in this scale have been shown to be significant and reliable (Gu et al., 2016).

Stress. The *Perceived Stress Scale* (PSS) (Cohen, 1983) is one of the most widely used instruments for measuring stress. It has been translated into 25 different languages (Taylor, 2015). The *Perceived Stress Scale* was designed for populations with at least a junior high education. The instruments assess feeling and thoughts within the last month. Responses are rated on a 5-point Likert scale ranging from "*never* = 0" to "*very often* = 4" (Cohen et al., 1994). Previous studies reported the PSS-10 scale had good reliability at (a =. 90), convergent validity, and concurrent validity (Taylor et al., 2015). Studies exploring reliability and validity on PSS have also been consistent across different cultures (Taylor).

Self-Efficacy. The *Teacher Sense of Self Efficacy Scale* (TSSE- Short Form) (Tschannen-Moran & Hoy, 2001) was created to identify and understand what kinds of things are what create difficulties for teacher in school. The TSSE-short form scale is composed of 12 items. Responses are rated on a 9-point Likert scale ranging from "*nothing* = 1" to "*a great deal* = 9" (Tschannen-Moran & Hoy). This scale has a longer version of 24 item which has shown to have good reliability scores. However, this scale uses 12 items from the longer version and has been shown to be reliable at (a = .92) (Fives & Buehl, 2009). Constructs such as classroom management, instructional practices, and student's engagement are measured in this scale (Fives & Buehl).

Job Satisfaction. The *Job Satisfaction Scale* (JSS) (Spector, 1994) has a total of 36 items. Responses are rated on a 6-point Likert scale. Items range from "*1 = strongest disagreement*" to "*6 = strongest agreement*". Totals scale points can range between 36 points to 216 points. The JSS is meant to measure nine subscales which include pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work, and communication (Spector). The JSS' previous Cronbach alpha's have been found to be reliable (a > .90) in 17 different countries (Khamisa et al., 2015).

Well-being. The *Warwick-Edinburgh Mental Well-being Scale* (WEMWS) (Stewart-Brown & Janmohamed, 2008) was designed to examine participants' well-being. This scale is composed of 14 Likert scale items. According to Stewart-Brown and Janmohamed, the 14-item scale was designed to measure mental well-being covering subjective well-being and psychological functioning. Examples of subjective well-being are illnesses which affect mood and ability to function properly and examples of psychological well-being are sense of autonomy, self-acceptance, personal growth, purpose in life, and self-esteem. All items are worded positively and address aspects of positive mental health. The scores on the WEMWS can

vary from a low score of 14 to a high score of 70 (Stewart-Brown & Janmohamed). Example items are: "I've been dealing with problems well" and "I've been feeling good about myself." Answers range from (1) "*none of the time*"; (2) "*rarely*"; (3) "*some of the time*"; (4) "*often*"; and (5) "*all of the time*." However, based on previous research conducted on 1,749 participants, the Cronbach's alpha was .91 (Stewart-Brown & Janmohamed).

Group Facilitation

There was one facilitator and one volunteer assistant used for this study. The principal facilitator is a rehabilitation counseling doctoral student, a licensed professional counselor-intern (LPC-I), and a licensed chemical dependency counselor-intern (LCDC-I). The volunteer who attended four sessions in the middle school experimental group was a student completing their master's degree in rehabilitation counseling. The *Stress Prevention and Mindfulness* (SPAM) intervention (Reiser, 2017) used for this study was facilitated among all intervention groups by the principal investigator who has experience using mindfulness in individual, group, and various counseling settings. The facilitator/principal investigator of this study also has researched and presented on mindfulness techniques in conferences and in university settings. The volunteer assistant for this study assisted with the middle school experimental group with documentation-related assignments (e.g., overseeing sign-in sheets, passing out handouts). The facilitator trained the assistant on a weekly basis on the upcoming session to be taught to the experimental group. The group facilitation and sessions always included PowerPoint slides on screen and on paper, handouts/worksheets from the session, group discussions, in-session activities, and mindfulness techniques. Participants were provided with folders, session materials, pens, and snacks for each weekly session. Each session included (1) a quick check-in handout provided in the SPAM intervention which asked members to state how they were feeling, thinking and behaving, (2) a

discussion of homework assigned from the previous session, (3) a review of PowerPoint slides for the current session, (4) an overview of the current session's activities, (5) practicing new mindfulness breathing techniques, and (6) an overview of assigned homework for the following session.

SPAM Intervention

Structure of SPAM Group

Reiser and McCarthy (2018) developed the *Stress Prevention and Mindfulness* (SPAM) intervention specifically developed for teachers (K-12). The SPAM intervention provides a learning opportunity and supportive environment where teacher participants can learn about mindfulness. The SPAM intervention was adapted from the *Optimize Your Potential Program* offered at the University of Texas at Austin, which is an eight-week mindfulness-based intervention founded on the work on Jon Kabat-Zinn. The psychoeducation material and activities in the SPAM intervention was developed by Reiser and McCarthy (Reiser, 2017) at the University of Texas at Austin. The three goals of the SPAM intervention are to (1) increase teachers' knowledge and causes of stress (2) introduce mindfulness skills and techniques, and (3) increase social support by providing a therapeutic group environment in session. Each of the SPAM sessions are designed to provide psychoeducation on stress, thoughts, and emotions while practicing mindfulness skills (e.g., breathing and body scans).

Experimental Group Intervention

The experimental group teachers were provided with the demographic survey and the (1) *Five-Facet Mindfulness Questionnaire* (FFMQ) (Baer et al., 2012), (2) *Perceived Stress Scale* (PSS) (Cohen, 1983), (3) *Teacher Self -Efficacy Scale* (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001), (4) *Job Satisfaction Scale* (JSS) (Spector, 1994), and (5) *Warwick-Edinburgh*

Mental Well-Being Scale (WEMWBS) (Stewart-Brown & Janmohamed, 2008) in a paper and pencil format. Teacher participants were contacted in person on two occasions by the facilitator; before the intervention began and during the last session to provide participants with the pre and post packages used in this study (i.e., at the end of eight weeks). There was a total of nine weeks between the pre-post surveys due to a schedule conflict one of the weeks. The experimental group was provided with 12 hours of continuing education units for the time spent during the intervention and filling out pre-post surveys. The post package for the experimental group also included five assessments as noted above but had additional reflection questions designed to assess the quality and usefulness of the intervention used.

Teachers in the experimental group were provided with psychoeducation on stress and emotions as well as instructions on the practice of mindfulness and its techniques. The SPAM intervention was divided into eight weekly sessions which lasted approximately one hour per session. Facilitators and teacher participants sat in a circular format with the goal of facilitating, sharing information, completing activities, and conducting discussions.

Session 1: Introduction to Teacher Stress and Mindfulness

An introduction of mindfulness and research on teacher stress was provided during the initial session. Teacher participants were presented with the transactional model of stress which will explain the perceptions of demands and resources. Emphasis on how work-related demands and a lack of resources in the school setting can cause stress were discussed when explaining the Transactional Model of Stress (Lazarus & Folkman, 1984). After reviewing the model, the facilitators guided teachers in identifying their own triggers to stress using a *stress warning signs checklist*. The teacher participants were then introduced to mindfulness: its definition, the practice of mindfulness, and attitudinal qualities pertaining to teaching. At the end of the session,

the facilitators assigned homework which consisted of reflecting on the attitudinal qualities and practicing two mindfulness activities.

Session 2: The Stress Response

Session two commenced with teacher participants discussing their homework from the previous session. The facilitators then presented teacher participants with the stress cycle and explained how stress can affect their physical sensations, thoughts, feelings, and behaviors. Teacher participants were then asked to complete an in-session activity wherein they were required to think of a situation and identify its associated body sensations, feelings, and thoughts. Additionally, the differences between reacting and responding behaviors were explained. Next, the facilitators engaged in a discussion with teachers to assess how being mindful can increase control of one's reactions to certain stressful situations. For example, practicing breathing during a stressful situation provides an opportunity of awareness, focus, and control. This discussion was followed by a guided mindful sitting exercise, followed by processing participant reactions to the session. Next, homework was explained and assigned. This session's homework consisted of reading one handout and completing three mindful activities.

Session 3: Stress and Thinking

This session was designed to teach participants about the nature of thoughts and unhealthy thinking patterns. Teachers were asked to reflect on unhealthy personal thinking patterns they engaged in as well as the unhealthy thinking patterns they engaged in while they were at school. Teachers then completed an activity in which they identified their negative thoughts. Next, the group processed the activity and was assigned homework for this session. The homework included reading a handout, completing a chart, and completing three mindful breathing exercises.

Session 4: Stress and Emotion

The session commenced with a debriefing of the previous session's homework. The focus of this session was emotions. Teacher participants were provided with a list of emotions and were asked to identify which the type of relationships they had with each emotion. The teachers were then be asked to reflect on their identified emotions with a partner, followed by a group reflection. The facilitators explained how mindfulness and its strategies can help with emotional acceptance. Next, the teachers were provided with their weekly homework assignment which consisted of reading a handout and completing three mindfulness breathing exercises.

Session 5: Mindful Communication

This session opened with reflections of the previous session's homework. In session five, psychoeducation on communication styles and mindfulness communication were provided to the teacher participants. The teachers were then be asked to identify what style of communication with which they most identified. The facilitators then led the teacher participants in an activity focused on universal human needs (e.g., connection, autonomy, meaning, honesty). Next, teachers were asked to practice assertive communication and expression of needs by role playing with a partner. The teacher and facilitator processed the mindfulness communication activity, were asked to identify something they were grateful for and were provided with weekly homework. This session's homework consisted of practicing expression of needs, asking request of connection and completing three to five mindfulness exercises.

Session 6: Mindful Communication Part 2

This session began with a three-minute breathing activity that was led by a volunteer teacher. Next, the facilitators and teacher participants explored and discussed how unmet needs can lead to negative judgements placed on others such as family, friends, students, and

colleagues. The facilitators then introduced the teachers to an activity in which judgements of others were reflected upon. Next, teachers were asked to process the activity as a group. The group then completed a three-minute breathing getting out of judgement activity and processed this activity as a group. Teachers were asked to complete another *Transforming Judgment* activity and three *Nostril Breathing* techniques for homework.

Session 7: Mindfulness for Stress Reduction

This session opened with a brief round of a "pleasant moment" that was experienced that day (e.g., a body sensation, something in the environment, a smile from a colleague or student). The group then reflected on homework from the previous session. An overview of each mindfulness exercise introduced in the SPAM group (i.e., sessions one through six) was provided. The facilitators then discussed mindfulness for stress prevention and intervention strategies. Teacher participants were asked to discuss the challenges and successes they had experienced thus far as a group. Teachers then reflect on how they would implement mindfulness as a coping strategy to deal with future stressful situations. The facilitators emphasized the importance of adopting a gentle and curious attitude toward uncomfortable thoughts and emotions in the classroom setting. The session was followed by a member-led body scan which entailed identifying body parts that feel stress and letting go of this stress. The intervention facilitator provided with homework which included reviewing a handout, filling out a pleasant calendar, and completing three to five body scans.

Session 8: Group Termination and Resources

Facilitators began the final session by reflecting on the previous week's homework. The goal of the final session was to ask teacher participants to reflect on the knowledge and skills they had acquired during the entire SPAM intervention. All the mindfulness strategies were

reviewed and clarified as needed. Facilitators also reviewed the mindfulness philosophy and its practices. Teachers were then asked to complete an activity in which they needed to maintain a certain number of balloons in the air at the same time. The purpose of this activity was to reflect on what teacher participants were doing and what they had learned at the same time. Next, the facilitators provided resources available to continue practicing and learning the skills acquired during the intervention. Teachers were invited to discuss how they planned to move forward as a community of colleagues. Facilitators led the discussion of the termination of the group. Additionally, the facilitator gave all participants during the last session the post packages with the instructions of turning them in that same week. See Appendix A for Sessions One through Eight.

Control Group

The control group teachers were provided with the demographic survey and the (1) *Five-Facet Mindfulness Questionnaire* (FFMQ) (Baer et al., 2012), (2) *Perceived Stress Scale* (PSS) (Cohen, 1983), (3) *Teacher Self -Efficacy Scale* (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001), (4) *Job Satisfaction Scale* (JSS) (Spector, 1994), and (5) *Warwick-Edinburgh Mental Well-Being Scale* (WEMWBS) (Stewart-Brown & Janmohamed, 2008) in a paper and pencil format. Teacher participants were contacted in person on two occasions by the school secretary; before the intervention began and after the intervention ended to provide them with the pre and post packages used for this study (i.e., at the end of eight weeks). There was a total of nine weeks between the pre-post surveys due to a schedule conflict one of the weeks. The control group participants were requested to complete the prepackage which included a demographic questionnaire and the five aforementioned instruments. The post package only included the same

five survey measures noted above. The control group was provided with two hours of continuing education units for the time spent on the pre-post surveys.

Procedures

The first step in this study was to contact the intervention developer, Jensen Reiser, author of the *Stress Prevention and Mindfulness* (SPAM) intervention, for permission to use his intervention, activities, and materials for the study. The facilitator read and studied the intervention materials for approximately two weeks. Additionally, Dr. Reiser, the creator of the intervention, provided the facilitator with advice via e-mail on the management of the teacher groups. Measures in mindfulness, stress, job satisfaction, self-efficacy, and well-being were used for data collection. Concomitantly, two different school districts were contacted via e-mail with a proposal of implementing the mindfulness intervention for their teachers and schools. Upon receiving approval from one of the school boards, an additional presentation was provided to the school's administrators regarding the process of the study and intervention format. Once the school administration approved the intervention, a request was submitted for approved locations within the schools so the intervention could take place and continuing education credits could be provided to teachers as an incentive for their participation in this study.

Upon receiving the SPAM intervention material and approval from the school district to conduct the study, an application was sent to the respective university Institutional Review Board to obtain to approval to conduct the study. The pre -and posttest consisted of a paper-pencil survey which both the control and experimental group were asked to complete. The teacher participants were asked to complete a demographic questionnaire and five measures in the introduction meeting as follows (1) the *Five Facet Mindfulness Questionnaire*, (2) the *Perceived Stress Scale*, (3) the *Teacher Self Efficacy Scale*, (4) the *Job Satisfaction Scale*, and (5) the

Warwick-Edinburgh Mental Well-Being Scale. For those teachers who did not wish to participate in the intervention, a second packet containing these same questionnaires and pencil was handed back to them in person. Teachers were sent an e-mail via their work e-mails as a reminder that the facilitator would be on their campus passing out post-packages surveys as well as information to provide them with the continuing education units. The second phase included gathering materials and preparing the intervention that was delivered to the teachers in the experimental group.

Data Analysis

The method of statistical analysis for the present study was a four-way factorial ANOVA with two between subjects' factors and two within subject repeated measure factors.

The study was completed using both a treatment and non-treatment group. The treatment group consisted of those teacher participants who attended to at least six sessions. The non-treatment group was those teachers from the same school district who chose not to participate in the study. Both groups received the pre-post measures. However, the non-treatment group did not receive any type of intervention and was used as a baseline of comparison. Teachers were also interviewed at the end of the intervention to ascertain if they were able to implement any of the information they acquired during the intervention. The idea was to measure implementation of intervention and skills learned outside of the group setting.

CHAPTER IV

RESULTS

The purpose of the present study was to determine whether an eight-week stress prevention and mindfulness-based intervention would be an effective method for reducing stress and increasing mindfulness, self-efficacy, job satisfaction, and well-being among elementary, middle, and high school teachers. Although this study used a quantitative approach, the researcher added four additional reflection questions to the experimental group's posttest packages. These questions were designed to add to the quantitative results presented in the study to obtain a better understanding of the intervention experience for the treatment groups.

The present study used an experimental and a control group and had three levels of teacher participants for each group (i.e., elementary, middle, and high school). Both groups were measured on five different constructs before and after the eight-week Stress Prevention and Mindfulness intervention. The dependent measures used in this study were the (1) the *Five-Facet Mindfulness Questionnaire* (FFMQ) (Baer et al., 2012), (2) the *Perceived Stress Scale* (PSS) (Cohen, 1983), (3) the *Teacher Self -Efficacy Scale* (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001), (4) the *Job Satisfaction Scale* (JSS) (Spector, 1994), and (5) the *Warwick-Edinburgh Mental Well-Being Scale* (WEMWBS) (Stewart-Brown & Janmohamed, 2008).

The study used a four-way factorial ANOVA with two between subjects' factors, groups and levels, and two within subjects/repeated measures factors, pretest-posttest and scales (2 X 3

X 2 X 5). The researcher conducted the study using a total of 33 teacher participants from a school district located on a U.S.-Mexico border. Fourteen of the participants in this study were part of the experimental/treatment group and 19 participants comprised the control group.

Chapter four includes the demographic information and characteristics of the teacher participants and discusses the sample descriptive information, the instruments' psychometric properties (e.g., Cronbach's Alpha), a summary and interpretation of the research findings (e.g., SS, df, MS, F and P), and qualitative results gathered from the experimental groups. Additional attention is given to the significant findings found in this study and the relevant research questions. Further testing was conducted using Bonferroni at a .05 level of significance and Scheffe at the .05 level of significance. Additional information with tables is provided for those findings with significant results (e.g., scales, pre-post scales, pre-post scales and groups).

Full Sample Descriptive Statistical Information

The study sample used a total of 33 teacher participants who taught in a school district located on a U.S.-Mexico border. The experimental group consisted of n = 14 (42.4%) teacher participants and n = 19 (57.6%) participants in the control group. From the 33 teacher participants, 25 (75.8%) were female, seven (21.2%) were male and one (3%) identified as other and the mean age of the participants was 42.8 years (SD = 10.3). The full sample consisted of 11 (33.3%) elementary school participants, nine (27.3%) middle school participants and 13 (39.4%) high school participants. The full sample identified with three different types of race. Twenty-one (63.6%) of the participants identified their race as Hispanic, 10 (30.3%) participants self-identified as African American and two (6.1%) participants self-identified as Asian. Of the 21 participants who identified as Hispanic, 20 (60.6%) participants chose Mexico as the geographical area with which they identified and one (3.0%) participant indicated they were

from Central America. Twenty-six (78.8%) of the participants reported being religious and 24 (72.7%) said they were spiritual. One (3.0%) teacher from the full sample of participants had a high school degree, one (3.0%) reported having a vocational degree, 23 (69.7%) participants reported having a bachelor's degree, and eight (24.3%) participants reported having a master's degree. Five (15.2%) of the teacher participants reported having one to five years of teaching experience, five (15.2%) of the participants reported having six to 10 years of experience, nine (27.3) had 11-15 years of teaching experience, and 14 (42.4%) had more than 16 years of experience. However, only 15 (45.5%) of the 33 reported having their degree in education. Twenty-four (72.7%) reported teaching a CORE class, eight (24.2%) of the teacher participants reported teaching a special education class, five (15.2%) reported having a second job aside from teaching, and 12 (36.4%) reported doing activities to increase stress reduction activities (e.g., yoga and meditation) at least once per week. Twenty-three (69.7%) of the participants reported currently feeling stressed with work. Thirty-one (93.9%) of the participants reported feeling support from administration. See Table 1 for demographic statistics.

Experimental Group Sample Descriptive Statistical Information

The experimental group was comprised of four (28.6%) elementary teacher participants, four (28.6%) middle school teacher participants, and six (42.9%) high school participants. Teachers who missed more than two sessions of the eight-week SPAM intervention were not included in the sample. Two teacher participants were dropped from the elementary experimental group, four from the middle school experimental level, and two from the high school experimental group. The experimental group consisted of 13 (92.9%) female participants and one (7.1%) male participant. Four (28.6%) participants from the experimental sample identified as Caucasian, nine (64.3%) as Hispanic and one (7.1%) as Asian. Eight (57.1%) of the nine

participants who identified as Hispanic chose Mexico as the geographical location with which identified with. One (7.1%) identified as Central American. Twelve (92.9%) of the participants identified as religious and nine (64.3%) identified themselves as spiritual. Eight (57.1%) of the 14 experimental participants reported having a bachelor's degree and six reported having a master's degree. However, only five (35.7%) of the 14 participants reported having their degree in education. Two (14.3%) of the 14 experimental participants reported having one to five years of teaching experience, three (21.4%) reported having between six to10 years of teaching experience, and nine (64.3%) of the teacher participants had more than 11 years of teaching experience. Eleven (78.6%) reported currently teaching a CORE class, 11 (78.6%) reported currently feeling stressed, three (21.4%) reported teaching a special education class, and three (21.4%) reported having a second job. Six (42.9%) reported doing activities to increase their overall awareness (e.g., yoga, meditation) and 13 (92.9%) reported feeling support from their school administration. This information is provided in Table 1.

Control Group Sample Descriptive Statistical Information

The control group was comprised of eight (42.1%) elementary teacher participants, four (21.1%) middle school teacher participants, and seven (36.8%) high school participants. All teachers who completed the pre assessment also completed the post assessments. The control group consisted of 12 (63.2%) female participants, six (31.6%) males, and one participant who self-identified as other (5.3%). Six (31.6%) of the experimental sample identified as Caucasian, 12 (63.2%) as Hispanic, and one (5.3%) as Asian. One hundred percent of the participants who identified as Hispanic chose Mexico as the geographical location with which they identified. Thirteen (68.4%) participants identified as religious and 15 (78.9%) identified as spiritual. Fifteen (78.9%) of the 19 control group teacher participants reported having a bachelor's degree and six reported having a master's degree (10.5%). Ten participants (52.6%) of the 19 participants reported having their degree in education. Three (15.8%) of the 19 teacher participants reported having one to five years of teaching experience and two (10.5%) reported having between six and 10 years of teaching experience. Three (15.8%) of the teacher participants had more than 11 years of teaching experience and 11 (57.9%) of the teacher participants had more than 16 years of teaching experience. Thirteen (68.4%) reported currently teaching a CORE class, 12 (63.2.6%) reported currently feeling stressed, six (26.3%) participants reported teaching a special education class, and two participants (10.5%) reported having a second job. Six teacher participants (31.6%) reported doing activities to increase awareness (e.g., yoga, meditation) and 18 (94.7%) reported feeling support from school administration. This information is provided in Table 1.

Table 1.
Demographic Descriptive Statistics

Baseline Characteristic	Experimental		Control		Full Sample	
	n	%	*n*	%	*n*	%
Group						
Experimental	14	42.4	14	42.4	33	100
Control	19	57.6	19	57.6	33	100
Grade Level						
Elementary	4	28.6	8	42.1	11	33.3
Middle	4	28.6	4	21.1	9	27.3
High	6	42.9	7	36.8	13	39.4
Gender						
Female	13	92.9	12	63.2	25	75.8
Male	1	7.1	6	31.6	7	21.2
Other	-	-	1	5.3	1	3.0
Race						
White	4	28.6	6	31.6	10	30.3
Black	-	-	-	-	0	-
Hispanic	9	64.3	12	63.2	21	63.6
Asian	1	7.1	1	5.3	2	6.1
American Indian	-	-	-	-	0	-
Hawaiian	-	-	-	-	0	-
Other	-	-	-	-	0	-
Hispanic Geographical Area						
Mexico	8	57.1	12	63.2	20	60.6
Central America	1	7.1	-	-	1	3.0
South America	-	-	-	-	-	-
Caribbean	-	-	-	-	-	-
Other	-	-	-	-	-	-
Education Level						
High School	-	-	1	5.3	1	3.0
Vocational	-	-	1	5.3	1	3.0
Bachelors	8	57.1	15	78.9	23	69.7
Masters	6	42.9	2	10.5	8	24.3
Doctorate	-	-	-	-	0	-
Education Degree*	5	35.7	10	52.6	15	45.5

Note: N = 33 (experimental and control group). Participants were on average 42.8 years old (SD = 10.3).
*Reflects the number and percentage of participants answering “yes” to this question.

Table 1. Cont.
Demographic Descriptive Statistics

Baseline Characteristic	Experimental		Control		Full Sample	
	n	%	*n*	%	n	%
Teaching Experience						
1-5 years	2	14.3	3	15.8	5	15.2
6-10 years	3	21.4	2	10.5	5	15.2
11-15 years	6	42.9	3	15.8	9	27.3
16+ years	3	21.4	11	57.9	14	42.4
Teaching Special Education*	3	21.4	5	26.3	8	24.2
Teaching Core Classes*	11	78.6	13	68.4	24	72.7
Support from School Administration*	13	92.9	18	94.7	31	93.9
Currently stressed*	11	78.6	12	63.2	23	69.7
Have a second job*	3	21.4	2	10.5	5	15.2
Other mindfulness-related activities*	6	42.9	6	31.6	12	36.4
Religious*	12	92.9	13	68.4	26	78.8
Spiritual*	9	64.3	15	78.9	24	72.7

Note: N = 33 (experimental and control group). Participants were on average 42.8 years old (SD = 10.3).
*Reflects the number and percentage of participants answering “yes” to this question.

Scale Descriptive Data and Cronbach's Alpha Coefficients

The descriptive statistics and Cronbach's alpha for the (1) *Five-Facet Mindfulness Questionnaire* (FFMQ) (Baer et al., 2012), (2) *Perceived Stress Scale* (PSS) (Cohen, 1983), (3) *Teacher Self -Efficacy Scale* (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001), (4) *Job Satisfaction Scale* (JSS) (Spector, 1994), and (5) *Warwick-Edinburgh Mental Well-Being Scale* (WEMWBS) (Stewart-Brown & Janmohamed, 2008) are presented in Table 2. The scales used in this study were examined for inter-item reliability by conducting Cronbach's alpha. The psychometric property of the internal consistency/reliability for each of the scales was derived through the utilization of Cronbach's alpha for each scale in the pretest and then again in the post-test. The mean Cronbach's alpha across pretest and posttest was derived through the utilizations Zr transformation. The means for pre, post, and pre-post Cronbach's alpha coefficients for all scales used in this study can be found in Table 2.

The mean Cronbach's alpha for the scales are as follows: The FFMQ scale consisted of 15 items with a mean ($\alpha = .67$) and (pre SD = 7.89, post SD = 5.61), the PSS consisted of 10 items and a mean ($\alpha = .89$) and (pre SD = 7.36 and post SD = 6.38), the TSES consisted of 12 items and a mean ($\alpha = .89$) and (pre SD = 5.96 and post SD = 6.31), the JSS consisted of 36 items and a mean ($\alpha = .89$) and (pre SD = 16.30 and post SD = 14.04), and the WEMWS scale consisted of 14 items and a mean ($\alpha = .92$) and (pre SD = 10.55 and post SD = 8.10). According to Cohen (1978), an ($\alpha = \geq .70$) is considered a good to excellent reliability coefficient. Four of the five scales used for the presented study had ($\alpha = \geq .89$) as their mean Cronbach's alpha, meaning four of the scales used in this study demonstrated good reliability.

Table 2.

Cronbach's Alpha of Scales (Fisher's Zr Transform)

Scales	Pre r	Post r	Mean Cronbach's Alpha
Mindfulness	.73	.59	.67
Stress	.92	.85	.89
Self-Efficacy	.87	.92	.89
Job Satisfaction	.89	.86	.89
Well-being	.94	.90	.92

The mean Cronbach's Alpha coefficient was derived through the utilization of Fisher's Zr transformation

Quantitative Results

The results for the four-way ANOVA (2 X 3 X 2 X 5) are shown in Table 3. The four-way factorial ANOVA included two between subjects' factors, groups and levels, and two within subjects/repeated measures factors, pre-test-posttest and scales. This study consisted of two groups (experimental and control), pre and posttests, five scales (mindfulness, stress, self-efficacy, job satisfaction, and well-being), and three levels (elementary, middle and high school). Thus, there were 15 null hypotheses. Among the 15 null hypotheses, only three effects were significant (refer to Table 3). The null hypothesis of no difference was among scales, pre-post and scales; and no difference among cell means for pre-post, scales and groups. Therefore, these significant omnibus F values (e.g. scales, pre-posttest and scales, and pre-posttest, scales and groups) were further assessed through multiple pairwise comparisons procedures. Bonferroni testing was used for significant results in scales and Scheffe testing for significant results in pre-posttest and scales, and pre-posttest, scales and groups. Bonferroni testing uses a level of significance of .05 and Scheffe testing at a .05 level.

Table 3

Summary Table for a Four-Way Factorial ANOVA (2 X 3 X 2 X 5) Groups, Levels, Pretest-Posttest and Scales: Mindfulness, Stress, Job Satisfaction, Self-Efficacy and Well-being

Source of Variation	*SS*	*df usual*	*df conservative**	*MS*	*F*	*Partial eta square*
Between Subjects	9,728.10	32				
Groups	135.92	1		135.92	0.43	
Levels	233.65	2		116.82	0.36	
Groups x Levels	740.62	2		370.31	1.16	
error b	8,617.91	27		319.18		
Within Subjects	138,137.32	297				
Between Pre-Post	130.49	1		130.49	1.81	
Pre-Post x Groups	130.73	1		130.73	1.81	
Pre-Post x Levels	160.67	2		80.34	1.11	
Pre-Post x Groups x Levels	269.33	2		148.16	2.05	
“error” W1	1,949.43	27		72.18		
Between Scales	118,623.72	4	1	29,205.93	310.90	.92
Scales x Groups	255.21	4		63.8	0.68	
Scales x Levels	399.26	8		49.9	0.53	
Scales x Groups x Levels	1,289.20	8		161.151	1.71	
“error” W2	10,145.44	108	27	93.94		
Between Pre-Post x Scales	547.67	4	1	136.92	4.25	.14
Pre-Post x Scales x Groups	398.82	4	1	99.70	3.09	.10
Pre-Post x Scales x Levels	178.39	8		22.30	0.69	
Pre-Post x Scales x Groups x Levels	150.82	8		18.85	0.58	
“error” W3	3,481.13	108	27	32.23		
Total	147,865.32	329				

*p < .05; **p < .01

*The lower bound df, were used because sphericity could not be assumed.

Data Analysis for Hypotheses Testing

The null hypotheses for the present study were tested with an F distribution at the .05 level of significance. The three hypotheses presented below were significant at a .05 level, refer to Table 3.

$H_{8:}$ There is a difference among scales.

$H_{12:}$ There is an interaction effect between pre-posttests and scales.

$H_{13:}$ There is an interaction effect between pre-posttests, scales and groups.

Means and Differences Between Scales

The means for the scales (mindfulness, stress, self-efficacy, job satisfaction and well-being) are found in Table 4. The means for the scales were the following: mindfulness (M = 37.36), stress (M = 23.69), self-efficacy (M = 39.42), job satisfaction (M = 81.21), and well-being (M = 36.24). A Bonferroni was used to measure significance for differences between scales at a $P \leq .05$ level. The present study used five scales to measure the constructs of mindfulness, stress, self-efficacy, job satisfaction, and well-being. There was a difference found between mindfulness and stress at a (M = 13.65), mindfulness and job satisfaction at a (M = -43.86), stress and self-efficacy at a (M = -15.73), stress and job satisfaction at a (M = -57.52), stress and well-being (M = -12.55). There was also difference found between self-efficacy and job satisfaction at a (M = -41.79) and job satisfaction and well-being (M = 44.97). Refer to Table 5 for means differences between scales. As seen in Table 5, stress and job satisfaction each had three significant mean differences between scales. Stress had significant results at a .05 level with self-efficacy, job satisfaction and well-being. Job satisfaction had significant results at a .05 level with mindfulness, stress, and self-efficacy.

Table 4

Means of Scales: Mindfulness, Stress, Self-Efficacy, Job Satisfaction and Well-being

Scales	Mean
Mindfulness	37.36
Stress	23.69
Self-Efficacy	39.42
Job Satisfaction	81.21
Well-being	36.24

Table 5

Means Difference Between Scales: Mindfulness, Stress, Self-Efficacy, Job Satisfaction and Well-being

Scales	Mindfulness	Stress	Self-Efficacy	Job Satisfaction	Well-being
Mindfulness	–				
Stress	-13.67**	–			
Self-Efficacy	2.06	15.73**	–		
Job Satisfaction	43.85**	57.52**	41.79**	–	
Well-being	-1.12	12.55**	-3.18	-44.97**	–

*p < .05; **p < .01

Means and Differences Among Pre-Post Test and Scales

Table 6 reflects the means for pre-post tests and scales. Pre-test means for scales are as follows: mindfulness (M = 35.67), stress (M = 22.72), self-efficacy (M = 39.60), job satisfaction (M = 82.70), and well-being (M = 33.70). Means for post-tests were mindfulness (M = 39.04), stress (M = 24.65), self-efficacy (M = 39.24), job satisfaction (M = 79.73) and well-being (M = 38.52). A Sheffe test was used to measure significant difference of means at a level of $P \leq .05$ for pre-post and scales. There was a total of eight differences between means for pre-post and scales with no significant level. However, there were a total of 17 significant differences between means for pre-post and scales. Ten of the 17 significant differences were positive values and seven of the 17 significant values were negative values.

The significant mean differences are presented below and can be found in Table 7. Pre mindfulness had two significant results with post stress (M = 11.02) and post job satisfaction (M = -44.06). Pre-stress had significant level with post mindfulness (M = 16.32), post self-efficacy (M = 16.52), post job satisfaction (M = -57.03) and post well-being (M = -15.8). Pre self-efficacy had significant level with post stress (M = 14.94) and post job satisfaction (M = -40.14). Pre job satisfaction had a significant level with post mindfulness (M = 43.65), post stress (M = 58.04), post self-efficacy (M = 43.45) and post well-being (M = 44.17). Pre well-being had a significant level with post mindfulness (M = -5.35), post stress (M = 9.04), post self-efficacy (M = -5.55), post job satisfaction (M = 46.04) and post well-being (M = -4.83). Pre and post stress had significant results with all of the other scales except with stress. Pre and post job satisfaction also had significant results with all of the other scales except with job satisfaction. Pre well-being on the other hand had significant results with all the other scales and with itself. However, post well-being only had three significant results with stress, job satisfaction and well-being.

Table 6

Means of Pre-Post and Scales: Mindfulness, Stress, Self-Efficacy, Job Satisfaction and Well-being

Scales	Mean
Pre	
Mindfulness	35.67
Stress	22.72
Self-Efficacy	39.60
Job Satisfaction	82.70
Well-being	33.70
Post	
Mindfulness	39.04
Stress	24.65
Self-Efficacy	39.24
Job Satisfaction	79.73
Well-being	38.52

Table 7

Differences between means for Pre-Post and Scales: Mindfulness, Stress, Self-Efficacy, Job Satisfaction and Well-being

Scales	Post				
Pre	Mindfulness	Stress	Self-Efficacy	Job Satisfaction	Well-being
Mindfulness	-3.37	11.02**	-3.57	-44.06**	-2.85
Stress	16.32**	-1.93	16.52**	-57.03**	-15.8**
Self-Efficacy	.55	14.94**	.35	-40.14**	1.07
Job Satisfaction	43.65**	58.04**	43.45**	2.96	44.17**
Well-being	-5.35**	9.04**	-5.55**	46.04**	-4.83**

*p < .05; **p < .01

Means and Differences Among Groups, Pre-Post and Scales

The scale means found in Table 8 reflect the means for the control and experimental groups in pre-posttest. Means for the experimental group pre-test are as follows: mindfulness (M = 34.08), stress (M = 21.75), self-efficacy (M = 40.16), job satisfaction (M = 79.58) and well-being (M = 32.44). Post-test means for the experimental group were mindfulness (M = 37.13), stress (M = 23.19), self-efficacy (M = 40.44), job satisfaction (M = 82.38) and well-being (M = 37.97). Means for the control group pre-test are as follows: mindfulness (M = 37.26), stress (M = 23.69), self-efficacy (M = 39.01), job satisfaction (M = 85.80) and well-being (M = 35.49). Post-test means for the control group were mindfulness (M = 40.93), stress (M = 26.11), self-efficacy (M = 38.05), job satisfaction (M = 77.08) and well-being (M = 39.07).

As seen in Table 8, overall means for the control group tended to be higher than the means for both pre and post experimental group. Additionally, overall means increased from pre to post trials. Four (i.e., mindfulness, stress, job satisfaction, and well-being) of five pre means for the control group were higher than the experimental group pre means. Additionally, job satisfaction was the construct with the biggest difference between pre experimental mean and pre control mean. There was a noticeable difference of (6.22) between means for pre control and pre experimental in the job satisfaction construct. However, self-efficacy was the only construct and mean in the experimental group that was higher than the control group with a difference of (1.15). In Table 8, the post means for the experimental group and means for the control group reflect some changes after the intervention and 8-week period. The control group has a total of three post means that were higher than the experimental group post means. Mindfulness, stress and well-being post means still demonstrated to be higher in the control group than the experimental group. The experimental group still had higher means for self-efficacy but also

reflected higher means for the job satisfaction construct. Results in Table 8 show job satisfaction post means for the experimental and control group means to have reversed. There was a difference of (5.30) between control and experimental means for job satisfaction.

Table 9 reflects differences in means for each group and in pre-posttests. Means were subtracted from the pretests to the posttest for each group. The values in the experimental group are all negative values meaning the pre means were smaller than the post means. When subtracted from each other, there is a negative difference (see Table 9). This signifies the means from the pre to the post in the experimental group increased. The values in the experimental group were -3.05 for mindfulness, -1.44 for stress, -0.28 for self-efficacy, -2.80 for job satisfaction and -5.53 for well-being. However, none of the values were significant for this group.

The control group had negative values for mindfulness (-3.67), stress (-2.42) and well-being (-3.58), meaning that the control group increased in these constructs just like the experimental group. However, the control group had two values that were positive, meaning there was decline in self-efficacy (0.96) and job satisfaction (8.72**). Job satisfaction was the only value from the control group with a significant difference at a .05 level. These results indicate there was a significant decrease in job satisfaction scale for the control group (see Table 8).

Differences between means in the experimental group and the control group are also presented in Table 9. There is an absolute difference between means for the experimental and control group of (.62) for the mindfulness scale, (.98) for the stress scale, (1.24) for the self-efficacy scale, (11.52) for the job satisfaction scale and (1.95) for the well-being scale. These differences of means between groups do not appear to of big difference, with the exception of

job satisfaction which has a big difference of means between groups. Job satisfaction had a (11.52) mean difference between the experimental and control groups. These mean differences can also be seen in Table 9, when subtracting the values of the same scales in the experimental pre means and control pre means from the same scales in experimental post and control post means. For example, subtracting post-post mindfulness-mindfulness (-3.80) minus, pre-pre mindfulness-mindfulness (-3.18). The difference is .62, which is the difference also shown in Table 9 for each scale.

It can be concluded from the presented results (see Table 8 and Table 9), there were higher post results of all scales (e.g., mindfulness, stress, self-efficacy, job satisfaction, and well-being) in the experimental group. However, none of the results were significant. Some constructs in the control group such as mindfulness, stress, and well-being increased while self-efficacy and job satisfaction decreased. Job satisfaction was the only construct which decreased at a significant .05 level.

Table 8

Means for Pre-Post Scales in Experimental and Control Group

Scales	Experimental	Control
	Mean	Mean
Pre		
Mindfulness	34.08	37.26
Stress	21.75	23.69
Self-Efficacy	40.16	39.01
Job Satisfaction	79.58	85.80
Well-being	32.44	35.49
Post		
Mindfulness	37.13	40.93
Stress	23.19	26.11
Self-Efficacy	40.44	38.05
Job Satisfaction	82.38	77.08
Well-being	37.97	39.07

Table 9
Differences Means between Pre-Post in Scales for Control and Experimental Groups

Scales	Experimental	Control	Ex. and Con.
	Mean	Mean	Difference
Mindfulness	-3.05	-3.67	.62
Stress	-1.44	-2.42	.98
Self-Efficacy	-0.28	0.96	1.24
Job Satisfaction	-2.80	8.72**	11.52
Well-being	-5.53	-3.58	1.95

Scheffe Test, *p < .05; **p < .01

Pairwise Comparisons

There was a total of 56 significant results out of 100 total results when comparing pre-post-tests, scales, and groups. For the purpose of this study, the researcher focused the analysis on the scales means differences for pre-experimental and pre-control results and post-post results for the control group. Pre- experimental and pre-control had a total of 25 results and had 14 significant results. The post-experimental and post-control section of the groups also had 25 total results with 14 significant results. However, the results which compared the same scales were not significant for the pre-pre section or the post-post section. The same scales and results which were significant in the pre-pre section were also significant in the post-post section. Means were then subtracted from the pretests to the posttest for each group. Table 10 reflects differences in means for each group and in pre-posttests. Smaller values in in pre that are subtracted from bigger numbers in post will lead to negative values, which mean increased differences between means.

The experimental pre mindfulness scale was significant with the pre control group scale of stress (10.39) and job satisfaction (-51.72). The experimental post mindfulness scale was significant with the post control group scale stress (11.02) and job satisfaction (-39.95). It can be concluded from these results that mindfulness and stress, and mindfulness and job satisfaction decreased.

The experimental pre-stress scale was significant with the pre control group scale of mindfulness (-15.51) and self-efficacy (-17.26), job satisfaction (-64.05) and well-being (-13.74). The experimental post stress scale was significant with the post control group scale mindfulness (-17.74) and self-efficacy (-14.86), job satisfaction (-53.89) and well-being (-15.88). It can be

concluded from these results that stress and mindfulness increased, stress and self-efficacy decreased, stress and job satisfaction decreased, and stress and well-being increased.

The experimental pre self-efficacy scale was significant with the pre control group scale of stress (16.47) and job satisfaction (-45.64). The experimental post self-efficacy scale was significant with the post control group scale stress (14.33) and job satisfaction (-36.64). It can be concluded from these results that self-efficacy and stress increased, and self-efficacy and job satisfaction decreased.

The experimental pre job satisfaction scale was significant with the pre control group scale of mindfulness (42.32) stress (55.89), self-efficacy (40.57) and well-being (44.09). The experimental post job satisfaction scale was significant with the post control group scale mindfulness (41.45) stress (56.27), self-efficacy (44.33) and well-being (43.31). It can be concluded from these results that job satisfaction and mindfulness increased, job satisfaction and stress decreased, job satisfaction and self-efficacy decreased, and job satisfaction and well-being increased. The experimental pre well-being scale was significant with the pre control group scale of stress (8.75) and job satisfaction (-53.36). The experimental post well-being scale was significant with the post control group scale stress (11.86) and job satisfaction (-39.11). It can be concluded from these results that well-being and stress decreased, and well-being and job satisfaction decreased.

Since the study presented is an experimental study which used an eight-week intervention/treatment as part of the study, pre and posttest were given to participants to be able measure effectiveness. Pre and post results for both of these groups allowed pairwise comparison to be used, as seen in Table 10. This type of comparison will help determine whether the treatment/intervention (SPAM) was significant. The results running diagonally of (-3.18), (-

1.94), (1.15), (-6.22), and (-3.05) are the scale means of the pre results for both groups. The results diagonally following the previous results as seen in Table 10, (-3.80), (-2.92), (2.39), (5.30) and (-1.10) are the scale means for post results in both groups. When these two series of numbers are compared to each other (with-in the same scale), direction is able to be determined. For example, mindfulness had (-3.18) in pre and (-3.80) in post, stress (-1.94) in pre and (-2.92) in post, self-efficacy (1.15) in pre and (2.39) in post, job satisfaction (-6.22) in pre and (5.30) in post and well-being (-3.05) in pre and (-1.10) in post. Although not significant, mindfulness increased, stress increased, self-efficacy decreased, job satisfaction decreased, and well-being decreased among teachers in the experimental group.

In summary, there were no significant results in pre-posttests and scales and groups, when using a pairwise comparison analysis. However, based on the study's results, it can be concluded job satisfaction decreased at a significant level for the control as compared to the experimental group who received the SPAM intervention.

Table 10

Pairwise Comparisons between means for Pre-Post, Scales and Groups

Scales			Control									
			Pre					Post				
			Mindfulness	Stress	Self-Efficacy	Job Satisfaction	Well-being	Mindfulness	Stress	Self-Efficacy	Job Satisfaction	Well-being
Experimental	Pre	Mindfulness	-3.18	10.39*	-4.93	-51.72*	-1.41	-6.85*	7.97*	3.97	-4.30	-4.99
		Stress	-15.51*	-1.94	-17.26*	-64.05*	-13.74*	-19.18*	-4.36	-16.30*	-55.33*	-17.32
		Self-Efficacy	2.9	16.47*	1.15	-45.64*	4.67	-0.77	14.05*	2.11	-36.92*	1.09
		Job Satisfaction	42.32*	55.89*	40.57*	-6.22	44.09*	38.65*	53.47*	41.53*	2.50	40.51*
		Well-being	-4.82*	8.75	-6.57	-53.36*	-3.05	-8.49*	6.33	-5.61	-44.64*	-6.63
	Post	Mindfulness	-0.13	13.44*	-1.88	-48.67*	1.64	-3.80	11.02*	-0.92	-39.95*	-1.94
		Stress	-14.07*	-0.50	-15.82*	-62.61	-12.30*	-17.74*	-2.92	-14.86*	-53.89*	-15.88*
		Self-Efficacy	3.18	16.75*	1.43	-45.36	4.95	-0.49	14.33	2.39	-36.64	1.37
		Job Satisfaction	45.12*	58.69*	43.37*	-3.42	46.89*	41.45*	56.27*	44.33*	5.30	43.31*
		Well-being	0.71	14.28*	-1.04	-47.83	2.48	-2.96	11.86*	-0.08	-39.11*	-1.10

Scheffe Test, *p < .05; **p < .01

Additional Reflective Questions

Thirteen of the 14 participants in the experimental group answered the additional reflection questions in the post packages. Thirteen of the participants reported using the mindfulness techniques in their personal life (e.g., outside the classroom setting) aside from the homework assigned during the intervention. Four (30.8%) of the 13 participants reported using the mindfulness techniques in their professional life (e.g., classroom, school, among co-workers), while nine (69.2%) of the participants reported using it in their personal life (e.g., home and with partner, family, children, and friends). Eleven (84.6%) of the participants reported they planned to use the mindfulness techniques and skills learned in the future.

"Required professional development, further guidance and training, and awareness" were some of the words used by the participants in the additional comments section. Participants described the intervention as "interesting, worthwhile, and beneficial." However, many participants reported they felt they needed more guidance and training in mindfulness techniques. Participants stated that including these types of interventions and techniques as professional development for teachers before or during the school year should be a requirement as they are beneficial. Additionally, one teacher discussed a personal health issue she had been dealing with before and during the intervention with the principal investigator. Specifically, this teacher stated she had no idea how she would have been able to manage the semester if it wasn't for the intervention session and techniques. The teacher further reported she felt the mindfulness techniques she learned allowed her to worry less and be more present for her family members and students.

The following are examples of statements made by teachers who were part of the three different experimental groups who took part of the eight-week mindfulness intervention.

"Mindfulness techniques should be a requirement for teachers and students before the beginning of the year."

"This should be a district initiative to incorporate mindfulness professional development brief or in depth."

"Mindfulness has helped me in becoming more aware of how to handle stress. Enjoyed every single session."

Although this study used a quantitative approach for the data analysis, the descriptive and reflective data allows readers and future researchers to gain a better understanding of the results of the present study. This data reflects the individual meaningfulness and experience of the mindfulness intervention which may not be reflected in the quantitative portion of this study.

CHAPTER V

DISCUSSION

The purpose of this study was to explore the impact of an eight-week, mindfulness-based intervention designed to (1) increase mindfulness, (2) reduce stress, (3) improve self-efficacy, (4) increase job satisfaction, and (5) increase well-being among elementary, middle, and high school teachers. The primary goal of the study was to create a positive change among teachers that would, in turn, improve the classroom experience for both teachers and students. The teacher participants in this study were separated into two groups, an experimental group and a control group. The experimental teacher group was given an eight-week stress prevention and mindfulness intervention developed for teachers, with the objectives of increasing mindfulness, reducing stress, increasing self-efficacy, increasing job satisfaction, and increasing well-being. The control group was not given any treatment and was also assessed at pre-post trials.

Previous research suggests there are high attrition rates in the teaching profession due to the high amounts of stress and pressure to which teachers are exposed. The high attrition rates in this profession have led to an instability in teacher longevity which in turn, reduces teacher quality (Garcia & Weiss, 2019). Many factors such as lack of administrative support (Carver-Thomas & Darling-Hammond, 2017), excessive workload (Oberle & Schonert-Reichl, 2016),

lack of professional development (Darling-Hammond, 2010), and maladaptive student behavior (Reiser & McCarthy, 2018) have been attributed to teachers leaving the profession.

Additionally, there are higher turnover rates among teachers who work with Hispanics and African American students (Carver-Thomas & Darling-Hammond, 2017). Current research on improving teacher classroom performance has focused on exploring different methods of reducing stress, increasing self-efficacy, and increasing job satisfaction, with the goal of improving teachers' overall work experience (Malinen & Savolainen, 2016; Reiser & McCarthy). As such, delivering professional development trainings and providing coping strategies and tools designed to help teachers reduce their stress in the work setting are clearly indicated.

Recently, research has focused on protective variables and practices such as mindfulness-based interventions when working with the teacher population. Mindfulness-based interventions are a cost-effective method for improving overall teacher well-being, reducing stress among teachers, and increasing teachers' job experience (Haydon et al., 2019; Reiser et al., 2016). Mindfulness-based interventions are also highly beneficial for identifying and regulating emotions that can affect work outcomes. In addition, research on mindfulness-based interventions has demonstrated reductions in emotional exhaustion and burnout among teachers, both of which are known to create negative teacher-student interactions (Braun et al., 2019; Reiser & McCarthy, 2018). Mindfulness-based interventions can also increase teachers' ability to manage stressful work-related situations and student behavior (Haydon et al.).

Students who have emotionally supportive teachers who maintain classroom organization have been found to benefit more than students whose teachers do not provide emotional support and lack classroom organizational skills (Braun et al., 2019). Research findings also suggest teachers with higher levels of emotional support and organizational skills tend to use better strategies to: positively manage classroom behavior, maximize learning time for students,

successfully manage school-related transitions, and successfully implement a variety of learning formats to better engage students than teachers with lower levels of emotional support (Braun et al.). Indeed, interventions that create a positive change among teachers and improve the classroom experience for both teachers and students are highly beneficial.

The *Stress Prevention and Mindfulness* (SPAM) intervention used for this study has demonstrated effectiveness for creating a positive environment for students and teachers (Reiser, 2017). The current study explored the following variables: mindfulness, stress, self-efficacy, job satisfaction, and well-being, with the goal of improving the classroom experience for teachers and students. This study consisted of one research question and 15 null hypotheses. The study's research question was to explore whether the SPAM intervention would increase mindfulness, reduce stress, increase self-efficacy, increase job satisfaction, and increase well-being among elementary, middle, and high school teachers. The null hypotheses were as follows:

$NH_{1:}$ There is no difference between the treatment and non-treatment groups.

$NH_{2:}$ There is no difference among educational levels.

$NH_{3:}$ There is no interaction effect between groups and educational levels.

$NH_{4:}$ There is no interaction effect between pre and posttests.

$NH_{5:}$ There is no interaction effect between pre-post tests and groups.

$NH_{6:}$ There is no interaction effect between pre-post tests and educational levels.

$NH_{7:}$ There is no interaction effect between pre-posttests, groups, and educational levels.

$NH_{8:}$ There is no difference among scales.

$NH_{9:}$ There is no interaction effect between scales and groups.

$NH_{10:}$ There is no interaction effect between scales and educational levels.

$NH_{11:}$ There is no interaction effect between scales, groups and educational levels.

$NH_{12:}$ There is no interaction effect between pre-posttests and scales.

$NH_{13:}$ There is no interaction effect between pre-posttests, scales, and groups.

$NH_{14:}$ There is no interaction effect between pre-posttests, scales, and educational levels.

$NH_{15:}$ There is no interaction effect between pre-posttests, scales, groups, and educational levels.

Summary of Results

Overall, the results of this study suggested the use of a mindfulness stress reduction intervention (i.e., SPAM intervention) showed a significant decrease in job satisfaction among teachers who did not participate in the intervention and a noteworthy but nonsignificant increase in the experimental group. These results are commensurate with previous studies (e.g., Harmsen et al., 2018; Prilleltensky et al., 2016) which demonstrated that with advanced training and professional support, teachers felt increasingly capable of dealing with students' negative behavior, felt competent, and reported high job satisfaction. Moreover, mindfulness-based interventions have been found to influence how teachers perceive work-related stress (Guidetti et al., 2019). Mindfulness is also negatively correlated with workload stress and burnout so improving mindfulness and reducing stress is likely to increase job satisfaction. Appraising work-related stress with increased awareness has also been found to create higher levels of job satisfaction among teachers (Guidetti et al; Reilly, et al., 2014). As such, improved job satisfaction among teachers is likely to positively influence the classroom environment and have noteworthy outcomes for students as well while reducing stress and related burnout.

Although four of the five variables measured in this study (i.e., mindfulness, stress, self-efficacy, job satisfaction and well-being) showed non-significant results, it is important to note the changes found between the experimental (SPAM intervention) and control (nonintervention) groups from pre-posttest. For example, while most teachers in the mindfulness intervention group reported they did not engage in the SPAM homework on a regular basis, they reported using the SPAM concepts and strategies in both their personal and professional lives. This suggests the techniques learned were useful tools for teacher participants. Additionally, reflective comments made by teachers in the SPAM intervention group suggested they benefited from the mindfulness skills they learned over the course of the eight-week training. For example, teachers who participated in the SPAM intervention group reported they wanted additional training and professional development such as the mindfulness intervention in the present study.

The significant decrease in job satisfaction in the control group is consistent with the subthemes that emerged in the experimental group mindfulness training sessions. Some of the discussions that took place during the sessions were about topics related to the SPAM groups increased awareness, emotional awareness and ability to mindfully respond (rather than react) in different work-related experiences. These results are similar to other studies on mindfulness-based interventions which found teachers often reported the most meaningful results of the interventions were the way they responded and approached their students in the classroom (Sharp & Jennings, 2016). Overall, the results found in the current study provide support for the use of stress prevention and mindfulness trainings for teachers to improve job satisfaction which, in turn, can help teachers to maintain a positive classroom environment. For example, significant differences can be seen in the means between the experimental and control group for job satisfaction. The group that did not take part in the SPAM intervention demonstrated

significantly lower levels of job satisfaction than teachers who participated in the intervention. In addition, teachers who participated in the SPAM intervention reported (in the post reflective questions) they found the SPAM intervention to be useful in their professional and personal lives.

Well-being was the closest construct to reach a significant level in the experimental (SPAM intervention) teacher group. Specifically, well-being among the experimental group reflected a substantial increase from pre-posttest, suggesting teacher who participated in the SPAM intervention had an increase in their mental well-being. Previous research has suggested mindfulness skills are great strategies for increasing emotional health and life satisfaction (Mansfield et al., 2016). Past research (e.g., Braun et al., 2019; Taylor et al., 2016) also shows interventions focused on increasing levels of teacher mindfulness and/or awareness will result in higher levels of well-being, improved quality of teacher-student interactions, and burnout reduction among teachers. Although both the experimental and control groups demonstrated a non-significant increase in well-being, only the experimental group showed well-being outcomes that were close to being significant. In addition, previous researchers who examined well-being outcomes based on mindfulness interventions among teachers used scales related to mental disorders such as depression and anxiety to assess well-being (Creswell, 2017). As such, while other studies assessed the relationship between mental disorders and well-being, the current study focused on positive aspects related to mental well-being.

Self-efficacy scores showed teachers who participated in this study remained in the same non-significant levels for the experimental group at pre-post but decreased with non-significant levels for the control group at post. This means self-efficacy increased among teacher participants who were part of the SPAM intervention and decreased for those who were not part

of the eight-week intervention. Similar to other studies regarding self-efficacy among teachers (e.g., Jamieson & Tuckey, 2017), the present study showed mindfulness-based interventions can be an effective method for improving levels of teacher self-efficacy. Previous research has also indicated improving self-efficacy among teachers can improve their ability to manage classroom behavior and maintain positive teacher-student relationships (Meiklejohn et al., 2012). As such, providing brief mindfulness based intervention can be an effective methods of improving self-efficacy and in turn creating a more productive and positive classroom environment.

Results at posttest for stress demonstrated a non-significant increase stress in levels for both the control and experimental groups. However, the control group means for stress reflected higher levels of stress at pre-posttest as compared to the experimental group means. This suggests although there were no significant results for the stress construct, the group that did not participate in the intervention had higher levels of stress when measured at posttest. Consistent with other studies regarding stress among teachers (e.g., Guidetti et al., 2019; Hwang et al., 2019), this study found the control group had higher levels of stress at posttest when compared to the experimental group where teachers participated in an eight-week mindfulness intervention. This means teacher participants who were part of the SPAM intervention who learned different types of mindfulness and relaxation techniques had lower levels of stress, higher levels of self-efficacy, and higher levels of well-being at posttest compared to the control group at posttest. These results are consistent with previous findings on mindfulness-based interventions that have demonstrated effectiveness for reducing stress and managing emotions. Previous research also shows teachers who participated in mindfulness-based interventions reported increased use of positive coping skills to deal with job-related stress and better abilities to attend to students' needs (Taylor et al., 2015). However, the time of the semester at which the intervention took

place could have been a factor that affected stress levels as teachers who participated in the intervention reported they were required to engage in additional school-related events as the semester progressed and these added responsibilities could have increased their stress.

Mindfulness levels at pre-post tests for this study remained constant for both the experimental and control groups. These results are contradictory to previous results which suggest mindfulness interventions will increase mindfulness among participants. However, these results can be attributed to the assessment used to measure mindfulness in the present study. The scale used for this study (the *Five-Facet Mindfulness Questionnaire* [FFMQ], Baer et al., 2012) is a short form version of the original FFMQ which consists of 39-items. Although the FFMQ-39 is one of the most popular mindfulness scales (Gu et al., 2016), recent research has found this form of the FFMQ may not be as effective the short form for measuring mindfulness. Therefore, it has been recommended that future researchers use the short form of the FFMQ when assessing scale results to different groups (Medvedev et al., 2018). The assessment used for mindfulness could have affected the results in the resent study since the focus of this study was exploring and comparing pre-post results for the experimental and control group.

Limitations

This study used an experimental design comprised of an experimental and a control group for a total of 33 participants. Three experimental groups (elementary, middle, and high school teachers) participated in an eight-week mindfulness intervention and three groups comprising the control group (elementary, middle, and high school teachers) did not participate in the intervention. Both groups were assessed at pre and posttest after the eight-week intervention on variables of: mindfulness, stress, job satisfaction, self-efficacy, and well-being. Although there is also research supporting brief mindfulness-based interventions designed

specifically for teachers (Roeser et al., 2013), there were confounding variables in the current study which could have affected the outcomes of the study. Sample size of groups, characteristics of participants, sample characteristics, length and time of day the intervention are some of the confounding variables noted in this study.

Sample Size

In an experimental design, an adequate sample size is usually calculated for an estimated effect size (Baer et al., 2012). Although the final number of participants in the groups was not what was expected, there were still significant results in this study found for the construct of job satisfaction. It is recommended for other experimental design mindfulness interventions studies to consider having larger sample sizes to contemplate for attrition. The principal investigator (mindfulness intervention facilitator) in the present study attempted to recruit more teacher participants to account for possible attrition. Although there were many teachers who expressed being interested in participating, many of them voices not having enough time to attend the weekly session. There were five participants who were eliminated from the experimental groups due to their high number of absences as the facilitator set the limit for the number of absences at three. This means any participant absent three times with no make-up session was eliminated from the data collection. Teachers were informed in the beginning of the intervention of the importance of their attendance and make-up sessions. Three of the teachers who were eliminated were absent three times and two of the teachers were absent more than four times. Most of the teachers who were absent reported having a personal conflict that led to their absence and lack of time to schedule a make-up session. Future research may contemplate for attrition because of teachers' busy schedules and prepare to recruit a higher number of participants.

Sample Characteristics

The sample used for this study was not representative of teachers in other schools or schools in other regions of the state of country. This study took place in a city located on the U.S.-Mexico border, in which most of the population is from Mexican descent. The sample used for this study consisted of 64 percent of Hispanic participants and 60% of those identified as being of Mexican descent. Additionally, the region in which the schools used for this study were located is a region with some of the highest level of poverty in the region. As previously noted, all the schools were title 1 schools, which are school comprised primarily of minority, low income students. Therefore, teachers in this study may be exposed to other issues with their students (e.g. food insecurities, environment risk factors, and health problems) and may be exposed to higher levels of stress because of the responsibility of attention to their student needs and addressing negative behaviors. Almost 70% of the all teacher participants in this study reported feeling stressed at pre-assessment, which is consistent with previous research on stress among Title1 teachers. This means SPAM teacher participants were already reporting feeling stressed even before beginning the SPAM intervention. Therefore, the time in which the interventions are taken place in school setting should be a factor to consider for future mindfulness based interventions.

SPAM Teacher Participants Characteristics

More than half the teachers in the experimental SPAM intervention group reported they had many other school-related responsibilities outside their regular classroom duties. As such, teachers were required to teach while engaging in numerous extracurricular activities. Having multiple school roles and the high demand of teacher leadership in extracurricular activities are

factors to consider when studying the high levels of stress reported in this population. This is consistent with some of the results found in this study, which demonstrated teachers who did not participate in the SPAM intervention displayed noteworthy lower levels of job satisfaction, well-being, and self-efficacy, and higher levels of stress. The multiple roles teachers engage in can affect teachers' level of awareness, stress, and, in turn, their time availability to participate in the intervention. Teachers who take on multiple school roles have many more time restrictions and higher levels of stress than those teachers who do not engage in other school responsibilities.

Additionally, teacher participants in the SPAM intervention had some demographic characteristics which could potentially be confounding variables to this study, including: years of teaching experience, educational level, degree background, and CORE teaching assignments. That is, teachers in the SPAM intervention consisted of a sample in which 43% had a master's degree and 43% had between 11 to 15 years of teaching experience. However, only 35% of the SPAM teacher participants had earned their degree in education. The control group consisted of 79% of teachers with a bachelor's degree, 10% with a master's s degree, and 58% had more than 16 years of teaching experience. Moreover, 52% of the control group had their degree in education. For example, teachers in the SPAM intervention group with 11-15 years of teaching experience are likely to experience more stress than the control group who had considerably more teaching experience. However, the SPAM teacher participants had higher levels of education which can lead to higher levels of preparedness and professional development for this group compared to the control group and thus allows them to sustain job satisfaction levels. Additionally, 78% of the SPAM teacher participants were CORE teachers compared to the control group in which 68% were CORE teachers. Teachers who teach CORE class are known to be teachers with high levels school administrative pressure and stress. These factors are

important to consider in this study since they can influence the teachers ability to cope, maintain resiliency, exposure to stress, administrative pressure, abilities to respond to stressful situations

Length of the Intervention

While the results for the mindfulness construct researched in this study were not statistically significant, the mindfulness results are worthy of further exploration. The time at which an intervention takes place and the amount of time intervention sessions last are important factors to consider for further research in mindfulness interventions. Research on mindfulness practice and mindfulness-based interventions quality has shown the amount of mindfulness practice participants engage in will influence the quality of the mindfulness practice they create (Carmody & Baer, 2008). In the present study, the facilitator of the intervention met with teachers for eight weeks for approximately one hour for each of the eight sessions. The SPAM intervention used in the present study was created and used with other teacher participants by Reiser (2017). While previous research findings suggest two hours for eight to 12 weeks is the most effective format for delivering mindfulness-based interventions, the intervention in the present study was adapted to meet the teachers' schedules and availability. Specifically, the sessions were originally planned to last between 1.5 to 2.0 hours since it is recommended mindfulness-based intervention be at least two hours to increase participants' practice time (Reiser; Baer, 2003). Since the present study did not show any significant results in the mindfulness construct, future mindfulness research should explore mindfulness assessments previously used to measure mindfulness-based interventions effectiveness to be able to choose the best assessment.

Time of Intervention

The time during the semester and the time during the day in which the SPAM intervention took place is noted as a possible confounding variable in the present study. The pre and posttests for the experimental and control groups were given the first week of September and the first week of November, respectively, for a total of a nine-week time span during which the intervention took place. The intervention was extended by one week (from the original eight weeks to nine weeks) as there was a time conflict between the regularly scheduled intervention time and a school event at week six of the intervention. Therefore, there was a one week gap at week six of the SPAM intervention. During this week teachers may have lost momentum of the intervention. Additionally, during the time of the semester in which there was the week off for the teacher participants, there is high amount of school events which has been found to increase stress levels.

It was noted by the principals and teachers the semester gets busier with school-related events as the school semester progresses. Several teachers reported their stress levels, their workloads, and school events increased toward the end of the semester (e.g., school functions, benchmarking, fundraising, lesson planning, professional evaluations, professional development, and teacher meetings). The amount of workload teachers in the experimental group experienced during the intervention is consistent with the small increase found in stress. As such, it is recommended facilitators of future mindfulness interventions consider important school-related events that can affect their study participants and complete the intervention before school begins.

Additionally, the elementary and high school groups completed the SPAM intervention during the afternoon as soon as school ended for the day and students had been discharged from school. Teachers scheduled for the intervention in the afternoon had worked eight hours before

attending the intervention and, as such, stress levels and emotional exhaustion were high. Additionally, the SPAM intervention was conducted for the elementary and high school teachers during their own time, so the middle school teachers were the only teachers given time to participate in the intervention during school hours. The time allotted by the school and the time during the day in which the SPAM intervention took place were possible factors influencing teacher awareness, concentration, and mood. It was noted by the facilitator that teachers who participated in the intervention in the morning session came in alert, active, and prepared whereas the teachers in the afternoon sessions seemed more tired, overwhelmed, and unmotivated than the morning group. Therefore, it may behoove administrators to allow teachers to participate in mindfulness interventions in the morning when they are likely to be alert, attentive, and enthusiastic about participating in the intervention.

Future Directions

Mindfulness as a Coping Skill

Education leaders, school district administrators, and education researchers should focus on exploring and providing teachers with effective tools that will create a positive, professional experience with their students and in their classroom. Previous research has identified risk factors and protective factors (e.g., monetary compensation, teacher preparation) among teachers from kindergarten to high school (K-12). However, there is a lack of professional development and trainings for teachers that address teachers' personal concerns, coping skills, and emotions. Turnover rates among teachers have been found to be 70% higher for those teachers who work with students of color compared to white population. It has been reported teachers working with minority students often have to deal with additional issues the students are facing, including food

insecurities, environment risk factors, and health problems (Carver-Thomas & Darling-Hammond, 2017).

Current research on mindfulness has suggested it is important to address teachers' personal and organizational concerns in and out of the classroom to increase their work experience and overall well-being (Prilleltnsky et al., 2016). School districts have been and should continue to implement mindfulness-based interventions to improve teacher experiences which can subsequently improve teacher-student interactions and student experiences. Mindfulness interventions consisting of eight weekly, one-hour sessions such as the intervention used in this study can be a cost effective and practical method for improving the quality of work for teachers across all educational levels (e.g., elementary, middle, and high school). Mindfulness-based interventions can increase emotional competence and regulation skills among teachers which, in turn, facilitates teacher resilience, perception of stressful events and response to student's needs (Garner et al., 2017). If teacher-student interactions become positive experiences, then both teachers and students will increase their general well-being. (Garner et al., 2017).

Mindfulness in a School Setting

Providing professional development and administrative support have been identified as the biggest factors correlated with keeping teachers in the profession (Tickle et al., 2011). Mindfulness-based interventions also promote teacher well-being (Ruijgrok-Lupton et al., 2018). The present study demonstrated how an eight-week stress and mindfulness intervention can increase job satisfaction. The results are consistent with previous findings that demonstrated mindfulness-based interventions are an effective method for increasing job satisfaction among teachers (e.g., Prilleltnsky et al., 2016).

When using mindfulness-based interventions with teachers, it is recommended the intervention be offered during school hours. Previous research has shown the absence of professional development and lack of support from school administrators is a stressor contributing to teacher stress. School administrator and leaders in the education field should consider providing teachers participants with time and incentives by giving them time during school hours to participate in interventions and rewarding teacher's initiative to engage in professional development. Providing teachers with time during work to attend interventions will likely increase the amount of teacher participation in these types of interventions and, in turn, allow them to be more mindful during the intervention. Consistent with other findings (e.g., Jamieson & Tuckey, 2017), mindful employees tend to have more control over their responses and make less work-related mistakes. Mindfulness traits in teachers have also been correlated with higher job satisfaction because teachers who practiced more mindfulness techniques tend to approach stress in a more positive way (Guidetti et al., 2019).

Teaching Mindfulness

Previous studies suggest mindfulness training for teachers is an important aspect that can influence the outcomes of mindfulness studies. This means the facilitator and the chosen methods of teaching mindfulness-based interventions are important to consider because they can influence participant outcomes. Higher levels of well-being and lower levels of stress have been correlated with the amount of training the facilitator of the mindfulness-based intervention has when providing the intervention (Ruijgrok-Lupton et al., 2018). Previous research also suggests mindfulness-based stress reduction interventions consider the different teaching styles a facilitator might have as teaching approaches can affect the delivery and techniques of the mindfulness-based intervention. However, it has been noted the most important factor when

providing a mindfulness-based intervention is for the facilitator to have good teaching methods and teaching experience rather than having a large amount of mindfulness-based intervention training experience (Ruijgrok-Lupton, et al.). The facilitator for the current study is a licensed professional counselor-intern and a licensed chemical dependency counselor-intern who has engaged in mindfulness practice for two years and often uses mindfulness techniques in individual and group counseling sessions. The facilitator has also given numerous mindfulness presentations. The facilitator also has undergraduate and graduate teaching experience. However, the facilitator in this study did not have previous experience with some of techniques and activities used in SPAM intervention, nor had the facilitator been certified in any mindfulness intervention. Based on this study and previous research, it is recommended the facilitator of the mindfulness intervention engages in a personal mindfulness practice and has teaching experience and/or counseling background when conducting mindfulness group interventions. Certification in mindfulness practices is also recommended.

Conclusions

In conclusion, mindfulness-based interventions can have a positive effect on teacher-related job satisfaction and well-being. The results from this study demonstrated a significant decrease in job satisfaction among teachers who did not participate in the intervention and a noteworthy but nonsignificant increase in the experimental group. Therefore, it can be concluded, the SPAM intervention is an effective way for creating a positive classroom environment for both teachers and students. The constructs measured in this study have been highly researched among teacher populations and have been found to be correlated with positive experiences for teacher and students. Studies have shown teachers who participate in mindfulness interventions exhibit benefits in different areas of their lives (e.g., increased

attention and awareness, enhanced self-efficacy, improved relationships, and enhanced well-being) (Jamieson & Tuckey, 2017).

Mindfulness-based interventions are a low-cost method of increasing awareness, improving professional development, and providing accessible resources for teachers. The results in this study provide further insight on how mindfulness interventions can act as a coping strategy for stressful work-related situations and, in turn, can enhance positive classroom experiences.

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APPENDIX

APPENDIX A

DEMOGRAPHIC INFORMATION FORM

Dear Participant:

Thank you for agreeing to participate in this study. We want to collect some basic information about you in this short questionnaire and would appreciate it if you could answer these questions to the best of your knowledge.

Place an "X" next to your response OR write your response on the line provided.

1. What is your age? _____

2. What is your sex? ○ Female ○ Male ○ Other

3. With which race/ethnicity do you most idetify?

○ White (non-Hispanic) ○ Black/African American ○ Hispanic/Latino

○ Asian ○ American Indian/Alaska Native ○ Native Hawaiian/Islander

○ Other (please specify): _____

4. If you identify with Hispanic/Latino, what geographical area do you identify with?

○ Mexico ○ Central America ○ South America ○ Caribbean (Puerto Rican, Cuban)

○ Other (please specify): _____

5. What is the highest level of education you have achieved to date?

○ High school graduate/GED ○ Vocational/Technical training

○ Bachelor's Degree ○ Master's Degree ○ Doctorate

6. Was your degree(s) in education? ○ Yes ○ No

7. How many years of teaching experience do you have?

○ 1-5 years ○ 6-10 years ○ 11-15 years ○ 16+ years

8. What grade level do you currently teach in?

○ Elementary school ○ Middle school ○ High school

9. Do you currently teach a special education class? ○ Yes ○ No

10. Do you currently teach a core class (e.g., math, science)? ○ Yes ○ No

11. Do you feel support from your school administrators? ○ Yes ○ No

12. Are you currently experiencing any stress related to teaching? ○ Yes ○ No

13. Do you currently have another job besides teaching? ○ Yes ○ No

14. Do you currently practice any activities designed to help increase awareness of your thoughts, feelings, and bodily sensations (e.g. yoga or meditation) at least once per week?

○ Yes ○ No

15. Are you religious? ○ Yes ○ No

16. Are you spiritual? ○ Yes ○ No

Additional Comments: _____

Thank you for your participation

APPENDIX B

FFMQ-15: 15-item Five-Facet Mindfulness Questionnaire

Instructions

Please use the 1 (never or very rarely true) to 5 (very often or always true) scale provided to indicate how true the below statements are of you. Circle the number in the box to the right of each statement which represents your own opinion of what id generally true for you. For example, if you think that a statement is often true of you, circle “4” and if you think a statement is sometimes true of you, circle “3”.

Item	Never or very rarely true	Rarely true	Sometime true	Often true	Very often or always true
1.When I take a shower or a bath, I stay alert to the sensations of water on my body.					
2. I’m good at finding words to describe my feelings.					
3.I don’t pay attention to what I’m doing because I’m daydreaming, worrying, or otherwise distracted.					
4. I believe some of my thoughts are abnormal or bad and I shouldn’t think that way.					
5.When I have distressing thoughts or images, I “step back” and am aware of the thought or image without getting taken over it.					
6. I notice how food and drinks affect my thoughts, bodily sensations, and emotions.					
7. I have trouble thinking of the right words to express how I feel about things.					
8. I do jobs or tasks automatically without being aware of what I’m doing					

Item	Never or very rarely true	Rarely true	Sometime true	Often true	Very often or always true
9. I think some of my emotions are bad or inappropriate and I shouldn't feel them.					
10. When I have distressing thoughts or images, I am able just to notice them without reacting.					
11. I pay attention to sensations, such as the wind in my hair or sun in my face.					
12. Even when I'm feeling terribly upset, I can find a way to put it into words.					
13. I find myself doing things without paying attention.					
14. I tell myself I shouldn't be feeling the way I'm feeling.					
15. When I have distressing thoughts or images, I just notice them and let them go.					

APPENDIX C

Perceived Stress Scale

Instructions

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate *how often* you felt or thoughts a certain way.

Item	Never	Almost Never	Sometimes	Fairly Often	Very Often
	0	1	2	3	4
1. In the last month, how often have you been upset because of something that happen unexpectedly?					
2. In the last month, how often have you felt that you were unable to control the important things in your life?					
3. In the last month, how often have you felt nervous and “stressed”?					
4. In the last month, how often have you felt confident about your ability to handle your personal problems?					
5. In the last month, how often have you felt that things were going your way?					
6. In the last month, how often have you found that you could not cope with all the things that you had to do?					
7. In the last month, how often have you been able to control irritations in your life?					
8. In the last month, how often have you felt that you were on top of things?					
9. In the last month, how often have you been angered because of things that were outside of your control?					
10. In the last month, how often have you felt difficulties were piling up high that you could not overcome them?					

APPENDIX D

Teachers' Sense of Efficacy Scale (short form)

Instructions
This Questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.

Item	Nothing		Very Little		Sometimes Influence		Quite A Bit		A Great Deal
	1	2	3	4	5	6	7	8	9
1. How much can you do to control disruptive behavior in the classroom?									
2. How much can you motivate students who show low interest in school?									
3. How much can you do to get students to believe they can do well in school work?									
4. How much can you do to help your students value school?									
5. To what extent can you craft good questions for you students?									
6. How much can you do to get your children to follow classroom rules?									
7. How much can you do to calm a student who is disruptive or noisy?									

Item	Nothing		Very Little		Sometimes Influence		Quite A Bit		A Great Deal
	1	2	3	4	5	6	7	8	9
8. How well can you establish a classroom management system with each group of students?									
9. How much can you use a variety of assessments strategies?									
10. To what extent can you provide an alternative explanation or example when students are confused?									
11. How much can you assist families in helping their children do well in school?									
12. How well can you implement alternative strategies in your classroom?									

APPENDIX E
Job Satisfaction Survey

Instructions

Please circle the one number for each question that comes closest to reflecting your opinion about it.

Item	Disagree very much	Disagree moderately	Disagree Slightly	Agree Slightly	Agree Moderately	Agree very much
	1	2	3	4	5	6
1. I feel I am being paid a fair amount for the work I do.						
2. There is really too little chance for promotion in my job.						
3. My supervisor is quite competent in doing his/her job.						
4. I am not satisfied with the benefit I receive.						
5. When I do a good job, I receive the recognition for it that I should receive.						
6. Many of our rules and procedures make doing a good job difficult.						
7. I like people I work with.						
8. I sometimes feel my job is meaningless.						
9. Communication seems good within this organization.						
10. Raises are too few and far between						
11. Those who do well on the job stand a fair chance of being promoted						
12. My supervisor is unfair to me						

Item	Disagree very much	Disagree moderately	Disagree Slightly	Agree Slightly	Agree Moderately	Agree very much
	1	2	3	4	5	6
13. The benefits we receive are as good as most other organizations offer.						
14. I do not feel that the work I do is appreciated.						
15. My efforts to do a good job are seldom blocked by red tape.						
16. I find I have to work harder at my job because of the incompetence of people I work with.						
17. I like doing the things I do at work.						
18. The goals of this organization are not clear to me.						
19. I feel unappreciated by the organization when I think about what they pay me.						
20. People get ahead as fast here as they do in other places.						
21. My supervisor shows too little interest in the feeling of subordinates.						
22. The benefit package we have is equitable.						
23. There are a few rewards for those who work here.						
24. I have too much to do at work						
25. I enjoy my co-workers						
26. I often feel that I do not know what is going on with the organization.						

Item	Disagree very much	Disagree moderately	Disagree Slightly	Agree Slightly	Agree Moderately	Agree very much
	1	2	3	4	5	6
27. I feel a sense of pride in doing my job						
28. I feel satisfied with my chances for salary increases						
29. There are benefits we do not have which we should have.						
30. I like my supervisor						
31. I have too much paperwork.						
32. I don't feel my efforts are rewarded the way they should be						
33. I am satisfied with my chances for promotion						
34. There is too much bickering and fighting at work.						
35. My job is enjoyable						
36. Work assignments are not fully explained.						

APPENDIX F

The Warwick-Edinburgh Mental Well-being Scale (WEMWBS)

Below are some statements about feelings and thought. Please check the box that best describes your experience of each over the last week

Item	None of the time	Rarely	Sometime of the time	Often	All of the time
1.I've been feeling optimistic about the future					
2.I've been feeling useful					
3.I've been feeling relaxed					
4.I've been feeling interested in other people					
5.I've had energy to spare					
6.I've been dealing with problems well					
7.I've been thinking clearly					

8.I’ve been feeling good about myself

9.I’ve been feeling close to other people

10.I’ve been feeling confident

11.I’ve been able to make up my own mind about things

12.I’ve been feeling loved

13.I’ve been interested in new things

14. I’ve been feeling cheerful

APPENDIX G

Post-Intervention
Reflection Questions

Dear Participant:

Thank you for agreeing to participate in this study. We want to collect some basic information about you in this short questionnaire and would appreciate it if you could answer these questions to the best of your knowledge.

1. **Besides the homework assigned while in the intervention period, did you apply any of the mindfulness techniques and/skills learned to your life?**

○ Yes ○ No

2. **If yes, where did you apply them to (check all that apply)?**

○ Professional life (e.g. classroom, school, co-workers)
○ Personal life (e.g. home, partner, family, children, friends)

3. **Do you plan on using the mindfulness techniques and/skills learned in the future?**

○ Yes ○ No

VITA

Andrea Almaguer-Botero
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Phone: (956) 645-9430
E-mail: andreaalmaguer18@hotmail.com; andrea.almaguer01@utrgv.edu

EDUCATION

PhD Rehabilitation Counseling Candidate, Fall 2017- May 2020, 4.0

The University of Texas Rio Grande Valley, Edinburg Texas

Dissertation Topic: Improving the Classroom Experience by Providing Teachers with a Mindfulness Intervention

Master of Arts in Counseling Psychology, Fall 2016

Texas A&M International University, Laredo Texas

Thesis: The Relationship of Spirituality and the Well-Being of Latino College Students

Bachelor of Arts with a Major in Psychology, May 2012

Texas A&M International University, Laredo, TX.

LICENSES

Licensed Professional Counselor-Intern effective March 22, 2018

License number: 79243

Licensed Chemical Dependency Counselor- Intern effective November 05, 2018

WORK EXPERIENCE

LPC-Intern Family Care Liaison, Doctors Hospital at Renaissance

December 2019-Present

Provides compassionate and emotional care to the families of antepartum, postpartum and NICU patients with in Doctors Hospital at Renaissance. The goal

of this specialist is to provide families with resources, education and a supportive environment. The family care liaison will coordinate professional development opportunities for the healthcare team members through different types of training. The family care liaison will develop and implement informational, educational and emotionally supportive programs to families of NICU babies and to NICU staff with in the NICU department.

Doctoral Research Assistant, The University of Texas Rio Grande Valley

January 2018- December 2019

Assisted faculty in research projects, teaching undergraduate and graduate courses and peer mentoring. Research project topics have included Collegiate Recovery Programs, Well-being, Substance Use, Mindfulness and Spirituality among Latinos. Teaching responsibilities include lecturing, preparing course material such as PowerPoint, in class activities and exams, grading assignments and exams, proctoring exams, preparing and posting grades, proving individual and group assistance to students. Mentored undergraduate and graduate students on academic and rehabilitation program information.

Counselor (Volunteer), John Austin Pena Clinic, School of Medicine, The University of Texas Rio Grande Valley

Spring 2018- Present

The community driven clinic provides quality care for adolescents who are at risk with medical, mental health (behavior issues, ADHD, anger management), and alcohol, drugs, tobacco, etc. Worked closely with inter-professional team providing physical and mental care for at-risk adolescents. Counselors work with

low income, at risk youth in the Rio Grande Valley who are currently dealing with substance use disorders, depression, anxiety, suicide ideation and self-esteem. Counseling services are often provided in Spanish and have to maintain cultural sensitivity.

Counselor (Volunteer), *Lamar Academy, McAllen School District, RGV*

Spring 2018- Dec 2019

The community driven clinic provides quality care for adolescents who are at risk with medical, mental health (behavior issues, ADHD, suicide, anger management), and for alcohol, drugs, tobacco, etc.. There is collaboration with the school administration and staff to provide appropriate care and crisis intervention for at risk adolescents. Counselors work with at risk youth in the RGV who are dealing with substance use disorders, depression, anxiety, suicide ideation and self-esteem.

Clinician**,** International Educational Services (Immigration Detention Center)

March 2017 – December 2017

Conducted English and Spanish counseling sessions, assessments, screening mental health and wellbeing of minors in immigration detention centers. Provide individual counseling, psycho-education, crisis/trauma intervention while implementing strategies to meet the emotional needs of child with cultural sensitivity. Providing safety interventions and hospitalizations when necessary. Worked closely with case manager and other staff to asses for safety concerns and identify suitable release options, meeting required timeframes. Traveling with children for family reunification process and completing proper documentation.

***Graduate Research Assistant*,** Psychology Department, Texas A&M International University

August 2014 - May 2016

Worked with mentor and advisor Dr. Sara Castro-Olivo on research related to Latinos and promoting resiliency for Latino Immigrant Parents and Youth. Projects included conducting and editing literature reviews, collecting, inputting and analyzing data, attending trainings related to mental health and counseling, proving mental health psycho-education to the community. Took part of oral and poster presentations for local and national conferences.

Staff Assistant, Student Counseling, Texas A&M International University

January 2014 – July 2014

Reserve space, coordinate mental health events, supervise student employee responsibilities and timesheets. Completed minutes/notes of counselor meetings, handling the office requisitions, completed purchase orders, organized counselors travel. Responsible for managing any test requests that were made for students with a disability. Responsible for rescheduling, canceling client appointments and responsible for updating the department's social media accounts.

Patient Navigator/Case Manager, Gateway Community Health Clinic, Laredo TX

August 2013 - December 2013

Completed intake work such as mental health assessments (depression & anxiety assessments). Provided reminder calls, schedule, cancel and reschedule patient appointments. Organize mental health awareness conferences and maintained

networking with other community agencies. Manage, follow up and closed licensed professional counselors' cases.

Student Employee, Disability Services, Texas A&M International University, Laredo, TX.

December 2009 - December 2012

Maintaining records coordinating the collection and dispatch of office items or documents. Recruiting students in classes as note takers for disability students. Helping disability students with any accommodation needed in school such as walking them to class. Converting books into braille, using assistive technology and working with the program Jaws.

GRADUATE COUNSELING INTERNSHIPS

John Austin Pena Clinic *(School of Medicine, UTRGV), Edinburg TX*

Spring 2018- Present

The community driven clinic provides quality care for adolescents who are at risk with medical, mental health (behavior issues, ADHD, anger management), and alcohol, drugs, tobacco, etc. An inter-professional team provides the physical and mental care for these at-risk adolescents. There is participation with various professionals in the fields of emotional and mental health including physicians, nurse practitioners, physician assistants, social workers, nutrition, pharmacy, rehab counseling, communication disorders, occupational therapy, counseling, behavioral health.

Lamar Academy, *McAllen School District, McAllen TX*

Spring 2018- Dec 2019

The community driven clinic provides quality care for adolescents who are at risk with medical, mental health (behavior issues, ADHD, suicide, anger management), and for alcohol, drugs, tobacco, etc.. There is collaboration with the school administration and staff to provide appropriate care and crisis intervention for at risk adolescents. Counselors work with at risk youth in the RGV who are dealing with substance use disorders, depression, anxiety, suicide ideation and self-esteem.

F. S. Lara Academy (Alternative Middle and High School), Laredo TX

August 2015-May 2016

Provides students with counseling sessions focused in Cognitive Behavioral Therapy and social-emotional skills. Jovenes Fuertes, is a culturally adapted resiliency program given to the student to promote their overall general wellness. Topics discussed were ethnic pride, acculturative gaps, self-awareness, anger and stress management and coping skills. Group therapy was also provided to students in where different issues that these students were dealing with were covered such as drug use, gang related issues, behavioral and emotional problems.

Laredo First Assembly, Laredo TX

January 2016- May 2016

Provided individual and family counseling services to members of the church and was supervised by Pastor/Dr. Gilberto Salinas. Attended weekly group sessions that covered life crisis topics and anxiety along with spirituality.

TAMIU Community Stress Center, Laredo TX

August 2015-May 2016

Provided counseling services to adults and children from the community. These counseling sessions ranged from topics of depression, anxiety, behavioral problems, play therapy, couple, group and family therapy.

TEACHING EXPERIENCE

Group Counseling, Co-Instructor, Graduate Class, The University of Texas of Rio Grande Valley, Fall 2019

Family and Disability (Spanish), Instructor, Undergraduate Class, The University of Texas of Rio Grande Valley, Fall 2019

Psychosocial Aspects of Disability, Co-Instructor, Graduate Class, The University of Texas of Rio Grande Valley, Summer 2019

Family and Disability (Online), Instructor, Undergraduate Class, The University of Texas of Rio Grande Valley, Spring 2019

Psychology of Disability, Instructor, Undergraduate Class, The University of Texas of Rio Grande Valley, Fall 2018

Family and Disability, Teacher Assistant, Study Abroad Undergraduate Class The University of Texas Rio Grande Valley, Summer 2018

Internship in Rehabilitation Counseling, Teacher Assistant, Graduate Class, *The University of Texas of Rio Grande Valley, Spring 2018*

Psychological Testing, Teacher Assistant, Undergraduate Class, *Texas A&M International University, Spring 2015, Spring 2016*

PUBLICATIONS

Reed, B., Almaguer-Botero, A., Grizzell, S., & Watts, J. (2019). Collegiate Recovery Programs: Helping College Students in Recovery Succeed (In-Press)

GRANTS

Grant Writing, La Union del Pueblo Entero (non-profit), **The University of Texas of Rio Grande Valley,** Fall 2017

Assisted in grant writing project for Voices for Kids/National Institute of Health.

PROJECTS

Mindfulness Intervention for Teachers (Dissertation) *Fall 2020-Present*

Mindfulness trainings for teachers are being provided at three different schools in *Sharyland District. Topics such as mindfulness, stress, thought processing, effective communication and coping mechanisms were discussed with elementary, middle and high school teachers.*

Mindfulness Trainings for Study Abroad Students and Faculty, UTRGV, Spring 2018-Present

Provided mindfulness and coping strategies in PowerPoint presentations for University students and study abroad faculty.

Fuersas Jovenes Fuertes, Spring 2015- May 2016

Provided social emotional focus groups at F.S. Lara Academy

Fuersas Parent Component, Fall 2015

Provided parent groups with 8 weeks of psycho-education and emotional resiliency sessions at Holding Institute and Texas A&M International University

Mental Health Literacy Project, Summer 2015, Spring 2015 and Fall 2016

Provided presentations to both youth and adults in the community and different mental health agencies on Mental Health and Mental Health Literacy.

Breast Cancer Presentation, Spring 2016

Provided communication and empathy training for breast cancer nonprofit-foundation members.

PRESENTATIONS

Graduate Student Research Showcase, The University of Texas Rio Grande Valley, November 2019

Improving the Classroom Experience by Proving Teachers with a Mindfulness Intervention

Health Advocacy Summit, The University of Texas Rio Grande Valley, October 2019

Mindfulness, Stress and Burnout

Mindfulness Presentation for Schools and Teachers, Shimotsu Elementary, October 2019

Mindfulness, Stress and Coping in Schools

National Association of Multicultural Rehabilitation Concerns. July 2019

Future Implications of Cultural Factors When Working with Latino Student with Disabilities.

Mindfulness Presentation for Leadership NOW!, UTRGV, May 2019

Mindfulness and Stress in Leadership

10th Annual Substance Abuse and Behavioral Health Conference. April 2019

Mindfulness Practices and Self-Care for Mental Health Professionals

National Council Rehabilitation Education, Anaheim CA, March 2018, Poster

Future Implications of Cultural Factors When Working with Latino Student with Disabilities.

Lamar Bruni Vergara Conference, Laredo TX., April 2016, Poster, First Place

Thesis: The Relationship of Spirituality and the Well-being of Latino College Students

Lamar Bruni Vergara Conference, Laredo TX. April 2016

Mental Health Literacy (Andrea Almaguer, Laura Mendez, Edwin Rodriguez and Diana Vaquera)

Pathways at Texas A&M University Corpus Christi, Corpus Christi TX, October 2015, Poster

Thesis: The Relationship of Spirituality and the Well-being of Latino College Student

National Association of School Psychology, Orlando FL. February 2015

Training ELL Parents to promote Resiliency from Home- (Sara Castro-Olivo, Veronica Lopez, Kristine Cramer, Brenda Hernandez, Andrea Almaguer, Laura Mendez)

Lamar Bruni Vergara Conference, Laredo TX. April 2015, Poster

Jovenes Fuertes

Lamar Bruni Vergara Conference, Laredo TX. April 2014, Poster

Family Developmental Theory

AWARDS

Research Excellence Student Award, College of Health Professions, The University of Texas Rio Grande Valley, November 2019

4th Place, Graduate College Research Showcase, The University of Texas Rio Grande Valley, November 2019

1st Place, PhD Research Rehabilitation Poster Contest, The University of Texas Rio Grande Valley, July 2018

Almaguer, A. P.

Future Implications of Cultural Factors when Working with Latino Student with Disabilities

1st Place, Social Sciences, *Lamar Bruni Vergara Conference, Poster,* Texas A&M International University Conference, April 2016

Almaguer, A. P. (2016, May)

Thesis: The Relationship of Spirituality and the Well-being of Latino College Student

2nd Place Graduate Level Winner, *Lamar Bruni Vergara Conference, Poster,* Texas A&M International University Conference, April 2016

Almaguer, A. P. (2016, May)

Thesis: The Relationship of Spirituality and the Well-being of Latino College Student

SCHOLARSHIPS

Reed PhD Scholarship, The University of Texas Rio Grande Valley, Fall 2019- Spring 2020

Reed PhD Scholarship, The University of Texas Rio Grande Valley, Fall 2017- Spring 2018

ASSOCIATIONS & AFFILIATIONS

National Council Rehabilitation Education, *December 2018- Present*

Secretary of Deaf Rehab Club, *University of Texas of Rio Grande Valley, August 2018- May 2019*

The purpose of the Deaf Rehab Club is to be an organized support group for all students in the Bachelor of Health Sciences and Human Services in Rehabilitation Counseling program. The organization will provide the opportunity for networking among the community, graduates and rehabilitation professionals. The Deaf Rehab Club will be an advocacy group in the support of disability rights in the University of Texas Rio Grande Valley community and community at large.

American Counseling Association, *2015- 2016*

Association of International Students*, Texas A&M International University, Fall 2012*

The purpose of association was to create awareness to the students about the different cultures of international students. International Students were assigned a local mentor to help the students through the transition of a new culture with the idea of learning new

LANGUAGE

Bilingual Certification, Master of Arts in Counseling Psychology, Texas A&M International University 2015-2016

Bilingual; *fluent in English and Spanish*

American Sign Language- Basic ASL

BIOGRAPHICAL SKETCH

Dr. Andrea P. Almaguer-Botero has a bachelor's degree in Psychology in 2012 and a master's degree in counseling psychology with a bilingual counselor certification from Texas A&M International University in 2016. Dr. Almaguer-Botero master thesis was focused in spirituality within the Latino population. After her masters Dr. Almaguer-Botero worked as a clinician in a children's immigration detention center providing crisis and trauma counseling to unaccompanied minors.

Dr. Almaguer-Botero became a Licensed Professional Counselor Intern and Licensed Chemical Dependency Counselor Intern in 2018 and graduated with her doctoral degree in rehabilitation counseling at The University of Texas at Rio Grande Valley in 2020. During her doctoral degree Dr. Almaguer-Botero provides counseling at a substance abuse clinic for at risk youth and crisis counseling for teenagers. Dr. Almaguer-Botero also taught several English and Spanish undergraduate and graduate rehabilitation counseling courses. Lastly, Dr. Almaguer–Botero has presented in national conferences and conducted experimental research in mindfulness. Her dissertation focused on providing teachers with a mindfulness intervention which got her the doctoral research excellence award in the college of health professions for The University of Texas Rio Grande Valley. Dr. Almaguer-Botero, is currently working in the NICU department at Doctors Hospital at Renaissance providing mothers of NICU babies with crisis, trauma and bereavement counseling.

Andrea P. Almaguer-Botero, Andrea.almaguer01@utrgv.edu