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## Effective Mindfulness Practices for Reducing Veteran Teacher Perceived Stress

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Effective Mindfulness Practices for Reducing Veteran Teacher Perceived Stress

A Dissertation by

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School of Education

Submitted in partial fulfillment of the requirements for the degree of

Doctor of Education in Organizational Leadership

April 2021

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April 2021

Effective Mindfulness Practices for Reducing Veteran Teacher Perceived Stress

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## ABSTRACT

### Effective Mindfulness Practices for Reducing Veteran Teacher Perceived Stress

by Michael E. Brouillette

**Purpose:** The purpose of this mixed methods study was to measure and describe the extent to which mindfulness practices impact veteran teacher perceived stress. In addition, it was the purpose of the study to capture the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress.

**Methodology:** This study used a mixed methods study research methodology. Data were collected from 15 teachers in the form of answers to the Perceived Stress Scale and interviews to collect their lived experiences. Responses from veteran teachers who have used mindfulness for at least 1 year were analyzed with the objective of detailing specific mindfulness techniques that have helped to reduce their perceived stress. This analysis endeavored to find common themes and specific techniques that were effective at reducing the perceived stress of the veteran teachers who participated in this study.

**Findings:** This research revealed that veteran teachers were affected by stressors. The teachers in this study felt mindfulness practices have helped them deal with their perceived stress. Furthermore, the most often used mindfulness practice to reduce perceived stress was mindfulness breathing. External sensory and internal sensory mindset mindfulness practices were also used by veteran teachers to reduce perceived stress.

**Conclusions:** The study concluded that veteran teachers will continue to be affected by stressors. Additionally, this study found that mindfulness practices will reduce veteran teacher perceived stress. Teachers who use breathing, external sensory techniques, or

internal sensory mindfulness techniques will reduce their perceived stress. Finally, teachers who choose to teach themselves mindfulness practices will reduce their perceived stress using such practices.

**Recommendations:** Further research recommendations include studying the relationship between mindfulness as a stress reduction practice and the teacher perceived stress during Year 2 of the COVID-19 pandemic. Another recommendation includes studying the relationship between social-emotional competence and mindfulness as a stress reduction practice. Another further recommendation is studying the effect of mindfulness practices on school culture.



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## CHAPTER I: INTRODUCTION

Teachers are critical to the education and development of our children. Teachers help to form the academic and emotional foundations of children as well as social constructs necessary to prepare them to participate fully in our society. Teachers are most effective when they are emotionally present to deliver instruction to the children in their classroom (Jennings & Greenberg, 2009). As important as teachers are in educating children and preparing them to participate as educated citizens, teachers face significant stress each day, which makes it difficult to be as effective as they could be (Greenberg, Brown, & Abenavoli, 2016). Teachers experience this stress from the beginning of their careers.

Teachers start to feel the stress at the onset of their careers with their first year of teaching (Aguilar, 2018). There appears to be a significant difference for first-year teachers between the theoretical framework of how they will deal with students and the reality of standing in front of students for the first time in the classroom (Dicke, Elling, Schmeck, & Leutner, 2015). This difference is the catalyst for the stress that can shatter the dreams of first-year teachers (Friedman, 2000). Even during this first year of teaching, and in the years ahead as they become veteran teachers, teachers face the stress of the teacher–student assessment processes.

Teachers must learn to manage the stress associated with the ever-changing assessment requirements mandated by federal, state, and local school district policies and laws. This is a stressor from the moment a teacher takes the first job and can impact veteran teachers at any point in their career. It can cause the same physiological and psychological response whether in the first year or any subsequent year thereafter (Ryan

et al., 2017). Accountability of teachers' performance has been increasingly placed on outcome results of the students' performance in the form of standardized assessments which result in a corresponding increase in teacher stress (Ryan et al., 2017). In addition to the stress of assessments, the stress of dealing with the mounting demands of the job are inherent with both first-year and more experienced veteran teachers (Greenberg et al., 2016).

Teachers across America feel the stress of classroom management, time demands, and heavy workloads placed on them. Dealing with issues that include classroom misbehavior, limited planning time, and high student-to-teacher ratios is not new to the teaching profession. However, with the advent of electronic social media, increasing numbers of students from a single parent (or no parent) family are challenging student/teacher boundaries and adding unique stressors to teachers (S. D. Walker, 2017). If teachers are to survive their first year of teaching, as well as the stressors they will encounter in the following years of their career, they must learn how to deal with stress efficiently (Cheung, Huang, & Tsang, 2016; Fitchett, McCarthy, Lambert, & Boyle, 2018).

Without learning to deal with the ever-present stress that teachers face every day from administrators, parents, children, and their own sense of self-efficacy, teachers can be subject to burnout as well as emotional and physical distress (Ouellette et al., 2018). Although the loss of first-year teachers is considered of high concern across the educational system (Doan & Peters, 2009), there is mounting evidence that veteran teachers are beginning to face a high attrition rate as well (Bressman, Winter, & Efron, 2018). Teacher stress continues to be cited as a primary cause for teacher attrition and



burnout (von der Embse, Kilgus, Solomon, Bowler, & Curtiss, 2014). It is becoming increasingly important for educators to address the issue of stress and determine the most effective methods that reduce teacher stress (Jennings, 2015). Several techniques have been researched in an attempt to assist teachers in dealing with the stress of their profession. One of the newest methods showing promise at helping teachers deal with stress in the education system is mindfulness (LaRock, 2014; Sherretz, 2011).

Mindfulness has been studied for the past 4 decades in America for its effectiveness at reducing stress (Bishop, 2002; Brown & Ryan, 2003, 2004; Brown, Ryan, & Creswell, 2007). Mindfulness programs were developed to train teachers on how to use mindfulness practices to reduce their stress (Jennings, 2015; Jennings & Greenberg, 2009; Jennings et al., 2017). Those programs have been undergoing scrutiny to determine whether and how they are capable of doing what they claim to do: reduce teacher stress. The use of such programs has purported varying levels of success. One program that is nearly 40 years old is Mindfulness-Based Stress Reduction (MBSR; Bishop, 2002). MBSR, along with other mindfulness programs and practices, is being used in our nation's schools and has shown promise in reducing stress for both students and teachers (Zenner, Herrnleben-Kurz, & Walach, 2014). Teacher stress continues to be a significant issue faced by every teacher entering the profession as well as for veteran teachers who face new challenges and new strategies. The practice of mindfulness continues to be studied for its effectiveness at reducing teacher stress.

## **Background**

### **Stress in America**

The American Psychological Association (APA) conducted a *Stress in America* survey in 2017. The survey findings revealed that nearly 2/3 of Americans (63%) believe the feelings about the future of our nation is a somewhat or very significant source of stress (APA, 2017). The survey also found that 61% of respondents viewed work at that same level of stress. Gallup also conducted a survey on stress in America in 2017, which determined that 79% of Americans frequently or at least sometimes during the day feel stress (Saad, 2017). That same Gallup survey acknowledged that children and work were the most significant contributing stressors. The largest percentage of respondents, 58%, who indicated that they frequently experience stress have children under the age of 18. When looking at stress by generation, the APA reports the highest stress levels are found in Millennials (those born between 1982 and 2004) and Gen Xers (those born between the mid-1960s and early 1980s; APA, 2017). Millennials and Gen Xers who deal with the highest levels of stress comprise 64% of the labor force according to the United States Bureau of Labor and Statistics (Cunningham, 2018).

### **Stress in the Workplace**

The American Institute of Stress (AIS), as its name would indicate, studies stress. One area of emphasis is the study of stress in the workplace. AIS compiles results from numerous studies to produce documents that show how job stress continues to be a major source of stress for American adults and indicates a progressive gain over the last few decades in the level of stress experienced by the workforce (AIS, 2018). The four leading causes of stress identified by AIS are lack of job security (6%), juggling work

and personal lives (20%), people issues (28%), and workload (46%). A disturbing trend found by AIS's review of the literature is the increase of workplace violence with "an average of 20 workers [being] murdered each week in the U.S. making homicide the second highest cause of workplace deaths and leading one for females" (AIS, 2018, p. 8). One sector that ranks among the highest regarding daily stress is the education profession.

### **Stress in Education**

The education system in America is fraught with stress and stressors. There is a relentless onslaught to privatize public education that strains the economic, social and emotional systems adding stress at every level: School boards, superintendents, administrators, teachers, parents, and students (Ravitch, 2016). Youth violence and school shootings have continued to escalate in recent years spiking to 305 school shootings in America in 2013 (Shelton & Manning, 2018). Issues as diverse as bathroom use for transgenders and gender nonconforming students (Beese & Martin, 2018) and the assimilation of recently immigrated youth into American classrooms (de Haymes, Avrushin, & Coleman, 2018) add to the stress across the educational system. At the focal point of all of this stress is the one adult who stands between these pressures and the students, the teacher.

### **Stress and Teachers**

Teachers are a critically important part of our society, yet they have the undesirable characteristic of being involved in one of the top stressful professions in America (Greenberg et al., 2016). In 2014, 46% of teachers reported high daily stress (Gallup, 2014). Recent research conducted by the Pennsylvania State University on

teacher stress and health concluded that “there is an urgent need to address the nation’s teacher crisis” which is brought about by the increase in occupational stress (Greenberg et al., p. 9). In their findings, Greenberg et al., suggested four programs that have proven to be useful in helping teachers manage their well-being, “Mentoring and induction programs, workplace wellness programs, social-emotional learning (SEL) programs, (and) mindfulness/stress management programs” (p. 2). The mindfulness stress management program is meant to manage stress effectively so the stress does not increase. Stress is an expected part of life, but continuous stress has deleterious effects both psychologically and physically, and teachers need to learn how to manage this before it is detrimental to their well-being (Jackson, 2012).

The stress that teachers face can be likened to the same stress that was felt by our most primitive ancestors (Selye, 1973). Selye conducted seminal work in clinical studies on stress and discovered the relationship between biological processes and stress that he called the stress syndrome (Jackson, 2012; Selye, 1973). Selye discovered that the body would respond in the same way regardless of the type of stress to which it is subjected. His research was a catalyst for scientists to study the causes of stress, which he called stressors, as well as the effects of those stressors on the human body (Slavich, 2016). These studies on stress paved the way for the current research on stress and stress reduction.

Several conditions have been shown to be exceptionally stressful in the life of a teacher. The first is that of being a first-year teacher (Moir, 2014). Teachers who make it past the 3-year induction and acculturation period are considered veteran teachers (Keengwe, 2018). Six areas that rank among the top stressful circumstances both first-

year and veteran teachers face are classroom management (Chang, 2013), time demands and workload (Cheung et al., 2016), standardized curriculum and testing (Dworkin & Tobe, 2014; Jennings et al., 2017), teacher assessments (Ryan et al., 2017), teacher burnout (Ryan et al., 2017), and teacher attrition (Corry, 2009).

### **Methods to Reduce Stress**

There are many ways that stress can be reduced. Some researchers such as Mandel (2008) concluded that proper diet and exercise can help to reduce stress. Other researchers found that addressing mindset can reduce stress as well (Ansley, Houchins, & Varjas, 2016). Another way of addressing stress is with mindfulness practices (Kabat-Zinn, 1994).

### **Mindfulness Practices in Stress Reduction**

Although mindfulness dates back hundreds of years and is rooted in Buddhist traditions, the modern concept of mindfulness practices researched for its effectiveness at reducing stress has appeared in American scholarly literature for nearly 40 years (Bishop, 2002; Brown & Ryan, 2003, 2004; Brown et al., 2007). The modern concept of mindfulness was introduced to America by Jon Kabat-Zinn in 1979 when he started the Stress Reduction Clinic at the University of Massachusetts (Kabat-Zinn, 1994). Since that time, mindfulness has been studied empirically for use in clinical, occupational and educational settings. Patricia Jennings is regarded as one of the premier authors on mindfulness for teachers (Mindful Staff, 2017). She is the cofounder, along with Mark Greenberg, of the Cultivating Awareness and Resilience in Education (CARE) for teachers program (Jennings & Greenberg, 2009). Her book, *Mindfulness for Teachers: Simple Skills for Peace and Productivity in the Classroom* laid out the case for

mindfulness (Jennings, 2015). Her earlier works, cited in over 4,000 articles, have been instrumental in the development of many techniques used by others to research mindfulness practices for teachers (Reardon, 2016; Roeser et al., 2013; Roeser, Skinner, Beers, & Jennings, 2012; S. D. Walker, 2017).

### **Theoretical Framework**

Jennings and Greenberg (2009) developed a theoretical framework to deal with the social and emotional competence (SEC) and well-being of teachers. They postulated that if teachers can be trained to develop their prosocial skills, they can affect change in student outcomes in the classroom. Their model suggests that a positive climate in the classroom will result in higher student outcome (Jennings, 2011). Early indications are that this theory is being validated by research (Haygeman, 2017; LaRock, 2014; McRobbie, 2017; Roeser et al., 2012; Sherretz, 2011). At the core of this framework are the mindfulness practices that teachers are employing to affect this positive change (Zenner et al., 2014).

### **Impact of Mindfulness Practices on Teacher Perceived Stress**

There are a few studies that looked at the effect that learned mindfulness practices had on teacher stress. Flook, Goldberg, Pinger, Bonus, and Davidson (2013) conducted a pilot study to examine the effect of mindfulness practices on teacher stress. Their findings suggested a potential “for a mindfulness-based intervention to promote meaningful psychological and behavioral changes in elementary school teachers” (p. 189). Reardon (2016) concluded in a study on the use of a brief mindfulness program for teachers that “mindfulness-based practices should be incorporated into a teacher’s professional development training as mindfulness-based practices may help teachers with

stress reduction” (p. 73). Roeser et al. (2013) conducted two randomized field trials on the use of mindfulness to reduce teacher stress. The studies looked more at the perceptions of teachers to complete and use the training than on the outcome of the reduction of stress. As such, the study found that “98% of the teachers who underwent MT (Mindfulness Training) said they would recommend the program to peers and school principals” (Roeser et al., 2013, p. 794). There is a gap in the literature regarding the perceptions of veteran teachers who have completed and used mindfulness training for longer than 1 year and notably, what are the best practices of teachers in the field who are using mindfulness practices to affect teacher stress positively.

### **Problem Statement**

Teaching, though vital to our society, is regarded as one of the most stressful professions in the United States (Fitchett et al., 2018). A recent national survey found that 46% of teachers felt their daily stress was equal with nurses for the highest among all occupations (Gallup, 2014). Several identified causes impact teacher stress. They include first-year teachers passing through phases that increase stress (Moir, 2014), increasing complexity and demands of teacher assessments (Ryan et al., 2017), classroom management issues (Chang, 2013), and time demands and workload (Flook et al., 2013). The study of teacher stress is extensive as is the number of books, courses, and techniques developed to combat teacher stress. One method that is showing promise on reducing teacher stress is the use of mindfulness practices (Reardon, 2016) though much research remains to assess the impact of mindfulness practices on veteran teacher stress.

Mindfulness practices have shown potential in effectively reducing stress in clinical patients (Bethany, 2016) and workplace settings (Langer, 1989; K. M.

Richardson & Rothstein, 2008). Bethany (2016), a Doctorate of Nurse Practitioner graduate from Brandman University, wrote extensively on the positive effects that mindfulness meditation has on managing stress. Four decades of research has shown the benefits of mindfulness in reducing stress (Bethany, 2016; Bishop, 2002). Even with many studies that looked at the effectiveness for mindfulness practices to reduce stress in the educational system (Haygeman, 2017; LaRock, 2014; McRobbie, 2017; Sherretz, 2011, Zenner et al., 2014), few studies have looked at the positive impact on the reduction of stress on veteran teachers who utilize mindfulness practices (Roeser et al., 2013; S. D. Walker, 2017). More precisely, there are no studies that have measured and described the extent to which mindfulness practices impact veteran teacher stress, particularly after at least 1 year of use. No study to date has captured the most effective mindfulness practices of veteran teachers to reduce teacher stress past the first year of sustained use.

### **Purpose of the Study**

The purpose of this mixed methods study was to measure and describe the extent to which mindfulness practices impact veteran teacher perceived stress. In addition, it was the purpose of the study to capture the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress.

### **Research Questions**

1. To what extent do mindfulness practices impact veteran teacher perceived stress?
2. What are the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress?



## **Significance**

There are four significant aspects to this study. First, it advances the literature about the impact of mindfulness practices on veteran teacher perceived stress. More specifically, it seeks to collect best practices from the field from teachers who have gone through mindfulness training and are using these practices to reduce stress. Although authors such as Sherretz (2011) and McRobbie (2017) collected data from teachers suggesting that mindfulness practices helped to reduce stress, and Flook et al., (2013) found teachers were able to use mindfulness to reduce stress in their classrooms, these studies did not collect best practices from veteran teachers in the field. There are a few studies on the impact that mindfulness practices have on teacher stress and no studies that specifically target veteran teacher perceived stress.

Second, there is a trend in the literature for the use of mindfulness to help teachers reduce stress as is seen in Roeser et al. (2013) when they conducted two trials; in their conclusion, they suggested a study like this to determine “potential downstream effects” (p. 802). In Reardon’s dissertation (2016) on mindfulness and teacher stress, she suggested “mindfulness-based practices should be incorporated into teacher’s professional development” (p. 73). This study addressed that suggestion in the interviews. Flook et al. (2013) specifically addressed mindfulness on teacher stress. They suggested an assessment was needed for “longer-term impact of (mindfulness) training” (p. 190). To date, no study has been found that has a posttraining sampling longer than 3 months from the teacher’s mindfulness training date. This study interviewed veteran teachers who have been practicing mindfulness for longer than 1

year. This will allow researchers and course developers to indicate which mindfulness practices are assessed as most effective at reducing veteran teacher perceived stress.

Third, there appears to be no literature to date that has interviewed veteran teachers who use mindfulness practices to share best practices beyond a short period of time posttraining, that is, 30 days. Findings of this study can be used to improve the teacher professional development of potentially all veteran teachers, offering best practices on mindfulness practices that positively impact veteran teacher perceived stress.

Finally, the scope of this study was originally limited to teachers from California because California seems to be the epicenter for the propagation of mindfulness in education (Comstock, 2015). However, due to the accessibility of California teachers because of the COVID-19 pandemic, teachers in Washington state were also considered. The findings of this study will be unique and valuable because the veteran teachers interviewed for this study are using mindfulness practices, and there are no studies to date indicating this type of environment.

Teachers are being asked to perform under increasing levels of stress (Greenberg et al., 2017). As the number of teachers declines, more will need to be done to address the increasing stress level of teachers entering the profession (Fitchett et al., 2018) and of veteran teachers who remain to carry the teaching load. This study provides feedback from the field from veteran teachers who are successfully using mindfulness to reduce stress.

### **Definitions of Terms**

Relevant terms used throughout this dissertation are defined below to standardize the reader's perception of each concept.

**Burnout.** Burnout is defined as “an erosion of engagement that what started out as important, meaningful, and challenging work becomes unpleasant, unfulfilling, and meaningless” (Maslach, Schaufeli, & Leiter, 2001, p. 416).

**Emotional intelligence (EI).** EI is a psychological theory that was introduced by John Mayer and Peter Salovey and made famous by the book *Emotional Intelligence* (Goleman, 1995). Mayer and Salovey (1997) defined EI as “the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote and intellectual growth” (p. 5).

**Mindfulness.** Jon Kabat-Zinn is regarded by those who study mindfulness as the person who brought this Eastern Buddhist practice to America. In so doing, he secularized the term by defining mindfulness as “paying attention in a particular way: on purpose, in the present moment, and non-judgementally” (Kabat-Zinn, 1994, p. 4).

**Mindset.** Carol Dweck, in her landmark book *Mindset* (2006), established the conceptual language of two types of mindset or “view you adopt for yourself” (p. 6): Fixed mindset, which prevents an individual from being able to learn and move forward and growth mindset, which allows for an individual to change in a positive manner.

**Social emotional learning (SEL).** SEL “is the capacity to recognize and manage emotions, solve problems effectively, and establish positive relationships with others” (Zins & Elias, 2006, p. 234).

**Stress.** Lazarus and Folkman (1984) defined stress as “a relationship between the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being” (p. 21). However, the accepted definition of

stress from the APA is Baum's (1990) definition that defined stress as "a negative emotional experience accompanied by predictable biochemical, physiological and behavioral changes" (p. 653). Both definitions were used in this research.

**Veteran teacher.** The *Handbook of Research on Pedagogical Models for Next-Generation Teaching and Learning* defines a veteran teacher as one who has taught for more than 3 years of full-time service (Keengwe, 2018).

### **Delimitations**

Delimitations frame the boundaries of the study under the control and decisions of the researcher (Patton, 2015). This study was delimited to teachers meeting the following criteria:

1. Full-time public-school Pre-K through 12th-grade teachers.
2. Teachers who are currently teaching in California and Washington.
3. Veteran teachers defined as teachers who have taught for a minimum of 3 full-time years of service.
4. Teachers who have used mindfulness practices for a minimum of 1 year.

### **Organization of the Study**

This study is divided into five chapters. Chapter I consisted of the introduction, description of the problem, statement of the purpose of the study, and subsequent research questions. Chapter II gives a comprehensive review of literature pertinent to stress, stress in the workplace, stress in the education system, teacher stress, and methods of stress reduction with a focus on existing literature of the use of mindfulness to reduce stress, particularly in teachers. Chapter III lays out the methodology for conducting this mixed methods research design to include descriptions of the quantitative and qualitative

aspects of collecting, analyzing, and reporting of the findings. Chapter IV gives those findings with analysis and interpretation of the data. Chapter V gives conclusions based on the findings, gives the researcher's interpretation of the data, and offers recommendations for potential future research.

## CHAPTER II: REVIEW OF THE LITERATURE

The review of literature is an integral part of any research endeavor. It allows the reader an opportunity to be grounded in the writings of others on the topic of investigation and helps to establish a need for the study that ensues. This review of literature starts with an investigation of the nature and significance of stress and how it affects the workplace, education, and primarily, teachers who are the focus of this study. The work of Sheldon Cohen, the developer of the Perceived Stress Scale (PSS), helps to lay the foundation for this examination of stress throughout the study (Cohen, Kamarck, & Mermelstein, 1983). Next, the methods for mitigating stress are presented with a focus on mindfulness practices, specifically, the works of Patricia Jennings (2015), an early pioneer in the adaptation of mindfulness practices for education.

Describing how stress affects a person's physical, mental, and emotional wellbeing is essential because it is the relationship between stress and the individual that is examined in this study. Equally important to developing a clear picture of what stress is in relation to the human body and psyche is the need to understand how stress can be measured, not from a biological perspective with electrodes and machines, but with the vantage point of the individual who is perceiving the stress (Roberti, Harrington, & Storch, 2006). That is why the PSS was initially developed and why it was chosen to be utilized as the instrument for the conduct of this study (Cohen et al., 1983).

Following a thorough investigation of the nature of stress, comes a review of the literature on the impact of stress in the workplace. Next comes a narrowing of scope to look at the effects of stress on education in America, specifically, on how stress affects teachers. The importance of this study has three primary considerations: Stress affects

the health and well-being of teachers (Prilleltensky, Neff, & Bessell, 2016), the health and well-being of teachers affects student performance (Clement, 2017), and mindfulness practices affect teacher stress (Jennings et al., 2017; S. D. Walker, 2017).

After the foundation is laid for how stress effects teachers, techniques and practices that have been shown to mitigate the effects of stress on the individual are explored. Most of those methods have been shown to reduce overall stress. However, stress experienced by teachers while in the classroom in front of students must be mitigated if the teacher is to be effective at delivering instruction. One of the techniques examined that can be utilized in the moment in the classroom is mindfulness (Jennings, 2015). This study explored how mindfulness practices have reduced stress in the workplace and education. The chapter concludes with the way mindfulness practices continue to be studied for their effectiveness at reducing stress; specifically, it presents what the literature says or fails to say about how mindfulness practices effect veteran teacher perceived stress.

### **Stress**

Stress has been defined in many ways. The two definitions that were used as a framework for the conduct of this study are from Lazarus and Folkman followed by Baum. The first definition from Lazarus and Folkman (1984) deals with the relationship between the environment and the person and the self-appraisal by the individual on whether that relationship is “taxing or exceeding his or her resources and endangering his or her well-being” (p. 21). The second definition endorsed by the American Psychological Association (APA) is from Baum (1990), which provides a more clinical definition of stress as “a negative emotional experience accompanied by predictable

biochemical, physiological and behavioral changes” (p. 653). The first definition focuses on relationships and the second on the physical effect that stress has on the human body and mind.

One of the first researchers to study the relationship between stress and its effect on the human body was Dr. Hans Selye (Jackson, 2012; K. M. Richardson & Rothstein, 2008; Selye, 1956). Selye conducted seminal work in clinical studies on stress and discovered the relationship between biological processes and stress that he called the stress syndrome (Jackson, 2012; Selye, 1973). Selye discovered that the body would respond in the same way regardless of the type of stress to which it was subjected. His research was a catalyst for scientists to study the causes of stress, which he called stressors, as well as the effects of those stressors on the human body (Slavich, 2016). In his article, “The Evolution of the Stress Concept,” Selye (1973) described the phenomenon of the “biologic stress response” (p. 692). He wrote about how each physical action on the body such as cold, heat, eating sugar, or exerting muscular activity, has a corresponding physical reaction like shivering, sweating, blood-sugar elevation, or heart rate and respiration increase. Each of these examples demonstrates the relationship that stress has on the body.

By the 1990s, people generally accepted as fact that stress could affect their health, performance on the job, or even social relationships (Baum, 1990). More recent research has shown that individuals who are subjected to a highly stressed lifestyle are at a greater risk of developing a myriad of adverse health conditions to include cancer, cardiovascular disease, depression, anxiety, diabetes, obesity, and fatigue (Slavich, 2016; Wolever et al., 2012). Even today, the idea that there is an adverse effect of stress on an

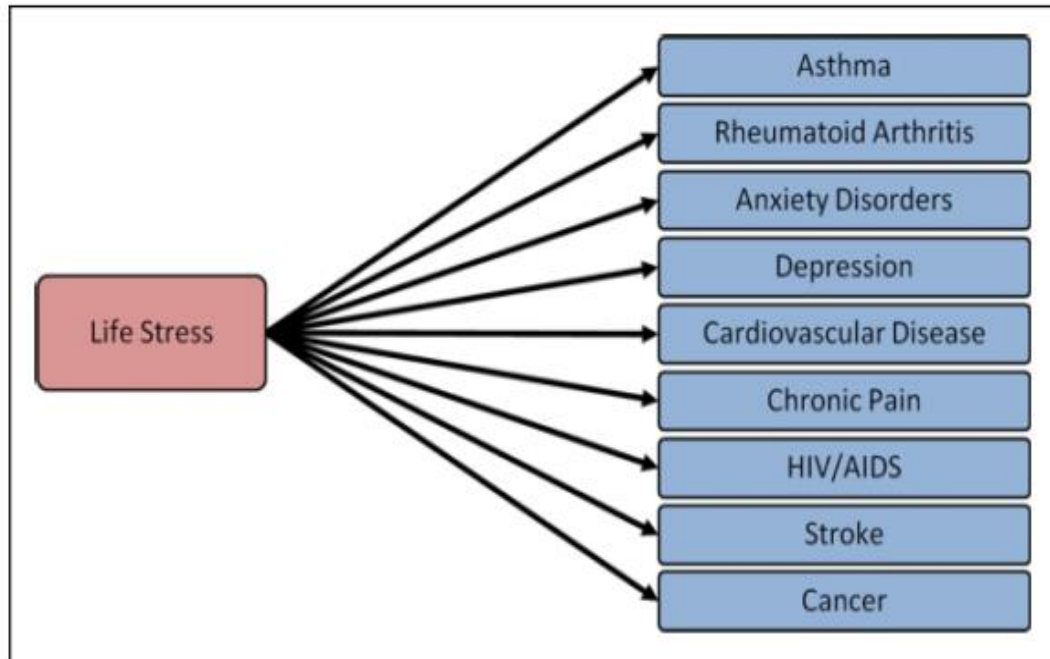


individual's health is accepted as fact by the general public (Slavich, 2016). This perception is reflected in the 2011 study called *Stress in America*, by the APA that found 94% of respondents believed that stress can be attributed to the formation of major illnesses such as depression, obesity, heart disease, cardiovascular disease, and premature death. The perception that “psychological stress can affect mental and physical health is extremely popular” (Slavich, 2016, p. 346).

Various forms of stress specifically addressed in the literature such as body, mind, heart, or “migraines, insomnia, high blood pressure, heart attacks, heart disease, anxiety disorders, depression, and a vast array of our most common ailments are stress-related. Yet only 3% of primary care office visits incorporate stress management counseling” (Nerurkar, Yeh, Davis, Birdie, & Phillips, as cited in Rechtschaffen, 2014, p. 26). In his study on “Life Stress and Health: A Review of Conceptual Issues and Recent Findings,” Slavich (2016) brought together significant findings that show, “Life stress has been implicated in the development, maintenance, or exacerbation of several major mental and physical health condition, in addition to accelerated biological aging and premature mortality” (p. 348). He depicted the nine major correlations between stress to physical and psychological disorders in his Figure 1 (Slavich, 2016). With a clear implication of the effect of stress on relationships and the health of individuals, the study of the effect of stress on the individual soon moved to organizations and the workplace.

### **Stress in the Workplace**

Once the establishment was made that stress was a contributor to multiple medical and emotional issues, the workplace became a focal point where social engineers turned their research to discover and eradicate stress, thus improving the productivity of



*Figure 1.* Life stress and health. From “Life Stress and health: A Review of Conceptual Issues and Recent Findings,” by G. M. Slavich, 2016, *Teaching of Psychology*, 43(4), p. 348 (<https://doi.org/10.1177/0098628316662768>).

employees and the bottom line for companies and corporations (K. M. Richardson & Rothstein, 2008). Richardson and Rothstein (2008) stated, “To paraphrase the ‘father of stress’ Hans Selye, stress is an unavoidable consequence of life, and therefore an unavoidable consequence of organizations” (p. 69). Organizational or occupational stress is an all-encompassing term that considers job environment, role expectations, organizational policies and procedures, and interpersonal demands classified as environmental stressors inherent in every workplace (Jacobs & Blustein, 2008). With the advent of electronic networking and increased technology available to virtually any employee, the lines between home life and the workplace tended to blur, which brought the stress of the job to the home (Lundberg & Cooper, 2011). Furthermore, with the increased use of electronics in the workplace, employees bring job assignments home,

which only extends an already long workday adding additional stress to the employee (Nixon & Spector, 2014).

There is also an increase in the stress on both the partners in a relationship who find the need for both to work full-time to meet the financial obligations of raising a family, paying for health care, and planning for eventual retirement (Lundberg & Cooper, 2011). The stress that is associated with the demands of the occupation is also a contributor to the employee's negative experiences of the job (Morris, 2014). One of the industries in America where stress is prevalent throughout the system itself is education.

### **Stress in Education**

The American educational system has developed from its humble beginnings in the rooms of those interested in teaching their children to the conglomerate of political and bureaucratic interests across the spectrum of our society (Boyd, Crowson, & Mawhinney, 2015). Stress is manifested in every level of the American educational system starting from the bottom, the children, to their parents, the teachers, school administrators, district superintendents, and all the way up to the secretary of education often embroiled in political calculations that are scrutinized by the media and politicians across the nation (Ravitch, 2016). Stress is inherent in the pursuit of curriculum, the funding of education, evaluating the effectiveness of teachers and schools, to the movement to privatize a public institution that has stood for more than 200 years (Belfield & Levin, 2015; Hursh, 2015; Saltman, 2015; Watkins, 2015). Another area of stress in the education system is youth violence, which remains the second leading cause of death for teenagers (Centers for Disease Control and Prevention [CDC], 2016).

Youth violence and school shootings continue to escalate, spiking to 305 school shootings in America in 2013 (Shelton & Manning, 2018). Incidents of children dealing with traumatic events add considerably to the stress within a school district even if the violence is perceived and not personally experienced (Perfect, Turley, Carlson, Yohanna, & Saint Gilles, 2016). Added to the adolescents' actual and perceived violence is the stress associated with exposure to violent video games. A recent meta-analysis of violent video games, the use of which has increased dramatically in school-age children, showed, "an increased composite aggression score; increased aggressive behavior; increased aggressive cognitions; increased aggressive affect, increased desensitization, and decreased empathy, and increased physiological arousal" (Calvert et al., 2017, p. 126). Other issues that have led to violence and stress on school grounds are as diverse as bathroom use for transgenders and gender nonconforming students (Beese & Martin, 2018), personal electronic devices used in bullying and sexting cases (Primack & Johnson, 2016), and the assimilation of recently immigrated youth into American classrooms (Santos et al., 2018).

Another situation that makes administrators and educators more stressed is the lack of teachers entering into the profession even when demand for teachers is rising. Sutchter, Darling-Hammond, and Carver-Thomas (2016) identified four areas where teacher shortage is felt the most: enrollment in teacher preparation programs, efforts to reduce pupil-teacher ratios, rising student enrollments, and teacher attrition. They pointed out that there was a decrease of near 240,000 teachers headed to the classroom in 2014 from 2009. This number is against a need of 300,000 teachers a year (Sutchter et al., 2016).

Ingersoll, Merrill, and Stuckey wrote a report in 2014 titled *Seven Trends: The Transformation of the Teaching Force*. The data for their report came from the statistical department of the U.S. Department of Education, the National Center for Education Statistics (NCES; Ross et al., 2012). The NCES collected answers to questionnaires over 25 years (1987 to 2012) in seven cycles. A total of about 300,000 teachers, 77,000 school-level administrators, and 35,000 district-level officials comprised the national representative sample for the data used. Of note to the issue of the decrease in new teachers entering the profession is the finding that the teacher workforce is getting “grayer” (Ingersoll et al., 2014, p. 8). Figure 2 from the *Seven Trends* study shows the effect of decreasing new teacher employment and the overall aging of the teaching workforce. Not only is greater stress placed on the aging teachers, evident by the demands of increasing class sizes, but the stress on resources for school administrators to handle the higher cost of senior teacher salaries is also implicated (Ingersoll et al., 2014; Sutchter et al., 2016).

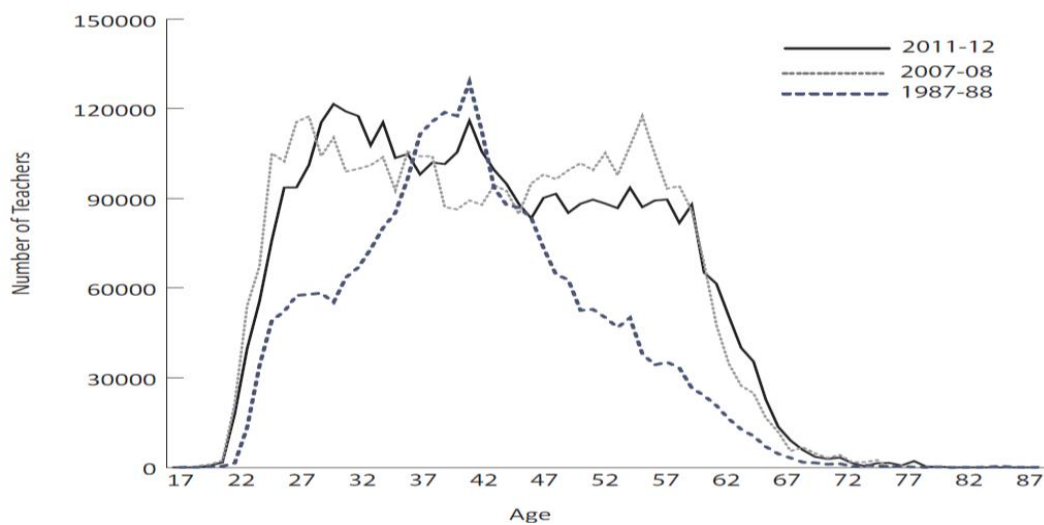


Figure 2. The aging of the teaching workforce.

The cost of replacing teachers has reached upwards of \$2.2 billion every year (Phillips, 2015). This cost is due in part to the number of new teachers who enter the profession and then change districts or quit within their first 5 years. The cost to replace teachers has been estimated to be as high as 50% of new teachers (Phillips, 2015). Another factor that adds to the stress throughout the educational system is the disproportionate number of teachers entering then leaving the profession in high-poverty school districts (Marinell & Coca, 2013).

At the focal point of all of this stress is the one adult who stands between these pressures and the students, the teacher. It is no wonder that teacher stress is at an all-time high (Fitchett et al., 2018). Several factors contribute to the increase in teacher stress.

### **Stress and Teachers**

The MetLife Annual Survey of the American Teacher indicated that teacher job satisfaction is at a 25-year low and decreased from 2008 to 2012 by 23% (MetLife, 2013). The survey found that only 39% of the teachers surveyed felt that they were very satisfied with their profession (MetLife, 2013). Teachers consistently rank among the top stressful professions in America (Greenberg et al., 2016). Several conditions have been shown to be exceptionally stressful in the life of a teacher. First-year teachers (Fitchett et al., 2018), classroom management (Chang, 2013; Flook et al., 2013), time demands and workload (Cheung et al., 2016), standardized curriculum and testing (Gallup, 2014; MetLife, 2013), teacher assessments (Ryan et al., 2017), teacher burnout (Chang, 2013), and teacher attrition (Corry, 2009) rank among the top stressful circumstances teachers face.

## **First-Year Teachers**

Recent research has shown that teacher stress for first-year teachers is at an all-time high (Fitchett et al., 2018). Early research suggested that new teachers came into the profession with more optimism than veteran teachers (Goddard, O'Brien, & Goddard, 2006). Beginning teachers experience stress in different ways than veteran teachers. First-year teachers feel stressed when they are confronted with the reality of a classroom environment versus the theoretical construct they receive in their training (Dicke et al., 2015). Beginning teachers tend to see the teaching experience from an idealized vision of helping to reach each child to develop his or her full potential, that is, until they are met with sometimes unruly, disruptive, and difficult students (Goodwin, 2012). First-year teachers begin to feel the stress of whether they will do a good enough job to get that next year contract; they tend to be in survival mode (Clement, 2017). They may also be faced with a feeling of anxiety over wondering whether they chose the right profession (Clement, 2017).

Research suggests there are three challenges faced by most new teachers: struggling with curricular freedom, an unsupportive environment, and being overwhelmed with classroom management issues (Goodwin, 2012). All these challenges add to the level of stress new teachers face daily. This elevated teacher stress is implicated in higher first-year teacher attrition rates (McCarthy, Lambert, & Reiser, 2014). However, the evidence has begun to collect that teachers who are just starting their careers are about as susceptible to stress, burnout, and attrition as experienced teachers (Fitchett et al., 2018; Roness, 2011).

## **Veteran Teachers**

Teacher stress is at an all-time high, particularly for first-year teachers (Fitchett et al., 2018). However, even veteran teachers, defined as those teachers who have taught for more than 3 years (Keengwe, 2018), are leaving the profession at an alarming rate, and stress on the job is often listed as a precipitator for why they are departing. In 2014, 46% of teachers reported high daily stress (Gallup, 2014). A 2016 national survey of college first-year students showed that the number of college students wanting to become teachers was at a 45-year low (Flannery, 2016). This only adds to the stress of the experienced teachers who continue in the profession to carry the load of those who have left. Many schools struggle to develop and maintain a support system of professional development for beginning or veteran teachers (Hargreaves & Fullan, 2012; Payne, 2008).

Veteran teachers face different challenges than first-year teachers. They wonder at the start of every new year what new curriculum or method of accountability will be put on them. They can find themselves unsure of how well they will adapt to any new standardized test or innovation (Clement, 2017). For both first-year teachers and veteran teachers, classroom management continues to be ranked among the top teacher stressors.

**Classroom management.** Past studies indicated that the factor that contributed most to teacher stress, and ultimately teacher burnout, was disruptive student behavior (Evers, Tomic, & Brouwers, 2004; Gold, 1985; Pines, 2002). When it comes to the human service industry, the profession identified as the most stressful was the teaching profession (Greenberg et al., 2016). The elevated stress felt by teachers in the classroom has been shown to impact the climate of the classroom and the academic performance of



the students (Flook et al., 2013). Teacher professional development programs that foster the well-being and social-emotional skills of teachers have been shown to “provide optimal emotional and instructional support to their students” (Jennings, Snowberg, Coccia, & Greenberg, 2011, p. 37). One such program is the implementation of mindfulness practices to develop teacher self-efficacy (S. D. Walker, 2017).

The study of how classroom management issues can lead to burnout is encapsulated in the comparison of the expected performance and the reality of performance seen through the lens of teacher self-efficacy (Friedman, 2000). A pioneer in the study of self-efficacy, Bandura (1977) suggested that a central element in the development of self-efficacy was the correlation between the expectations of competence and the ability to carry out and control life tasks. The self-efficacy of teachers correlates between a teacher’s expectation that they can handle the demands of the classroom and their perceived inability to deal with classroom management issues. The difference between expectation and perceived inability can create teacher stress (Schwerdtfeger, Konermann, & Schonhofen, 2008). A relationship between job-related stress and teacher self-efficacy was shown in a study of 145 teachers (Gonzalez, Peters, Orange, & Grigsby, 2017). In another study with 121 teachers and 1,817 students, those students in class with teachers who reported having high stress, high burnout, and low coping skills associated with low self-efficacy also had the lowest student outcomes (Herman, Hickmon-Rosa, & Reinke, 2018). One of the methods that has shown promise in helping teachers to develop and maintain a sense of positive self-efficacy is mindfulness training (S. D. Walker, 2017). To promote any type of professional development program for teachers,

however, requires a commitment to provide the resources needed to implement and sustain the program.

One of the areas of administration that affects a teacher's ability to effectively manage a classroom is dwindling resources. Across the country, schools are being required to cut budgets at a higher rate than in previous history (Barbour, 2012). Educators need to be more creative in how to utilize the dwindling resources they have if they are to improve student achievement. Often, this task falls on the shoulders of the classroom teacher to find ways to get the job done even when the money is not there (Barbour, 2012).

The most important discovery of the effects of stress on teachers is that it can harm student performance (Farmer, 2017; Flook et al., 2013; Jennings & Greenberg, 2009), which only adds to a teacher's stress and drives them to try to do better in the face of increasing time demand and workload. The perceived stress created by self-reflection on how the teacher's negative emotional state impacts students' learning adds an additional element of stress, creating a downward spiral into a state of low-self efficacy that can lead to burn-out (Katz, Harris, Abenavoli, Greenberg, & Jennings, 2017).

**Time demand and workload.** Additional research has suggested a correlation between time demands and workload elevating teacher stress and contributing to burnout (Hakanen, Bakker, & Schaufeli, 2006; Schaufeli & Bakker, 2004). The highest level of teacher stress reported in one study was work overload (Austin, Shah, & Muncer, 2005). Teachers are increasingly subjected to demands from administrators, parents, and non-teaching-related workload that are adding stress to their jobs (Van Droogenbroeck, Spruyt, & Vanroelen, 2014). When surveyed, nearly every teacher indicated that there

was an increasing demand for paperwork and limited time to spend with students (Herman & Reinke, 2015). There is not only a need to have more time in the classroom to work with students but also an element of time-management with a balance of work and home life (Singer, 2012). When work and home-life are out of balance, it can add to the stress in a teacher's life.

One of the areas that increases the demands on teachers' time is effective communications with parents or guardians. Teachers need to be able to effectively communicate with their student's parents (Hertel & Johnson, 2013; J. M. Walker & Dotger, 2012). This skill is even more essential against increasingly demanding parents (P. W. Richardson & Watt, 2018). The quality of the relationship between teachers and parents has been shown to have a positive effect on the academic success of students (Clarke, Sheridan, & Woods, 2009). Even with good teacher-parent communications, the stress imposed on the trend for standardized curriculum and testing adds another layer of stress on beginning and veteran teachers.

**Standardized curriculum and testing.** Teacher stress has increased in the "era of high stakes testing" (Dworkin & Tobe, 2014; Jennings et al., 2017). A trend over the past 30 years in education has been to standardize curriculum and testing across the nation (Armstrong, 2017). The advent of policies prescribed by Washington D.C. and pushed through state legislatures leaves little room for the teacher's input on how instruction is delivered (Armstrong, 2017). The introduction of No Child Left Behind (NCLB) reauthorization, Every Student Succeeds Act (ESSA), and the implementation of programs like Common Core State Standards are linked to teachers feeling increased professional stress, lower job satisfaction, and less engagement in their work (Gallup,

2014; MetLife, 2013). With each successive initiative came an edict by the U. S. Department of Education to standardize curriculum and teacher accountability methods (Armstrong, 2017).

**Teacher assessment.** Teachers face increasing stress associated with an ever-changing assessment requirement mandated by federal, state, and local school district policies and laws. This is a stressor from the moment a teacher takes the first job and can impact veteran teachers at any point in their career. The stress of facing assessments when there is little under the direct control of the teacher can cause the same physiological and psychological stress response whether in the first year or any subsequent year of teaching (Ryan et al., 2017). Accountability of teachers' performance has been increasingly placed on outcome results of the students' performance in the form of standardized assessments, which result in a corresponding increase in teacher stress (Ryan et al., 2017). There has been a growing involvement of federal and state regulations concerning the public-school curriculum, accountability, and evaluation of teachers using limited data such as state testing and performance-based standards (Galey, 2015; Turgut, 2013) all of which is increasing teacher stress.

In addition to dealing with the stress of assessments, the stress of dealing with the mounting demands of the job are inherent with both first-year and more experienced veteran teachers (Greenberg et al., 2016). All of this contributes to the expansion of teacher burnout across America. Teachers who participate in social and emotional competency, which includes such techniques as mindfulness training, are less likely to develop burnout (Jennings, 2011).

**Teacher burnout.** One of the results of all the stimulators of teacher stress listed above is teacher burnout (Ryan et al., 2017). Burnout has been defined as “an erosion of engagement that what started out as important, meaningful, and challenging work becomes unpleasant, unfulfilling, and meaningless” (Maslach et al., 2001, p. 416). Research conducted by the Pennsylvania State University on teacher stress and health concluded that “there is an urgent need to address the nation’s teacher crisis” which is brought about by the increase in occupational stress (Greenberg et al., 2016, p. 9). When teachers remain in their profession, the stress they face not only affects their psychological and emotional well-being, but it also affects their ability to teach effectively (Flook et al., 2013). One of the effects of teachers continuing to deal with stress on an ongoing and constant basis is teacher burnout, reported to be one of the top reasons for teacher attrition (Greenberg et al., 2016). In their report on *Teacher Stress and Health* (2016), Greenberg et al. cited, “The National Commission on Teaching and America’s Future estimates that public school teacher turnover costs more than \$7.3 billion per year” (p. 6).

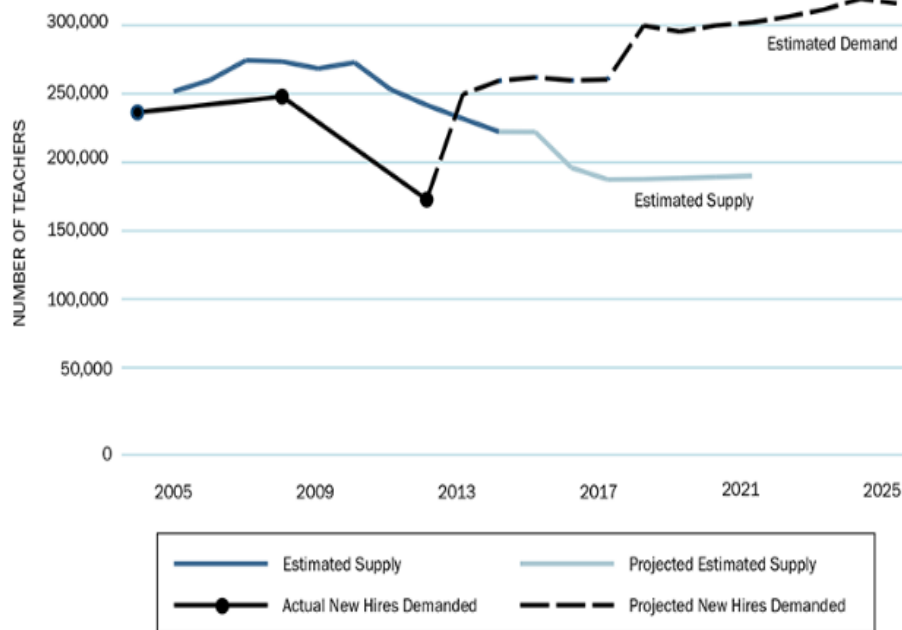
**Teacher attrition.** One of the issues that adds to the stress of teachers, which is compromising the ability to bring every classroom a quality teacher and costing school districts high organizational and financial costs, is teacher attrition (Corry, 2009). Hargreaves wrote in 2003 that “one of the most serious crisis and challenges facing the public school system and the teaching profession is the mass exodus from teaching related to the demographic turnover of teachers in the profession” (p. 121). One survey estimated that between 40 to 50% of teachers leave the profession before teaching for 5 years (Gallup, 2014).

Underfunded and underresourced school districts have been shown to have higher rates of teacher attrition and migration, defined as a teacher leaving one school for another school (Ingersoll, 2001). The Learning Policy Institute (LPI) in September of 2016 reaffirmed this situation and found that “teacher attrition remains high, at 8% annually” (Sutcher et al., p. 3). Figure 3 from the LPI study (2016) indicates how a surplus of teachers in the mid-to-late 2000s began to become a deficit as school budgets declined and teachers were being laid off in 2012. As the economy began to recover, the demand for schoolteachers increased, yet the shortage in teacher labor continues to be stagnant. There are just not enough qualified teachers to meet the demands. With fewer qualified teachers, shortfalls are being met with alternative teacher certifications and substitute teachers who have little to no teaching experience (Redding & Smith, 2016). The other effect of a shortage of teachers is the increase in classroom sizes, putting more stress on the existing teachers to fulfill the mission of educating children (Schanzenbach, 2014).

The research shows that stress affects the physical, mental, and emotional wellbeing of individuals. It also shows a correlation between stress and the adverse effect it has in the workplace, in educations, and specifically with the six major stressors that impact veteran teachers. The PSS is a proven instrument to measure this relationship and was utilized as the instrument for the conduct of this study. The next area of the research to be examined is how stress can be mitigated.

### **Techniques to Reduce Stress**

The preceding sections of this literature review have detailed the descriptions of stress, how stress affects the body and mind, and subsequently, how it affects the



Note: The supply line represents the midpoints of our upper- and lower-bound teacher supply estimates (see Figure 10 in the report for full analysis).  
 Source: U.S. Department of Education, multiple databases (see Appendix A in full report).

*Figure 3. Projected teacher supply and demand. From “A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S.,” by L. Sutch, L. Darling-Hammond, and D. Carver-Thomas, 2016 (<https://learningpolicyinstitute.org/product/coming-crisis-teaching>).*

workforce to include the education system and specifically, teachers. Teacher stress was then examined more closely to identify the primary contributors of teacher stress: being a first-year teacher (Fitchett et al., 2018), classroom management (Chang, 2013; Flook et al., 2013), time demands and workload (Cheung et al., 2016), standardized curriculum and testing (Gallup, 2014; MetLife, 2013), teacher assessments (Ryan et al., 2017), teacher burnout (Chang, 2013), and teacher attrition (Corry, 2009). In this next section, the literature about how stress can be mitigated is examined, and ultimately, the use of mindfulness practices to combat stress is reviewed. Since the beginning of studies into the stress response by Hans Selye (1956), there has been an attempt to learn how to

mitigate the effects of stress on the human body. The continued review of the effects of stress is embodied by the annual publication from the APA (2017) titled *Stress in America*.

In the 2017 edition of *Stress in America* (APA, 2017), methods for how to mitigate stress are identified. A little more than half (53%) of those surveyed to produce this yearly study identified physical activity as a method to help them cope with stress. Additionally, 47% listen to music, 46% exercise or walk, 29% pray, and the coping method identified as “on the rise, with 12 percent of people” (p. 7) was yoga or meditation. However, the method for dealing with stress that was the highest in the study with 74% was relying on someone for emotional support.

When the individual who is experiencing stress has an opportunity to vent or express bent up emotional pressure, that person has shown a release in the tension that was felt (Herman & Reinke, 2015). The challenge is to have systems in place to identify and then offer an outlet to express feelings earlier in the stress response process (Herman & Reinke, 2015). Some of the techniques that have received attention with researchers and have shown to be most effective in studies are being active in social clubs, deep breathing, exercising, listening to music, taking a hot bath/shower, talking to a friend, and walking (Austin et al., 2005). However, when considering the teachers in the conduct of their duties, only the deep breathing strategy is possible during a teacher’s active teaching time when present with children. When considering how stress effects an individual, it is important to consider the physical implications of stress on the human body.

Stress affects people physically and can contribute to the development of a disease. That is why the Centers for Disease Control (CDC) reviews and recommends



methods for mitigating stress. The CDC published an article in 2018 titled *Coping With Stress* that identified broad suggestions to deal with the emotional reactions to stress.

The following is taken from that article and lists their simple suggestions:

- Take care of yourself.
  - Eat healthy, well-balanced meals
  - Exercise on a regular basis
  - Get plenty of sleep
  - Give yourself a break if you feel stressed out
- Talk to others. Share your problems and how you are feeling and coping with a parent, friend, counselor, doctor, or pastor.
- Avoid drugs and alcohol.
- Take a break. (CDC, 2018, p. 1)

There is an element to dealing with stress that is beyond self-management. That is when the effect of stress on the mind and body are too much to manage, and professional help is required to stabilize the individual (Rogers, 2012). The two psychological conditions that are most prone to the effects of stress are depression and anxiety (Orsillo & Roemer, 2011; Williams, Teasdale, Segal, & Kabat-Zinn, 2007). The techniques that are suggested in the following paragraph from various authors are either given as an adjunct to professional help or used rather than seeking professional help because the individual's reaction to stress has not passed into a clinical level of discomfort or disability (Rogers, 2012). One of the first tasks to do in mitigating stress is to analyze where the stress is coming from (Singer, 2012).

There are several instruments individuals can use to self-assess stressors in their life. One such tool is The Recent Life Changes Questionnaire (RLCQ; Singer, 2012) inventory. This tool helps one to quantify the number of life events that have taken place in the previous 12 months, attributing points for various events such as illness, job loss, or demotion. The RLCQ also gives points to positive events such as marriage or significant purchase. By adding up the score, one can both identify stressors and measure the total number of points and, in theory, the amount of stress that one is experiencing. Another instrument that has been shown to be a global indicator with both validity and reliability and that was used for data collection in this study is the PSS (Cohen et al., 1983; Cohen & Williamson, 1988).

### **Social Emotional Competence**

Social and emotional competence (SEC) was utilized by Jennings and Greenberg (2009) to specifically question and focus research regarding the well-being of teachers. They postulated that if teachers can be trained to develop their prosocial skills, they can affect change in student outcomes in the classroom.

Jennings (2014) found that for both new teachers and veteran teachers there was a better ability to handle stress when they were afforded either training or the availability of SEC education. The adherence to an SEC model suggests that a positive climate in the classroom will result in higher student outcome. Research is validating this theory (Haygeman, 2017; LaRock, 2014; McRobbie, 2017; Roeser et al., 2012; Sherretz, 2011). At the core of this framework are the mindfulness practices that teachers are employing to affect this positive change (Zenner et al., 2014). SEC has been shown to facilitate the

ability of teachers to meet the stress demands of both testing mandates and curriculum challenges faced by today's classroom settings (Jennings, 2014).

### **Mindfulness and Stress**

Mindfulness traces its roots to the ancient practices of Buddhism (Kabat-Zinn, 1994). At its foundation is the ability to be fully present in the moment without judgment of the experiences one is having. Mindfulness was introduced to American academia in 1979 by Jon Kabat-Zinn when he founded the Stress Reduction Clinic at the University of Massachusetts Medical School to bring this Eastern practice to the Western medical world (Kabat-Zinn, 1994). Later Kabat-Zinn added the title Center for Mindfulness in Medicine, Health Care, and Society to his work at the university (Kabat-Zinn, 1997). In 1979 when Kabat-Zinn started his clinic, "the word *mindfulness* was nowhere in the medical lexicon" (Rechtschaffen, 2014, p. 25). His clinic continued to do work in this field and eventually developed the Mindfulness-Based Stress Reduction (MBSR) program that is still being utilized today. Significant work has been done with the clinical use of mindfulness in the mental health world.

The literature indicates that there is an increasing interest in the field of mindfulness. According to the "Mindful Research Guide" (Black, 2010), there has been a movement in the study of mindfulness. The guide showed a rise from 1982, when there was only one scientific article on mindfulness, to 2012 with 477 published articles. The increase in articles stretches across several fields from mental health, to medicine, to the use of mindfulness in occupations. From the mental health field, the research shows mindfulness has been successfully used in therapy on two major mental health problems facing Americans, depression and anxiety.

Works like *The Mindful Way Through Depression: Freeing Yourself From Chronic Unhappiness* (Williams et al., 2007) and *The Mindful Way through Anxiety: Break Free From Chronic Worry and Reclaim Your Life* (Orsillo & Roemer, 2011) detail the extensive research that has been conducted in the use of mindfulness in treating two of the most significant mental health issues facing America. In the book *The Mindful Way Through Depression: Freeing Yourself From Chronic Unhappiness*, the authors made a case for the use of mindfulness practices to mitigate the feelings, thoughts, and physical symptoms of depression (Williams et al., 2007). Of note is the praise written in the forward to the book by the author of *Emotional Intelligence*, Daniel Goleman, who wrote, “For depression sufferers, this book is a truly useful guide to achieving emotional balance. For mental health professionals, it should be mandatory reading” (Williams et al., 2007, p. 1). From the field of medicine, studies have been conducted that show a biophysiological effect of mindfulness on the human body.

Research has shown that mindfulness practices affect the nervous system by helping the individual to be more aware of the signals the body sends the mind, allowing the individual to provide better response to stressors (Greeson, 2009). MRI and brain imaging studies “are suggesting that mindfulness meditation reliably and profoundly alters the structure and function of the brain to improve the quality of both thought and feeling” (Hanh & Weare, 2017). The literature indicates that mindfulness practices are not just used in clinical settings but also in the workplace to affect positive outcomes for employers and employees.

## **Mindfulness on Stress in the Workplace**

Ivancevich, Matteson, Freedman, and Phillips (1990) defined stress management intervention (SMI) as “any activity or program initiated by an organization that focuses on reducing the presence of work-related stressors or on assisting individuals to minimize the negative outcomes of exposure to these stressors” (K. M. Richardson & Rothstein, 2008).

In his work on worksite stress reduction, Siu (2017) looked at several methods for the reduction of stress on the job. An evaluation of the effectiveness of an 8-week MBSR program found an “increase in quality of life and self-compassion, along with reduced job burnout and psychological distress” (p. 289) compared to a control group.

## **Mindfulness on Stress in Education**

In their book *Happy Teachers Change the World*, Hanh and Weare (2017) wrote about a “whole-school, comprehensive approach” (p. 279) toward the integration of mindfulness practices into the school team so that the stress associated with the conduct of running a school could be mitigated by a technique, mindfulness, that has been proven to reduce stress in individuals and corporations. This endeavor of turning toward mindfulness to help with the support of administrators, parents, students, and teachers in dealing with the stress of education is being pursued internationally in countries such as Spain, the United Kingdom, Scotland, Canada, and the United States. The introduction of mindfulness practices to administrators, senior staff, students’ parents and families, and teachers unfamiliar with these techniques can initially add to the stress each feels before eventually offering help at mitigating the effects of stress.

Mindfulness programs in schools are becoming more popular (Zenner et al., 2014) with claims of positive psychological outcomes. One of the more extensive systematic reviews of the evidence was provided in 2012 when the authors searched 12 databases to identify 24 studies that were further refined to include a total of 1,348 students who had received mindfulness training and then were measured for results. In their summary of this comprehensive and sophisticated statistical analysis, Zenner et al. stated, “Our analysis suggests that mindfulness-based interventions for children and youth can increase the cognitive capacity of attending and learning by nearly one standard deviation” (p. 18). Whether it is studied from the child’s voice (Bannirchelvam, Bell, & Costello, 2017), from a student curriculum evaluation (Haygeman, 2017), or a general evaluation of students in Pre-K–Grade 12 education (LaRock, 2014), mindfulness in education for use with children has and continues to receive attention from the researcher.

There are some studies to determine the effectiveness of mindfulness practices to reduce stress for students in the classroom. One such study, a meta-analysis of 24 identified studies titled the “Mindfulness-Based Interventions in Schools—A Systematic Review and Meta-Analysis” (Zenner et al., 2014), found there was a positive correlation between mindfulness practices and the reduction of student stress. Another unique study interviewed eight primary school students pre- and postmindfulness training and found they liked the experiential components but were bored with the theory parts. All of the students reported using mindfulness to control their emotions (Bannirchelvam et al., 2017). Another study called “Mindfulness Training Effects for Parents and Educators of Children With Special Needs” showed a significant outcome on perceived stress on a 2-

month follow-up (Benn, Akiva, Arel, & Roeser, 2012). Though several studies have assessed the effectiveness of mindfulness on students, few address the impact of mindfulness practices on teacher-perceived stress. The use of mindfulness to help mitigate teacher stress is just beginning to be fully explored.

### **Mindfulness for Teacher Stress**

In their findings, Greenberg et al., (2016) suggested four programs that have proven to be useful in helping teachers manage their well-being: “Mentoring and induction programs, workplace wellness programs, social-emotional learning (SEL) programs, (and) mindfulness/stress management programs” (p. 2). The mindfulness stress management program is meant to manage stress effectively so the stress does not increase. Stress is a normal part of life, but continuous stress has deleterious effects both psychologically and physically, and teachers need to learn how to manage this before it is detrimental to their well-being.

Rechtschaffen (2014) identified six positive qualities that surface naturally with teachers who practice mindfulness: compassion, understanding, boundaries, attention, intention, and authenticity. Compassion surfaces when the teacher can see the “student within the student” (p. 90) allowing for heartfelt relational interactions. Understanding starts when a teacher using mindfulness begins to notice their “thoughts and emotional patterns” (p. 90), which leads to developing the ability to let students know they are truly seen. According to Rechtschaffen, “Boundaries offer the space in which (students) can feel secure enough to learn, be creative, and thrive” (p. 91). Teachers practicing mindfulness can feel when situations cause stress and take action to keep themselves in the moment, creating and maintaining appropriate boundaries. He added, “One of the

clearest benefits from a committed mindfulness practice is the development of focused attention” (p. 92). With mindfulness, teachers can help students feel truly seen, and teachers can “feel greater competency” (p. 92). Authenticity is the ability to be fully yourself and as a teacher, modeling this quality to your students. Rechtschaffen concluded, “The message of mindfulness is that you are perfect exactly as you are” (p. 93).

In her book *Mindfulness for Teachers: Simple Skills for Peace and Productivity in the Classroom*, Jennings (2015) laid out the case for the use of mindfulness practices by teachers. Moreover, she focused most of her book on how mindfulness practices help the teacher, which in turn, help the student. She spent the first chapter defining mindfulness, Chapters 2 through 5 dealing with emotions and the regulating effect mindfulness plays, the sixth chapter on classroom dynamics, and concluded with Chapter 7 on “Mindfulness and School Transformation” (p. 181). Her Chapter 6 on classroom dynamics is rife with mindfulness techniques with no empirical and only ancillary evidence of efficacy.

In 2017, Marzano Research, in The Classroom Strategies Series, published *Cultivating Mindfulness in the Classroom* (Iberlin & Ruyle, 2017). Several studies were cited leading to a positive perception for the effectiveness of using mindfulness techniques on mitigating student stress. However, none of the studies cited in Table 1 addressed teacher stress.

A typical study on the effectiveness of mindfulness as a stress reduction technique for teachers is one performed by S. D. Walker (2017) in which 30 urban schoolteachers were evaluated before, immediately after, and 3 weeks postmindfulness training. The findings indicated a significant reduction in perceived stress immediately after and



Table 1

*Benefits of Mindfulness and Supporting Research*

Benefit	Sources
Emotional regulation	Chambers, Lo, & Allen, 2008; Davidson et al., 2012; Flook & Fuligni, 2008; McKim, 2007; Ramel, Goldin, Carmona, & McQuaid, 2004
Increased focus	Panksepp & Biven, 2012; Schonert-Reichl & Lawlor, 2010
Longer attention span	Black & Fernando, 2014; Siegel, 2007
Reduced rumination	Chambers et al., 2008
Greater receptivity to new ideas	Moore & Malinowski, 2009; Siegel, 2007
Reduced stress and anxiety	Hoffman, Sawyer, Witt, & Oh, 2010; Tang et al., 2007; Wayment, Wiist, Sullivan, & Warren, 1995
Faster rebound from negative thoughts and feelings	Keng, Smoski, & Robins, 2011; Salovey & Mayer, 1995
More thoughtful reaction to stimuli	Tang et al., 2007
Increased compassion	Shapiro, Austin, Bishop, & Cordova, 2005; Shapiro, Brown, & Biegel, 2007
Better self-control	Black & Fernando, 2014; Corcoran, Farb, Anderson, & Segal, 2010; Flook & Smalley, 2010; Siegel, 2007
Less reactive	Cahn & Polich, 2006; Goldin & Gross, 2010; Ortner, Kilner, & Zelazo, 2007
Better executive function	Flook & Smalley, 2010; Holzel et al., 2008
Increased optimism	Schonert-Reichl & Lawlor, 2010
Higher working memory capacity	Chambers et al., 2008; Jha, Stanley, Kiyonaga, Wong, & Gelfand, 2013
Improved emotional intelligence	Bridgeland, Bruce, & Hariharan, 2013
Decreased depression	Siegel, 2013
Better immune system	Davidson et al., 2003; Siegel, 2010

*Note.* From *Cultivating Mindfulness in the Classroom*, by J. M. Iberlin and M. Ruyle, 2017, Bloomington, IN: Marzano Research.

even 3 weeks posttraining (S. D. Walker, 2017). However, no subsequent follow-up was conducted 6 months or even 1 year postmindfulness training to see whether the techniques taught to these teachers were still effective or even being utilized nor was a delineation made between beginning teachers and veteran teachers.

### **Summary**

Stress has long been studied for its affects on individuals in the workplace, in education, and on teachers (Jennings, 2015; Morris, 2014; Slavich, 2016). Because of trends in attrition of teachers, reduced production of new teachers from America's university system, the aging workforce, and increased teacher burnout, veteran teachers are being asked to do more with fewer resources for an increasing student population (Ingersoll et al., 2014). The teaching profession continues to rank as one of the most stressful professions in the nation (Greenberg et al., 2016).

It has been well documented that first-year teachers face a tremendous level of stress as they begin to transition from college student to being responsible for the children under their care (Clement, 2017). However, evidence has shown that veteran teachers are beginning to experience stress, burnout, and attrition similar to that of new teachers, especially with the increase in stressors that affect both first-year and veteran teachers alike (Fitchett et al., 2018; Roness, 2011). These stressors include classroom management challenges (Flook et al., 2013), time demand and workload (Van Droogenbroeck et al., 2014), standardized curriculum and testing (Armstrong, 2017; Jennings et al., 2017), teacher assessment (Ryan et al., 2017), teacher burnout (Greenberg et al., 2016), and teacher attrition (Sutcher et al., 2016). Of the various ways teachers are learning to reduce their stress, one practice that is showing promise is mindfulness.

Mindfulness has been studied and used for 25 years in America to reduce stress in individuals, in the workplace, in education, and with teachers (Black, 2010); Jennings, 2015; Kabat-Zinn, 1994). The benefits of mindfulness have been documented across a wide range of topics to include reducing stress and anxiety (Iberlin & Ruyle, 2017). The literature indicates that mindfulness practices work; however, there is a gap in the literature to both address veteran teachers and teachers who have used mindfulness practices for more than 1 year. With the challenges facing veteran teachers in our education system today and the focus on mindfulness practice training, it was important to measure and describe the extent to which mindfulness practices impact veteran teacher perceived stress. In addition, it was the purpose of the study to capture the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress.

### **Synthesis Matrix**

A synthesis matrix was used to delineate how the literature targeted each of the main points contained in this literature review (Appendix A).

## CHAPTER III: METHODOLOGY

### **Overview**

This study was designed to determine the most effective mindfulness practices for reducing veteran teacher perceived stress. The methodology chosen matched the intent of the researcher in evaluating data obtained to address the research questions (Patton, 2015). Roberts (2010) defined the methodology chapter as the “section that describes in detail how the study was conducted” (p. 25). Chapter III lays out the research methodology used to conduct this study. Following the study’s purpose statement and research questions is a thorough description of the mixed methods research design used to collect the data that are analyzed in Chapter IV. Next the rationale and method for gathering and using both quantitative and qualitative data are presented. This chapter describes in full detail the reasoning and method of determining the population, target population, and sample for this study. In addition, this chapter discusses the collection instruments, survey, and interview questionnaire and describes how reliability and validity were addressed. A complete description of how data were collected and analyzed proceeds a discussion of the limitations of the study. The information presented in this chapter is summarized at the end of the chapter.

### **Purpose Statement**

The purpose of this mixed methods study was to measure and describe the extent to which mindfulness practices impact veteran teacher perceived stress. In addition, it was the purpose of the study to capture the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress.

## **Research Questions**

1. To what extent do mindfulness practices impact veteran teacher perceived stress?
2. What are the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress?

## **Research Design**

### **Mixed Methods**

A mixed methods research design was selected after careful consideration of the research problem (Creswell, 2014). This study begins by first scrutinizing and articulating the mixed methods theory that is the foundation of this study. Knowing about the mixed methods theory or phenomenon “helps to specify the boundaries of the case, and it contributes significantly to the rigor of the finished study” (Tobin, 2010, p. 288). This mixed methods theory examined what was already known, then looked at the shared experiences of veteran teachers, defined as teachers who have taught for more than 3 years full time (Keengwe, 2018). Next, a specific criterion of this study was applied, which was to collect the lived experiences of veteran teachers who used mindfulness practices for at least 1 year to affect their perceived stress in their teaching profession. To deeply understand their experiences and determine common, most effective mindfulness practices to reduce their perceived stress, it was necessary to interview teachers who had gone through mindfulness training and used mindfulness practices for at least 1 year. These interviews allowed the veteran teachers to share openly their thoughts and feelings to determine through self-assessment whether and how their mindfulness training helped them to reduce their perceived stress. The need to quantify their perceived stress level (quantitative data) and to collect their lived

experiences given during interviews (qualitative data) called for a mixed methods study quantitative and qualitative approach to gathering and assessing these data. This type of study allowed the researcher to combine both qualitative and quantitative data with more traditional procedures and designs (Creswell, 2014).

The use of a mixed methods study was selected for its ability to gather both quantitative and qualitative data. Creswell (2014) wrote that by collecting both kinds of data, qualitative and quantitative, the researcher could get “the best understanding of the research problem” (p. 14). Moreover, Patton (2015) found that when studies used only one method, they were “more vulnerable to that particular method” (p. 316). The mixed methods approach to this study was used with the quantitative data being collected first in the form of both personal demographic information and second by statistical data of perceived stress levels from the teachers. The quantitative aspect of this study was conducted through the use of two administered surveys: Personal Demographics Questionnaire (PDQ; see Appendix B) and the Perceived Stress Scale (PSS; see Appendix C). The qualitative aspect of this study was conducted via qualitative online interviewing using the interview questions in Appendix D to capture the subject’s thoughts and reflections on each question pertaining to the most effective use of mindfulness practices to reduce veteran teacher perceived stress.

### **Population**

The population of a study was defined by McMillan and Schumacher (2010) as the “total group to which results can be generalized” (p. 129). Creswell (2014) added that a population will have the same characteristics across the individuals or group selected. The purpose of this mixed methods study was to measure and describe the

extent to which mindfulness practices impact veteran teacher perceived stress. In addition, it was the purpose of the study to capture the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress.

Any veteran California or Washington teacher may be able to use mindfulness practices to reduce their stress and thus are included in the population for this study whether they have learned to use mindfulness practices or not. That defined the population for this study as all veteran Pre-K–Grade 12 veteran teachers in California and Washington state. According to the California Department of Education ([CDE], 2019), there were 313,989 Pre-K–Grade 12 public school teachers in the school year 2016–2017. The Washington state Office of Superintendent of Public Instruction ([OSPI], 2016) reported there were 54,757 Pre-K–Grade 12 public school teachers in that same school year. There are no databases that distinguish the number of veteran teachers; however, an estimate of this number can be extrapolated based on the number of new teachers who entered the teaching profession. In California that number has fluctuated between 11,000 and 30,000 a year in the past 16 years and has not kept up with demand (CDE, n.d.). Based on the data from the CDE (n.d.), of the 313,989 Pre-K public school teachers listed, an estimated total of 60,000 teachers would be in their first 3 years of teaching leaving an estimated 253,989 California teachers who would be defined as veteran teachers for the purposes of this study. For Washington state, the OSPI estimates that between 10.7% and 11.5% of the workforce are beginning teachers and that 82% are still teaching after 3 years, which gives an estimate of 7,700 teachers in their first 3 years of teaching (Plecki et al., 2017). That leaves 47,057 Washington state veteran teachers for

inclusion in this population for a total of 301,046 veteran California and Washington state teachers.

It is difficult to estimate the number of veteran teachers who have practiced mindfulness for a minimum of 1 year. There are no existing databases that track how many California or Washington State Pre-K–Grade 12 teachers use mindfulness practices. However, because all veteran teachers may be able to benefit from the results of this study, the population was estimated at 207,000 veteran teachers. This population to include Pre-K–Grade 12 teachers was chosen because of the propensity for stress across all grade levels. Further, demographic information was collected from the sample population that allowed the researcher to provide some statistical analysis of how many veteran teachers use mindfulness practices.

### **Target Population**

A target population is taken from an overall population because it is not feasible to interview or survey every individual in the overall population (Patton, 2015). However, if the target population is identified correctly, the results from the sample taken from the target population should be generalizable to the overall population (Creswell, 2014; Patton, 2015). The target population for this study was narrowed to all veteran teachers who have gone through mindfulness training and have used mindfulness practices as a means of reducing stress for at least 1 year.

### **Sample**

The sample is a subset selected from the target population of a size sufficient enough to statistically represent the target population (McMillan & Schumacher, 2019; Patton, 2015). The sample for this study from the target population was selected using a



purposeful sample methodology (Patton, 2015) starting with veteran Pre-K–Grade 12 teachers identified by organizations that train mindfulness to teachers in California. One such open-source database that contains names and contact information for California and Washington state mindfulness instructors is Mindful Schools (2019). Additionally, a Google news search alert was set to provide 10 articles each day that included the subject mindfulness in education. Over the course of 1 year, more than 3,000 article titles were reviewed. A four-phase process was utilized to identify potential subjects for the sample population.

The first phase was the identification of potential veteran teachers and receipt of their email address. This was accomplished by first reviewing the Google news article and identifying a school district, school, administrator, or teacher name that could provide a study subject. Next was to use LinkedIn to search for teachers who worked in the school district, the school, or the teacher named in the article. Additional LinkedIn teacher profiles were reviewed in the school districts to determine whether mindfulness was listed as a skill by the teacher. Over 2,000 teacher profiles were reviewed, and 322 teachers potentially met the study criteria of teaching for 3 years and using mindfulness for 1 year. An initial invite to connect via LinkedIn was sent to those identified teachers. Ninety-three teachers agreed to connect via LinkedIn. Finally, the last step of this phase was sending a direct message to those teachers who agreed to connect, telling them about the study and asking for an email address to send further information. Sixty-nine teachers responded with their email addresses.

The second phase was sending an initial e-mail to each teacher who had been trained in mindfulness to determine whether they were willing to participate in this study.

Attached to this e-mail was a link to a survey for demographic information on each teacher. The goal was to collect up to 45 teachers' demographic data surveys.

The third phase started upon receipt of the demographic surveys. A second e-mail was sent to the teachers who indicated in their survey that they were a veteran teacher (with a minimum of 3 full years of teaching experience) and have practiced mindfulness for a minimum of 1 full year. Attached to the second e-mail was a link to the PSS. The goal was to have up to 28 PSS surveys from the 45 teachers' demographic data surveys returned to the researcher.

The fourth phase started once the researcher received the completed PSS surveys. Teachers who completed the PSS surveys and agreed to participate in the study were sent an email invite via a Zoom meeting request for an interview in the order in which the surveys were returned. If the teachers agreed to the interview, they were added to the sample population. If they did not respond within 7 days, the next teacher was sent an invite. This continued until 15 veteran teachers were interviewed, constituting the full sample population.

### **Instrumentation**

The instrumentation used for this mixed methods study included a PDQ and the PSS (see Appendices B and C), which are quantitative instruments. In addition to the instruments to collect quantitative data, there was a researcher designed, semistructured open-ended interview questionnaire that was used to collect qualitative data for analysis of the mixed methods theory of this study (see Appendix D).

## **Quantitative Instrument**

Two instruments were used for the collection of quantitative data. The first was developed to provide statistical data for selection of the sample population as well as to identify information for categorizing the individuals into groups for analysis purposes. A brief PDQ was used to collect data from each subject prior to being selected to be interviewed (see Appendix B). Items that were asked on the questionnaire were intended to be minimally invasive with respect to privacy to protect the identity of the subjects while collecting the data necessary to check for gender, age, and years of teaching experience. Additionally, items were used to identify veteran teachers who were trained in mindfulness practices and the length of time each subject had been practicing mindfulness to meet the target population threshold of greater than 1 year. This information was necessary to identify teachers from the target population who could be interviewed as part of the sample population for this study as well as provide statistical categories for interpreting data collected.

The second instrument was the Perceived Stress Scale-10 (PSS-10; Cohen et al., 1983; Cohen & Williamson, 1988). The PSS-10 is regarded as the most widely used psychological instrument for measuring the perception of stress (Cohen & Williamson, 1988). The original PSS is a 14-item self-assessment test that has been used extensively to measure the perceived stress for the subject's life experience under examination. Cohen and Williamson (1988) found reliability issues with four of the items and developed the 10-item tool known as the PSS-10. The PSS-10 has come to be viewed as an instrument whose inferences made from the results are valid (Taylor, 2015). The PSS-10 has validity across multiple subpopulations, nationalities, and cultures. The test was

administered once prior to interviewing participants to determine a baseline of perceived stress after the subjects had been using mindfulness practices for more than a year.

### **Researcher as an Instrument of the Study**

Patton (2015) acknowledged the unique role of the researcher as an instrument in a qualitative study, particularly as one of the interviewers of the sample population. Characteristics, interviewing techniques, and even the unique personality of the researcher must be considered for possible influence during data collection (Pezalla, Pettigrew, & Miller-Day, 2012). There is the possibility for biases that the researcher can bring to the interview that must be addressed to limit the effect on the validity of the study. The researcher is a practicing marriage and family therapist who does not have a background in public education and needed to view responses from the study participants from an educational rather than a therapeutic lens. Additionally, the study of mindfulness was foreign to the researcher prior to the conduct of this study, and several misconceptions had to be corrected through a study of the research prior to initiating the first interview.

### **Qualitative Instrument**

Several qualitative methods were investigated to determine the best technique to employ. A level of consensus among the experts was sought using a Veteran Teacher Protocol Pilot (see Appendix E). The definition of an expert for purposes of this study is a veteran teacher, one who has taught more than 3 years full time, who has also undergone formal mindfulness training and is utilizing that training to reduce his or her stress. Internet video call interviews were utilized in the collection of these data.

This study relied on the researcher to conduct video interviews using an interview guide (McMillan & Schumacher, 2010). Questions were developed prior to the initiation of the interviews by a deliberate process that resulted in broad, yet focused questions designed to address the research questions specifically. The researcher selected several topics to create the semistructured open-ended questions using the literature review showing common themes. The questions were then reviewed by an expert in the education field with a doctorate in education who was familiar with mindfulness practices and research protocol. The questions were then field-tested by a veteran educator with a Doctorate in Education who was not used for the collection of data for this study.

### **Validity and Reliability**

Reliability and validity are essential elements to consider when conducting research. Reliability indicates to what extent the instruments consistently yield the same results (Patton, 2015). Validity determines to what extent the instrument measures what it is intended to measure. For the quantitative aspect of this mixed methods study, the primary instrument used to collect quantitative data was the PSS (Cohen et al., 1983). Extent was measured on a 5-point Likert scale using terms *never*, *almost never*, *sometimes*, *fairly often*, and *very often*. The PSS is regarded as the most widely used instrument to measure an individual's perceived stress and has undergone numerous evaluations for both validity and reliability data (Cohen et al., 1983; Cohen & Williamson, 1988; Taylor, 2015).

For the qualitative aspect of this mixed methods study there were two instruments: the researcher and the interview guide with semistructured open-ended interview questions. Patton (2015) wrote that "in qualitative inquiry, the researcher is the

instrument. The credibility of qualitative methods, therefore, hinges to a great extent on the skill, competence, and rigor of the person doing the fieldwork” (p. 22). The primary researcher was the only interviewer and possessed the requisite skills necessary to conduct interviews. This was verified using both practice interviews and field-testing to ensure that uniformity of interviewing technique was adhered to during the actual interviews of veteran teachers. The field-testing also helped to ensure a consistency throughout the interviewing processes using Internet video call interviewing techniques.

Patton (2015) also stated that it was important to construct the interview questions carefully so that the questions utilized for data collection measured the intended information needed to answer the research questions. The questions for this study were initially selected following intense analysis of a review of the literature to ascertain the important elements needed to answer the research questions directly, allow for follow-up questioning in a semistructured open-ended question format, and limit the time required by each participant to provide enough information to fully analyze their responses. The field test of the questions was accomplished by a pilot test interview of two of the potential sample population not included in the study. This was a critical step to ensure that awkward wording, vagueness, and discrepancies in the questions were corrected before the first veteran teacher was interviewed for record (McMillan & Schumacher (2010).

### **Data Collection**

Prior to data collection, the researcher completed the “Protecting Human Research Participants” web-based curriculum offered by the National Institute of Health (NIH) Office of Extramural Research and gained approval from the Brandman University

Institutional Review Board (IRB; see Appendix F). Data collection began with the initial deployment of the invitation e-mail with the attached PDQ (Appendix G), Participant's Bill of Rights (Appendix H), and Participant's Informed Consent (Appendix I). Upon receipt of the completed PDQs, analysis was completed to determine the sample population who met the criterion for this study. The subjects selected from the PDQ were e-mailed the PSS. Upon return of the PSS, subjects were contacted via e-mail with a link for an Internet video call to conduct the interview. Interview data were collected and evaluated for themes, and additional teachers were recruited following a purposeful sample methodology for increasing the sample size. The data collected were analyzed and processed for interpretation and results.

### **Quantitative Data**

The initial quantitative data came in the form of a personal demographic data survey. These data allowed the researcher to identify teachers who have taught for more than 3 full-time years in a Pre-K–Grade 12 public school classroom and who have used mindfulness for longer than 1 year. Those teachers who did not meet these criteria were sent an e-mail thanking them for their their participation and releasing them from any further involvement in this research. Each participant was given the opportunity to opt in to the results of the study. Teachers who met the threshold of more than 3 years teaching and 1 year of mindfulness practices were sent the Percieved Stress Scale (PSS), which has received praise for being the most widely used psychological instrument for measuring the perception of stress (Cohen & Williamson, 1988). The data collected from the PSS indicated the level of perceived stress for each participant prior to conducting interviews. This score allowed the researcher to discuss the extent to which mindfulness

practices affected the participant's perceived teacher stress prior to using mindfulness when asked to reflect on his or her score. Extent was measured on a 5-point Likert scale using terms *never*, *almost never*, *sometimes*, *fairly often*, and *very often*. A process of random selection was used to select 50% of the teachers who returned the completed PSS and opted in for interviews. In addition to the interpretation of the PSS scores with teachers' perceived stress pre- and postmindfulness training and practice was the additional ability to interpret the data in comparison to their corresponding personal demographic information to determine whether any conclusions could be ascertained.

All participants were assigned a unique identification number to assure confidentiality. This number was assigned to each of the instruments that subjects provided to the researcher (PDQ, PSS-10, and interview transcription) so that correlation could be made on the collected data without exposing the subjects to scrutiny from their schools or school districts. This allowed the subjects to answer truthfully and speak freely without regard to recrimination from anything that they reported.

### **Qualitative Data**

Several qualitative methods were investigated to determine the best technique to employ. A level of consensus among the experts was sought using a Veteran Teacher Protocol Pilot (see Appendix E). The definition of an expert for purposes of this study was a teacher who had undergone formal mindfulness training and was utilizing that training to reduce his or her stress. Internet video call interviews were utilized in the collection of these data. Prior to the collection of these data, the researcher conducted a field test with two veteran teachers who met the criterion yet were not used for collection of data for the study. These field tests were observed by an experienced researcher to



verify that interview question content was appropriate for the study, the researcher was using effective interviewing techniques, and issues such as putting the veteran teacher at ease, building rapid rapport, and time constraints were adhered to. Additionally, no data were collected prior to the approval of the Brandman University IRB. Following the field tests and the IRB approval, teachers were contacted, interviews were scheduled and conducted, and interview data were collected.

Data were collected from 15 out of 28 selected veteran teachers who have practiced mindfulness for a minimum of 1 year. Data from the interviews were coded using NVivo to identify themes. The process of interrater reliability was used to check the viability of theme development. Creswell (2014) stated that agreement of at least 80% between two or more researchers would indicate that the identified codes were reliable for the study. For this study, an experienced researcher with a doctorate reviewed 100% of the interviews and had an interrater reliability of greater than 80%. Findings were interpreted and published to be used by future professionals and course development personnel in the teacher education of mindfulness practices in the field.

### **Data Analysis**

The mixed methods study can be done where one aspect of the study, the quantitative inquiry, is used to establish the parameters for the qualitative in-depth assessment of the sample population (Patton, 2015). This study followed that paradigm. Demographic data were collected to establish the target population and further define its characteristics. Quantitative data were collected to establish baselines for teacher perceived stress. Qualitative data were collected to answer the two primary research questions. The qualitative data could not have been acquired without the discriminatory

nature of the quantitative data. The results of the two, quantitative and qualitative, helped to paint the complete picture as it pertains to the research problem.

### **Quantitative Data**

The initial quantitative data were collected by utilizing the PDQ via a Google Forms© survey attached to the invitation e-mail to teachers initially identified as having been through mindfulness training. It was initially sent to 93 teachers. Of the 93 teachers, 45 returned the PDQ providing their demographic information that allowed for the identification of the sample population.

The sample population was then sent the PSS using another Google Forms© survey instrument attached to a second e-mail allowing the qualified teachers to complete the PSS and return it to the researcher. The data collected from the PSS were scores and a perceived stress score was assigned to each participants of the total population of veteran teachers returning the PSS completed instrument. This gave the researcher a score to discuss with each veteran teacher who agreed to and was selected for an interview. The next phase of the study was conducted in the collection of qualitative data.

### **Qualitative Data**

Once the study subjects had submitted their PSS results and self-identified as willing participants for an interview, Internet video call interviews were scheduled between the researcher and the veteran teachers. A script of semistructured open-ended interview questions was used to collect reflections and insights from the teachers to directly address the research questions for this study. The interviews were recorded both via written notes by the researcher and through electronic recordings to allow for the

researcher's thoughts during the interviews and the exact word-for-word conversation between the teachers and the researcher. The researcher used a transcription service to provide a word-for-word transcription of the answers to the interview questions to ensure accuracy.

A computer program commonly used for qualitative analysis, NVivo, which is a data software program designed to allow for coding and frequency of themes, was utilized to provide statistical data of the interview scripts. After the qualitative data were collected, an analysis of the quantitative data relative to demographics and perceived stress was compared to offer the researcher the final information needed to compile results for the study, as seen in Chapter IV.

### **Limitations**

Limitations of a study are those areas that “may negatively affect the results or your ability to generalize” (Roberts, 2010, p. 162). The limitations of this study were the generalizability of the results based on geographic area, the location of the schools relative to the location of the researcher, the sample size compared to the target population, self-reporting by the veteran teachers, and the researcher as the instrument and only interviewer. Each of these elements was addressed in the construct of this study to mitigate as much as possible its impact on the study's findings.

The geographic area was selected because of the propensity of mindfulness training across the state of California and Washington state, the state in which the researcher resides. Because all the sample population reside in California or Washington State, there is a possibility that the results would not generalize to the rest of America or internationally. Demographic information of the participants was limited to the number

of years teaching and using mindfulness. Elements that included age, identified gender, nationality, and other potentially relevant data such as state or country of origin was not requested. The sample size was relatively small and can decrease the reliability of the data collected. Self-reporting survey results, such as those attained from the PSS, can be difficult to interpret free of the participant's own biases or state of mind on the day of the interview.

When the researcher is the only interviewer, it can increase validity because there will be limited variances between interviews; however, the biases of the sole interviewer must be accounted for during the interpretation of the data to ensure better reliability. This is accomplished using interrater reliability techniques. Patton (2015) described this process as having multiple individuals reviewing and interpreting the same data to minimize the biases of a single researcher. This was done for this study with a peer researcher assisting independently through reviewing the transcripts of the interviews, developing themes and code words, and evaluating the data. Once that process was accomplished, the peer researcher and primary researcher shared their findings, and any discrepancies were discussed. One area that was not a point of bias was with the primary researcher who had limited knowledge of mindfulness prior to the engagement in this study. There was no intent to prove or disprove the effectiveness of mindfulness on veteran teacher perceived stress, just a desire to discover what the data revealed.

### **Summary**

This chapter laid out the methodology for the conduct of this research focusing on the effects of mindfulness practices on veteran teacher perceived stress. Clinically and professionally, mindfulness has been studied for the reduction of stress (Black, 2010);

Iberlin & Ruyle, 2017), even for teacher stress (Hanh & Weare, 2017; Jennings, 2015; Rechtschaffen, 2014). The preceding chapter described the population, quantitative and qualitative data collection and analysis, and what limitations this methodology may present in relation to the research questions. This study focused on veteran teachers in California and Washington state who have taught for a minimum of 3 full years and who have practiced mindfulness techniques for at least 1 year. Demographic information was collected from the sample population to determine which teachers met the criteria for this study. Once identified, those teachers meeting the criteria were asked to complete the PSS test, and those data were used to further identify participants for interviews. A group of 15 veteran teachers were eventually interviewed following the procedures outlines in this chapter developed from the foundation of the purpose statement, research questions, research design, types of instrumentation, and data collected. The data collected were analyzed and are interpreted in the following chapter.

## CHAPTER IV: RESEARCH, DATA COLLECTION, AND FINDINGS

This study was designed to determine effective mindfulness practices for reducing veteran teacher perceived stress. Chapter IV provides analysis of data collected from veteran teachers who met the criterion as subjects for this study. This chapter reviews the purpose of the study, research questions, research methods, data collection methods, population, and sample. In addition, Chapter IV details the findings presented from the data. The chapter concludes with a summary of the findings.

Chapter IV analyzes the findings from a 10-question survey and interviews of veteran teachers who have used mindfulness for at least 1 year with the objective of detailing specific mindfulness techniques that have helped to reduce their perceived stress. This analysis endeavored to find common themes and specific techniques that were effective at reducing the perceived stress of the veteran teachers who participated in this study. The data collected were organized by themes to assist in identifying and understanding mindfulness techniques used by 15 veteran teachers at various locations across California and Washington.

This study sought to collect the lived experiences of veteran teachers who have used mindfulness practices for at least 1 year. This began by identifying potential subjects who indicated they were both schoolteachers and mindfulness practitioners. An attempt was made to connect with those teachers and upon connecting, to determine whether they were interested in participating in this study. Teachers were then qualified for participation and provided the opportunity to share their awareness of their perceived stress. This study then captured the mindfulness techniques used and described the effect those techniques had on the teachers who were selected to participate.

This study did not explicitly measure the effect of mindfulness training on perceived stress pre- and posttraining. It does report the collected retrospective data from veteran teachers on the extent to which mindfulness practices have decreased their perceived stress through the analysis of their answers to the Perceived Stress Scale (PSS). Extent was measured on a 5-point Likert scale using terms *never*, *almost never*, *sometimes*, *fairly often*, and *very often*. Additionally, this study focused on the described effect and impact their mindfulness practices had on their perceived stress through analysis of interviews with those teachers, as well as collecting effective mindfulness practices used by those veteran teachers, to reduce their perceived stress. The intention of this study was to learn from those veteran teachers their specific mindfulness techniques that might be successfully replicated for all teachers during times of stress.

### **Purpose**

The purpose of this mixed methods study was to measure and describe the extent to which mindfulness practices impact veteran teacher perceived stress. In addition, it was the purpose of the study to capture the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress.

### **Research Questions**

1. To what extent do mindfulness practices impact veteran teacher perceived stress?
2. What are the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress?

### **Research Methods and Data Collection Procedures**

The research design of this study was mixed methods using both quantitative data collected from administration of a survey instrument and qualitative data collected from

interviews that recorded the lived experiences of veteran teachers who used mindfulness practices for at least 1 year to affect their perceived stress in their teaching profession. It was the design of this study to interview teachers who had gone through mindfulness training and used mindfulness practices for at least 1 year to deeply understand their lived experiences and determine effective mindfulness practices to reduce their perceived stress. These interviews allowed the veteran teachers to share their thoughts and feelings openly to determine through self-assessment whether and how their mindfulness training helped them to reduce their perceived stress. The need to quantify their perceived stress level (quantitative data) and collect the responses given during interviews (qualitative data) called for a mixed methods study quantitative and qualitative approach to gathering and assessing these data.

Data were collected in the following way:

1. A survey was e-mailed to potentially qualified teachers asking for answers to PDQ and answers to the PSS.
2. An interview was then conducted with teachers who met the study criteria to gather their lived experiences with mindfulness as a form of perceived stress reduction.
3. Interviews were conducted via Zoom primarily because of the researcher's and subjects' constraints because of the ongoing COVID-19 pandemic.
4. Before each interview, participants were asked to acknowledge that they had received their informed consent and had been given a copy of their Brandman University's Bill of Rights (Appendix H). They were asked to sign that they had read and understood the process and agreed to participate willingly.



5. Each interview was recorded after receiving the interviewee's permission. The interviews were transcribed using Otter.AI Software.
6. NVIVO software was used to develop the themes and common mindfulness practices used by the researcher to complete this study.

## **Population**

The population of a study was defined by McMillan and Schumacher (2010) as the “total group to which results can be generalized” (p. 129). Creswell (2014) added that a population will have the same characteristics across the individuals or group selected. Any veteran California or Washington teachers may be able to use mindfulness practices to reduce their stress and thus are included in the population for this study whether they have learned to use mindfulness practices or not. That defined the population for this study as all veteran Pre-K–Grade 12 veteran teachers in California and Washington. According to the California Department of Education ([CDE], 2019), there were 313,989 Pre-K–Grade 12 public school teachers in the school year 2016–2017. There are no databases that distinguish the number of veteran teachers; however, an estimate of this number can be extrapolated based on the number of new teachers who entered the teaching profession in California. That number has fluctuated between 11,000 and 30,000 a year in the past 16 years and has not kept up with demand (CDE, n.d.). Based on the data from the CDE (n.d.), of the 313,989 Pre-K public school teachers listed, an estimated total of 60,000 teachers would be in their first 3 years of teaching, leaving an estimated 253,989 teachers who would be defined as veteran teachers for the purposes of this study.

It is difficult to estimate the number of veteran teachers who have practiced mindfulness for a minimum of 1 year. There are no existing databases that track how many California or Washington Pre-K–Grade 12 teachers use mindfulness practices. However, because all veteran teachers may be able to benefit from the results of this study, the population was estimated at 207,000 veteran teachers. This population to include Pre-K–Grade 12 teachers was chosen because of the propensity for stress across all grade levels.

### **Target Population**

A target population is taken from an overall population because it is not feasible to interview or survey every individual in the overall population (Patton, 2015). However, if the target population is identified correctly, the results from the sample taken from the target population should be generalizable to the overall population (Creswell, 2014; Patton, 2015). The target population for this study was narrowed to all veteran teachers who have gone through mindfulness training and have used mindfulness practices for at least 1 year.

### **Sample**

For this study, the sample size of 15 veteran Pre-K–Grade 12 teachers was selected. Figure 4 graphically shows the distribution of sample size. This sample size was attained by the following:

1. Initially 322 teachers were contacted through social media and direct referral to connect.
2. Of those, 93 teachers connected and provided an e-mail address.
3. Of those, 45 teachers returned PDQ and PSS surveys.

4. Of those, 28 teachers were identified who met the criteria for this study as depicted in Table 2, “Participants Meeting Study Criteria.”

5. Of those, 15 teachers were randomly selected for interviews.

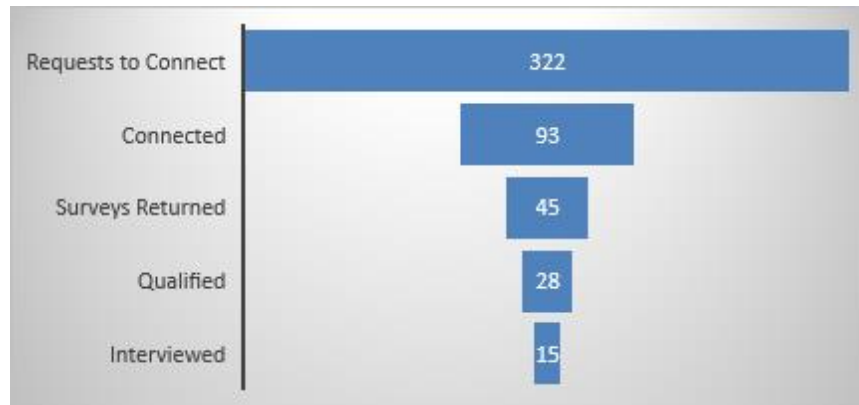


Figure 4. Funnel of potential to actual number of subjects.

Table 2

*Participants Meeting Study Criteria*

Participants	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A minimum of 3 years’ experience as a schoolteacher	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A minimum of 1 year experience practicing mindfulness	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

**Presentation and Analysis of the Data**

The presentation and analysis of data in this chapter were attained using a mixed methods research design. Quantitative data were gathered using the PSS survey electronically administered, and qualitative data were obtained with video interviews of

15 veteran teachers. The findings from the surveys and interviews are given showing their relationship to the research questions to this study.

### **Quantitative Data**

The first process was to evaluate the quantitative data. To collect and analyze these data, subjects submitted answers electronically to the PSS. The answers to the PSS were primarily useful in interpreting the data for the first research question. The answers provided a self-reflection by the subjects on their state of perceived stress during the 30 days prior to the interview. The PSS asks 10 questions for the subjects to reflect on a certain aspect of how they perceive their stress in the last month. For purposes of this study, subjects were asked to further reflect on their responses to the questions as they would relate to their role as a teacher and not with life overall. Table 3 depicts the results for the 10 questions and provides the frequency of scores as well as the mean score for each question. Each question on the PSS starts with the words, “In the last month, how often have you . . . ” and is only written once at the top of the column of questions.

### **Data Analysis for Research Question 1**

Research Question 1 asked, “To what extent do mindfulness practices impact veteran teacher perceived stress?” Two instruments were utilized to provide data for analysis of this research question. The first was the PSS, which provided quantitative data from each subject on how stress is perceived and handled. The second instrument was an interview that gave qualitative data on lived experiences dealing with teaching as a veteran teacher who has used mindfulness for at least 1 year.

**Perceived Stress Scale results and analysis.** The PSS comprises 10 questions that ask the respondents to evaluate how often they feel a certain way in response to the

cue. Each question has a choice of the same five possible answers: *never*, *almost never*, *sometimes*, *fairly often*, and *very often* with a given score of 1 to 5 respectively. A mean average score of 2.5 for a question would indicate a neutral position, neither positive nor negative toward that question. Five questions (1, 2, 3, 8, and 9) are skewed negatively, meaning that a 5 would be the most negatively impacted answer. Five questions (4, 5, 6, 7, and 10) are skewed positively, meaning that a 5 would be the most positively impacted answer.

Table 3

*Results from the Perceived Stress Scale Survey*

Survey Questions	Never		Almost Never		Some-times		Fairly Often		Very Often		M
	n	%	n	%	n	%	n	%	n	%	
In the last month, how often have you...											
1 been upset because of something that happened unexpectedly?	0	0.0	3	20.0	9	60.0	1	6.7	2	13.3	3.1
2 felt that you were unable to control the important things in your life?	0	0.0	5	33.3	7	46.7	2	13.3	1	6.7	2.9
3 felt nervous and "stressed"?	0	0.0	2	13.3	11	73.3	0	0.0	2	13.3	3.1
4 felt confident about your ability to handle your personal problems?	0	0.0	0	0.0	1	6.7	6	40.0	8	53.3	4.5
5 felt that things were going your way?	0	0.0	2	13.3	3	20.0	9	0.0	1	0.0	3.6
6 found that you could cope with all the things that you had to do?	0	0.0	0	0.0	2	13.3	9	60.0	4	26.7	4.1
7 been able to control irritations in your life?	0	0.0	0	0.0	3	20.0	8	53.3	4	26.7	4.1
8 been angered because of things that were outside your control?	0	0.0	0	0.0	7	46.7	7	46.7	1	6.7	3.6
9 felt Difficulties were piling up so high that you could not overcome them?	0	0.0	11	73.3	4	26.7	0	0.0	0	0.0	2.3
10 felt that you were on top of things?	2	13.3	7	46.7	5	33.3	1	6.7	0	0.0	2.3

Question 1 of the PSS had a mean score of 3.1. Of the 15 respondents, Subjects 4 and 9 felt they were very often upset; Subject 14 felt fairly often upset; Subjects 3, 5, 6, 7, 8, 10, 11, 13, and 15 felt they were sometimes upset; and Subjects 1, 2, and 12 felt they were almost never upset. Figure 5 depicts the responses to Question 1 of the PSS. This chart can also be viewed as a timeline because the subjects were interviewed chronologically from Subject 1 who was the earliest and conducted pre-COVID-19 pandemic and Subjects 4 and beyond who were interviewed during the pandemic with Subject 15 being the last to be interviewed.

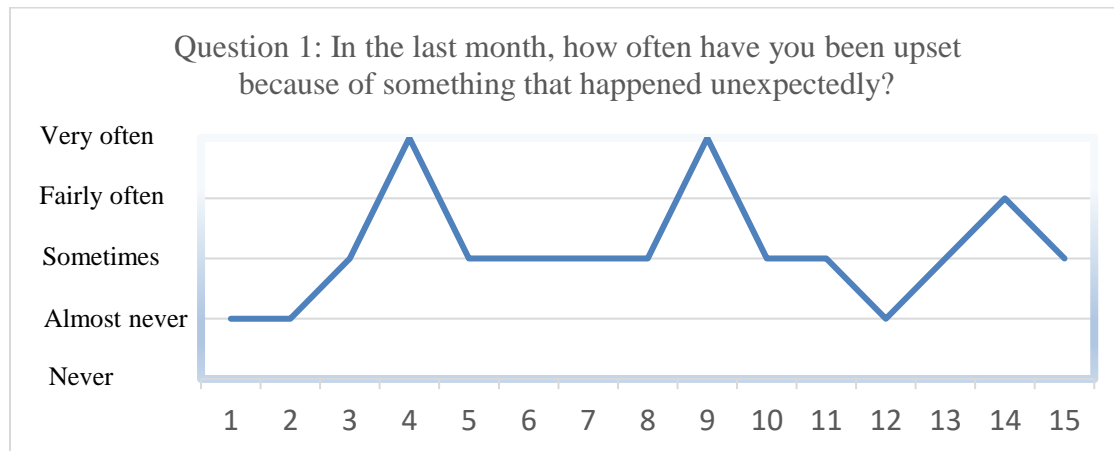


Figure 5. Chart of responses to question 1 of the PSS.

Question 2 of the PSS had a mean score of 2.9. Of the 15 respondents, Subject 4 felt very often unable to control the important things in life; Subjects 10 and 11 felt fairly often unable; Subjects 1, 6, 8, 9, 12, 14, and 15 felt they were sometimes unable; and Subjects 2, 3, 5, 7, and 13 felt they were almost never unable to control the important things in life. Figure 6 depicts the responses to Question 2 of the PSS. This chart can also be viewed as a timeline because the subjects were interviewed chronologically from

Subject 1 who was the earliest and conducted pre-COVID-19 pandemic and Subjects 4 and beyond who were interviewed during the pandemic with Subject 15 being the last to be interviewed.

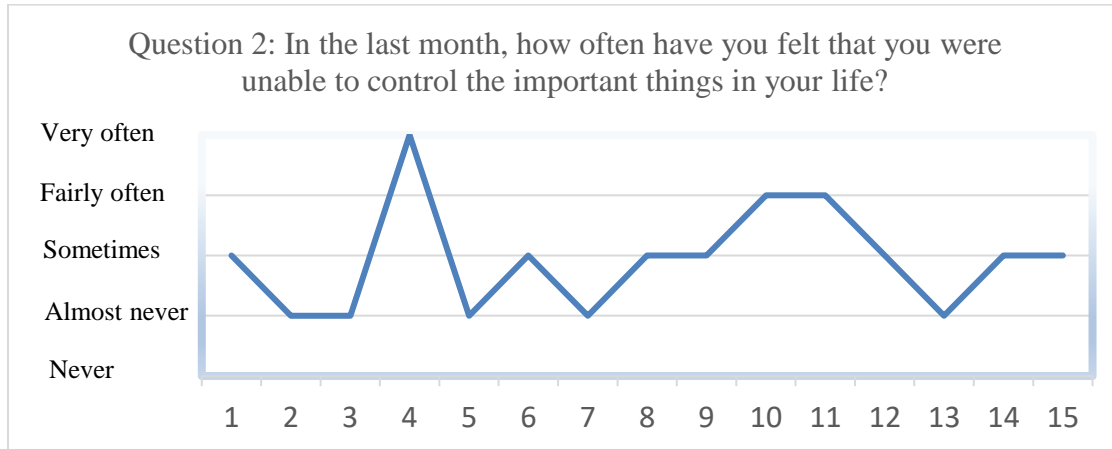


Figure 6. Chart of responses to Question 2 of the PSS.

Question 3 of the PSS had a mean score of 3.1. Of the 15 respondents, Subjects 4 and 14 very often felt nervous and stressed; Subjects 1, 2, 3, 5, 6, 8, 9, 10, 12, 13, and 15 sometimes felt nervous and stressed; and Subjects 7 and 11 almost never felt nervous and stressed. Figure 7 depicts the responses to Question 3 of the PSS. This chart can also be viewed as a timeline because the subjects were interviewed chronologically from Subject 1 who was the earliest and conducted pre-COVID-19 pandemic and Subjects 4 and beyond who were interviewed during the pandemic with Subject 15 being the last to be interviewed.

Question 4 of the PSS had a mean score of 4.5. Of the 15 respondents, Subjects 1, 2, 3, 4, 5, 7, 8, and 10 felt very often confident in their ability to handle personal problems; Subjects 6, 11, 12, 13, 14, and 15 felt fairly often confident; and Subject 9

sometimes felt confident in their ability to handle personal problems. Figure 8 depicts the responses to Question 4 of the PSS. This chart can also be viewed as a timeline because the subjects were interviewed chronologically from Subject 1 who was the earliest and conducted pre-COVID-19 pandemic and Subjects 4 and beyond who were interviewed during the pandemic with Subject 15 being the last to be interviewed.

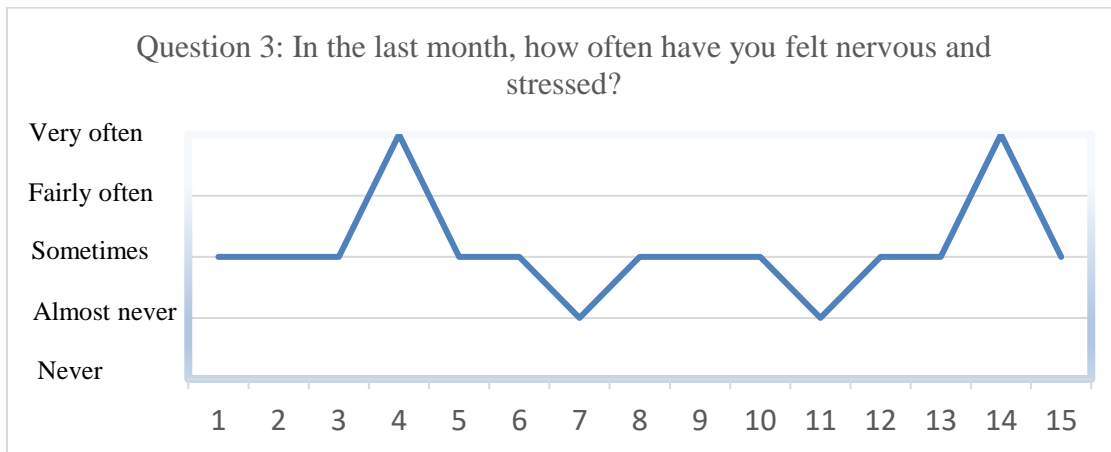


Figure 7. Chart of responses to Question 3 of the PSS.

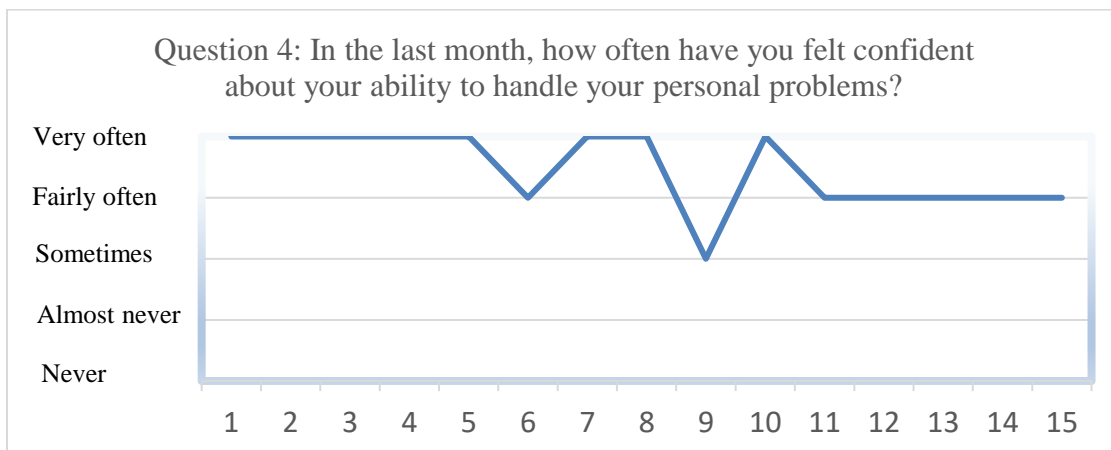


Figure 8. Chart of responses to Question 4 of the PSS.



Question 5 of the PSS had a mean score of 3.6. Of the 15 respondents, Subject 7 very often felt things were going their way; Subjects 1, 2, 3, 4, 5, 8, 10, 12, and 15 fairly often felt things were going their way; Subjects 6, 13, and 14 sometimes felt things were going their way; and Subjects 9 and 11 almost never felt things were going their way.

Figure 9 depicts the responses to Question 5 of the PSS. This chart can also be viewed as a timeline because the subjects were interviewed chronologically from Subject 1 who was the earliest and conducted pre-COVID-19 pandemic and Subjects 4 and beyond who were interviewed during the pandemic with Subject 15 being the last to be interviewed.

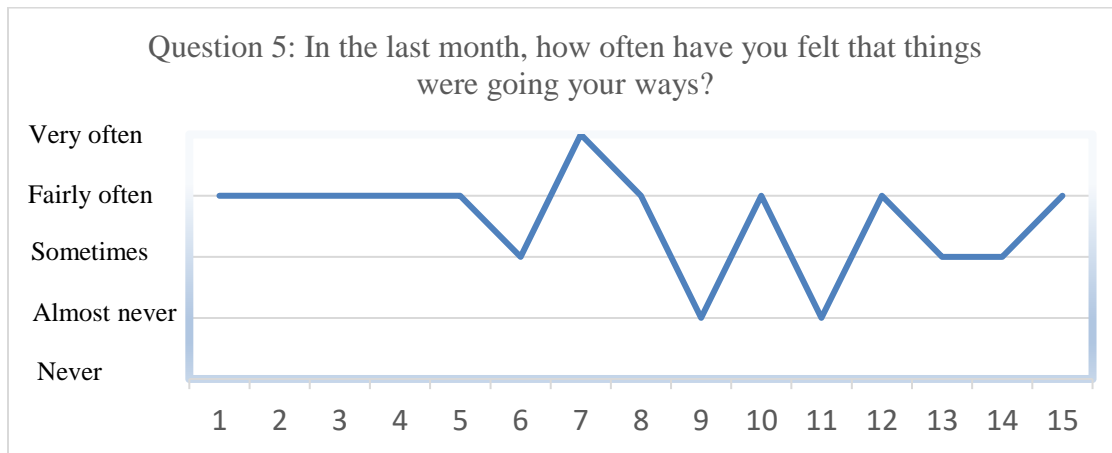


Figure 9. Chart of responses to Question 5 of the PSS.

Question 6 of the PSS had a mean score of 4.1. Of the 15 respondents, Subjects 6, 7, 8, and 10 very often found they could cope with all the things they had to do; Subjects 1, 2, 3, 4, 5, 12, 13, 14, and 15 fairly often felt they could cope; and Subjects 9 and 11 sometimes felt they could cope with all the things they had to do. Figure 10 depicts the responses to Question 6 of the PSS. This chart can also be viewed as a timeline because the subjects were interviewed chronologically from Subject 1 who was

the earliest and conducted pre-COVID-19 pandemic and Subjects 4 and beyond who were interviewed during the pandemic with Subject 15 being the last to be interviewed.

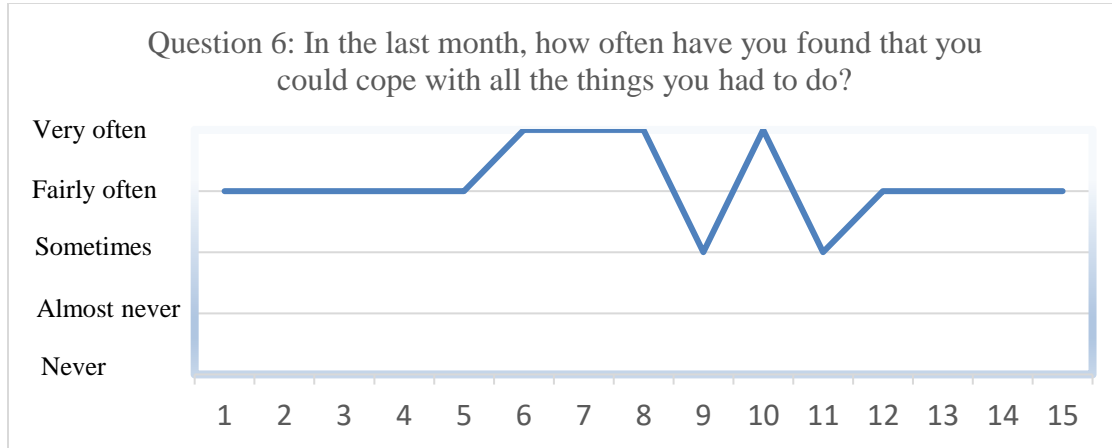


Figure 10. Chart of responses to Question 6 of the PSS.

Question 7 of the PSS had a mean score of 4.1. Of the 15 respondents, Subjects 6, 8, 10, and 12 very often felt they were able to control the irritations in their life; Subjects 1, 2, 3, 4, 7, 11, 14, and 15 fairly often felt they were able to control the irritations; and Subjects 5, 9, and 13 felt they were sometimes able to control the irritations in their life. Figure 11 depicts the responses to Question 7 of the PSS. This chart can also be viewed as a timeline because the subjects were interviewed chronologically from Subject 1 who was the earliest and conducted pre-COVID-19 pandemic and Subjects 4 and beyond who were interviewed during the pandemic with Subject 15 being the last to be interviewed.

Question 8 of the PSS had a mean score of 3.6. Of the 15 respondents, Subject 8 felt very often angered because of things outside their control; Subjects 2, 3, 6, 7, 10, 12, and 13 felt fairly often angered; Subjects 1, 4, 5, 9, 11, 14, and 15 sometimes felt angered because of things that were outside their control. Figure 12 depicts the responses to

Question 8 of the PSS. This chart can also be viewed as a timeline because the subjects were interviewed chronologically from Subject 1 who was the earliest and conducted pre-COVID-19 pandemic and Subjects 4 and beyond who were interviewed during the pandemic with Subject 15 being the last to be interviewed.

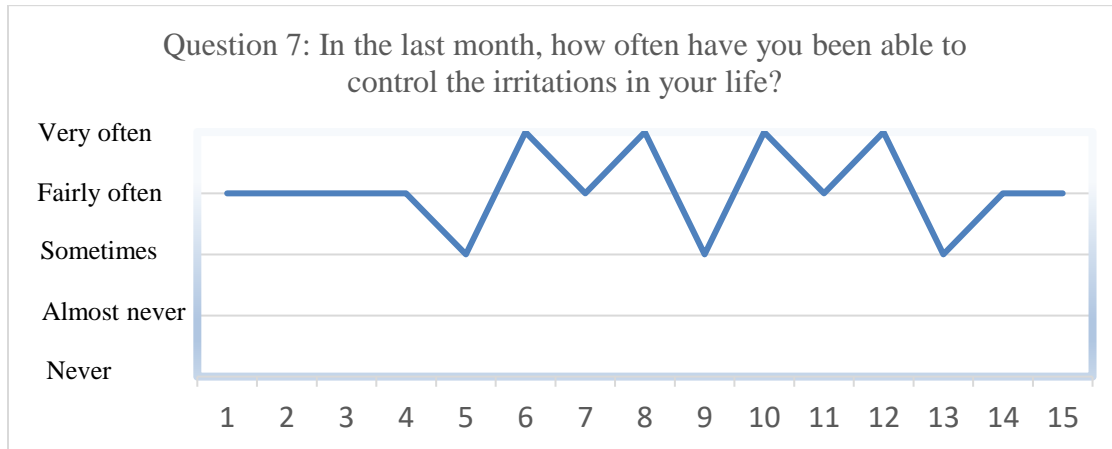


Figure 11. Chart of responses to Question 7 of the PSS.

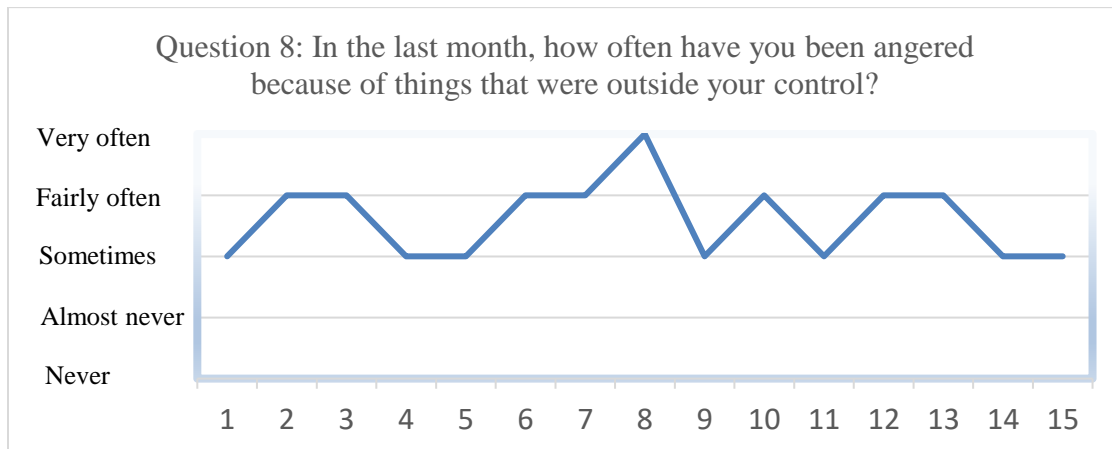


Figure 12. Chart of responses to Question 8 of the PSS.

Question 9 of the PSS had a mean score of 2.3. Of the 15 respondents, Subjects 5, 9, 10, and 15 sometimes felt difficulties were piling up so high they could not

overcome them; and Subjects 1, 2, 3, 4, 6, 7, 8, 11, 12, 13, and 14 almost never felt that way. Figure 13 depicts the responses to Question 9 of the PSS. This chart can also be viewed as a timeline because the subjects were interviewed chronologically from Subject 1 who was the earliest and conducted pre-COVID-19 pandemic and Subjects 4 and beyond who were interviewed during the pandemic with Subject 15 being the last to be interviewed.

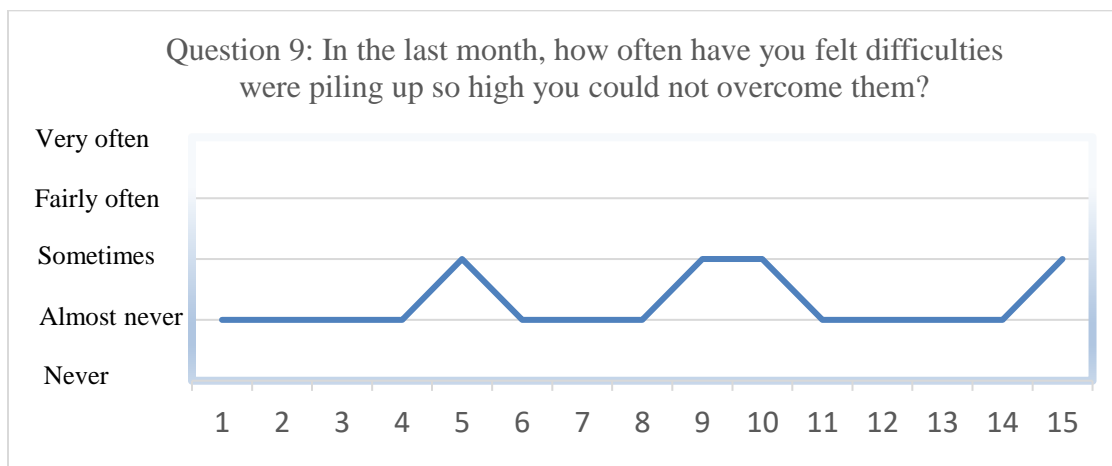


Figure 13. Chart of responses to Question 9 of the PSS.

Question 10 of the PSS had a mean score of 2.3. Of the 15 respondents, Subject 13 fairly often felt on top of things; Subjects 1, 4, 9, 10, and 15 sometimes felt on top of things; Subjects 2, 3, 5, 6, 7, 8, and 12 almost never felt on top of things; and Subjects 11 and 14 never felt they were on top of things. Figure 14 depicts the responses to Question 10 of the PSS. This chart can also be viewed as a timeline because the subjects were interviewed chronologically from Subject 1 who was the earliest and conducted pre-COVID-19 pandemic and Subjects 4 and beyond who were interviewed during the pandemic with Subject 15 being the last to be interviewed.

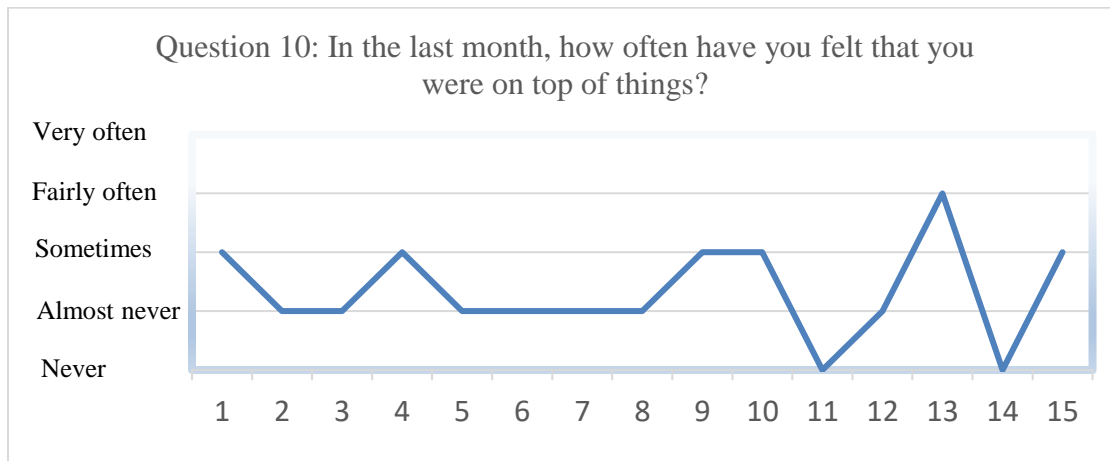


Figure 14. Chart of responses to Question 10 of the PSS.

### Qualitative Data

The second step was to collect and evaluate the qualitative data. Fifteen recorded interviews were transcribed using a software program called Otter.ai. The transcriptions of the interviews were then uploaded into NVivo, a program that qualitatively codes scripts. NVivo was used because of its ability to analyze a large quantity of data identifying and coding emergent themes and patterns (McMillan & Schumacher, 2010). The researcher for this study then analyzed the common themes and selected the strongest based on the frequency count provided by NVivo and each theme’s relevance to the research questions. The process of interrater reliability was used to check the viability of theme development. Creswell (2014) stated that agreement of at least 80% between two or more researchers would indicate that the identified codes were reliable for the study. For this study, an experienced researcher with a doctorate reviewed 100% of the interviews and had an interrater reliability of greater than 80%.

After a thorough analysis of the collected data from the 15 interviews, five themes with 269 frequencies were selected. The themes and frequencies were distributed

unequally between the two research and seven interview questions. Table 4 shows the distribution of the themes to the research questions and interview questions, ordered by frequency. Universal effects of mindfulness practices on perceived stress are defined as those effects described by a teacher as having a comprehensive or complete effect of how mindfulness has changed that teacher’s perception on stress as a teacher. Specific effects of mindfulness practices on perceived stress are defined as those effects described by a teacher to have a positive effect to their perceived stress to a certain feeling, action, or behavior. Effects to others mindfulness practices are defined as having an effect described by a teacher to have a positive change when that teacher uses mindfulness practices with others such as students, parents, coworkers, or educational staff.

Table 4

*Themes and Frequencies Distribution to Research and Interview Questions*

Central research question	Interview questions	Themes	Frequency
To what extent do mindfulness practices impact veteran teacher perceived stress?	1, 2, 3, 4, and 5	Universal effect	32
		Specific effect	17
		Effect to others	16
What are the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress?	6 and 7	External sensory practices	127
		Internal mindset practices	77

**Interview results and analysis.** The findings of the 15 interviews indicated three themes in response to Research Question 1: universal effects of mindfulness on perceived stress, specific effects of mindfulness on perceived stress, and mindfulness practices effects to others on perceived stress. All three of the themes had a greater than 50%

agreement among the respondents. Table 5 depicts the themes and frequencies that were identified after NVivo analysis on the transcripts from the interviews ordered by frequency. This figure aids in identifying the emerging themes of the effect mindfulness practices have on veteran teachers' perceived stress.

Table 5

*Chart of Themes and Frequencies From Interviews to Research Question 1*

Themes/pattern	Number of Respondents	% based on <i>N</i>	Frequency of reference
Universal effects of mindfulness practices on perceived stress	13	87	32
Specific Effects of mindfulness practices on perceived stress	9	60	17
Mindfulness practices effects to others on perceived stress	8	54	16

*Notes.* The *N* for interview participants = 15.

***Universal effects.*** Universal effects of mindfulness practices on perceived stress were the most frequent ( $r = 13, f = 32$ ) and are defined as those effects described by a teacher as having a comprehensive or complete effect of how mindfulness has changed that teacher's perception on stress as a teacher. For a subject's comment to be counted as a universal effect, it had to include language that indicated mindfulness practices changed perception of stress as a whole rather than for a specific stressor or for someone else. An example from one of the interviews came from Subject 8:

Mindfulness probably saved me. It saved me from Xanax, which is what the doctor put me on. And my brothers are both physicians, and when they found out that I was taking it, they immediately told me just stop that; you don't need that.

And any other kind of thing that I would have to take in order to feel calmer. So, now I don't drink alcohol. It's a religious thing. I don't drink, I don't smoke. I don't do anything that other people might use to calm themselves down. So this (mindfulness) has been a lifesaver for me.

Here are some additional comments from teachers who expressed how mindfulness had a universal effect on how they perceived stress. Subject 2 stated, "I feel it's been really helpful. . . . It's hugely helpful." Subject 4 said, "It really helped." Subject 6 stated, "I think it's [mindfulness practices] definitely had a big impact. . . . It impacts everything I do." Subject 8 added, "It [stress] made me physically sick sometimes. But now I love the classroom. I enjoy it. They've [mindfulness practices] helped me tremendously." Subject 10 said, "It's [mindfulness practices] off the chart been good." Subject 11 stated, "Oh my gosh, it [mindfulness practices] has lowered it [stress] so much." Subject 14 said, "That's [mindfulness practices] helped me deal with stress in my life." According to Subject 15, "I think if I didn't have mindfulness, I'd be an anxiety wreck."

*Specific effects.* Specific effects of mindfulness practices on perceived stress were the second most frequent ( $r = 9, f = 17$ ) and are defined as those effects described by a teacher to have a positive effect to their perceived stress to a certain feeling, action, or behavior. For a subject's comment to be counted as a specific effect, it had to be directed to a certain event rather than a universal effect or effect on someone else. An example from one of the interviews came from Subject 11 who uses mindfulness to cope with the stress of what is going to happen: "Mindfulness has really been able to help me



know and anticipate what's coming and when you anticipate what's coming, your stress level really does drop.”

Here are some additional comments from teachers who expressed how mindfulness had a specific effect on how they perceived stress. Subject 1 uses mindfulness to deal with lesson plans and curriculum development: “Stress of like . . . creating lesson plans and curriculum still was heavy. And then with mindfulness . . . it was cool.” Subject 15 uses mindfulness to deal with anger issues:

They've [mindfulness practices] probably helped because if I didn't do some of the things, I would just allow myself to get angry about stuff that I have no control over. So, I would say that some of the [mindfulness] strategies I use are very helpful for that.

Subject 5 uses mindfulness practices while driving to transition between home and work:

I will do that [mindfulness practices] often when driving . . . at the end of the day or sometimes at the beginning of the day just to get myself set if I know it's going to be a really stressful day.

Subject 7 uses mindfulness in conflict situation:

Right now, immediately, let's freeze . . . and let's lower the cortisol levels . . . disengage the fight or flight . . . so what mindfulness does is teaches you how to discipline your mind. . . . I would love to say that I was able to do this everywhere in my life, but I'm not.

*Effects to others.* Mindfulness practices effects to others on perceived stress were the third most frequent ( $r = 8, f = 16$ ) and are defined as having an effect described by a teacher to have a positive change when that teacher uses mindfulness practices with

others such as students, parents, coworkers, or educational staff. Effect to others use of mindfulness practices can also be shown to have an effect on the teacher using the practice. An example from one of the interviews came from Subject 1,

With kids, their parents will say, “I’ll pick you up at three o’clock,” and the children will look and it’s 3:03. So, like, the world is totally crashing. The mom is late and they [are] just having a complete breakdown. So we would use . . . mindfulness . . . and that worked. That helped a lot during those moments where the whole world was crashing. It [mindfulness] had to help so it’s not crashing.

Here are some additional comments from teachers who have used mindfulness practices with others to affect their stress. Subject 2 stated, “My goal was to be able to give this tool [mindfulness] to students. I’m doing it with them and I’m benefiting from it.” Subject 6 said, “And it [mindfulness] helps my students for sure.” According to Subject 8,

I started to apply it [mindfulness] in the classroom when I realized that the kids were out of control, or they felt they were out of control. . . . And if I put them in the right frame of mind, they’re much easier to deal with them. . . . That’s where I find the mindfulness being very helpful.

Subject 11 stated,

I found it [mindfulness] especially helpful with my students who are also in that state of anxiety because when a teacher is anxious, the people that were around become anxious. . . . As a teacher, and when we bring our classes into mindfulness with us, it really does help.

Subject 14 said, “I have helped students center themselves and get grounded. . . . All those things can really help.”

### **Data Analysis for Research Question 2**

Research Question 2 asked, “What are the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress?” Qualitative data in the form of answers to interview questions were used to investigate the answer to Research Question 2. Two major themes were developed following analysis using NVivo on the 15 interviews conducted: external sensory practices to reduce perceived stress and internal mindset practices to reduce perceived stress.

**External sensory practices to reduce perceived stress.** External sensory practices to reduce perceived stress were the most frequently used theme ( $r = 15, f = 127$ ) and are defined as mindfulness practices or techniques that involve engagement of the senses to external stimulation and are not dealing primarily with internal cognitive techniques. Four subthemes were identified by frequency as depicted in Table 6, which identifies the subthemes and shows the distribution of frequencies and respondents represented by subtheme ordered by frequency.

***Breathing mindfulness practices.*** Breathing mindfulness practices were the most commonly used mindfulness practice ( $r = 13, f = 50$ ). An example from one of the interviews came from Subject 1, “When I am stressed, I use breathing practices, for sure.” Breathing was used by most teachers and was a mindfulness technique that could be employed in the classroom. Subject 5 stated, “Often I will have my whole class actually take a deep breath with me.” Subject 6 said, “[I use] breathing breaks within every class I teach.” Four teachers stated that breathing was the first mindfulness practice

they use. Subject 1 said, “The first thing I do is breathe.” Subject 7 said, “It starts with breathing.” Subject 8 stated, “I do my breathing exercises.” Subject 10 said, “The first thing I do is breathe.”

Table 6

*External Sensory Mindfulness Practices Themes, Subthemes, and Frequencies Distribution*

Themes	Subthemes	Respondents	Frequency
External sensory practices to reduce perceived stress		15	127
	Breathing mindfulness practices	13	50
	Auditory mindfulness practices	9	36
	Visual mindfulness practices	7	22
	Other sensory practices	9	19

Breathing mindfulness practices were described in several ways. Subject 1 used a technique called belly breathing. Subject 2 said, “It’s [breathing] naturally or taking deep breaths.” Subjects 4, 5, and 11 also indicated that they use a deep breathing exercise. The remaining eight teachers who use breathing mindfulness practices described this technique as just breathing. Subject 7 added in “take some breaths . . . count to 10.”

***Auditory mindfulness practices.*** Auditory mindfulness practices were the second most commonly used mindfulness practice ( $r = 9, f = 36$ ). An example of an auditory mindfulness practice came from Subject 2 who strikes a gong and listens to the sound dissipate. Subjects 2, 5, 6, 8, and 14 use music as part of their mindfulness practice. Subject 8 stated, “After a pretty stressful day with the students, sometimes I just have to

turn on music and just close my eyes, and breathe.” Subjects 2, 10, and 11 use silence or the absence of noise as one of their mindfulness practices.

**Visual mindfulness practices.** Visual mindfulness practices were the third most commonly used mindfulness practice ( $r = 7, f = 22$ ). An example of a visual mindfulness practice came from Subject 5: “For me to be able to put something on my screen that will help take me to a different place or to reset my mind.” Subject 1 stated, “Taking a break from wherever you are and looking around and like what’s something I could see.” Subject 15 said, “I like to use visualization sometimes. . . . I have my cat here, and my cat is nice and calming. So sometimes some of those visualizing strategies will be about a cat.”

**Other sensory mindfulness practices.** Other sensory mindfulness practices were the fourth most common mindfulness practice ( $r = 9, f = 10$ ). An example of other sensory mindfulness practices came from Subject 11: “I do have a fidget with me. And fidgets are really great. And I have found that if I keep my hands active, I can calm myself down quite a bit.” Subject 2 stated, “I focus on the temperature of the air.” Subject 3 said, “Doing a body scan, noticing different things . . . rubbing different parts of your body to bring you back into your senses, into the present moment.” Subject 4 also uses body scans:

Starting with my toes, like focusing on relaxing my toes, then to the next part of my body, and my legs. Sometimes I don’t realize that I have tension that I’m carrying, until I focus on specific areas of my body.

**Internal sensory practices to reduce perceived stress.** Internal sensory practices to reduce perceived stress were the second most frequent theme ( $r = 15, f = 77$ )

and are defined as mindfulness practices or techniques that involve mindset or internal cognitive awareness of internal processes and do not deal primarily with external sensory stimulation. Four subthemes were identified by frequency as depicted in Table 7. Table 7 identifies the subthemes and shows the distribution of frequencies and subject participants represented by subtheme ordered by frequency.

Table 7

*Internal Mindset Mindfulness Practices Themes, Subthemes, and Frequencies Distribution*

Themes	Subthemes	Participants	Frequency
Internal mindset practices to reduce perceived stress		15	77
	Yoga practices	6	24
	Centering mindfulness practices	8	22
	Being present in the moment	7	20
	Meditation practices	5	11

***Yoga practices.*** Yoga practices were identified by six subjects as one of their mindfulness practices and were the most frequently referenced internal sensory practice ( $r = 6, f = 24$ ). Four of those teachers teach yoga. Three of those teachers teach yoga to their students.

***Centering mindfulness practices.*** Centering mindfulness practices were identified by eight subjects and were the second most frequently referenced internal sensory practice ( $r = 8, f = 22$ ). Being centered is defined as being able to focus on a point inside yourself that gives you a sense of balance (Raab, 2017). Subjects 2, 7, 8, 9,

10, 11, 12, and 14 all stated that they use centering as a way of reducing their perceived stress.

*Being present mindfulness practices.* Being present mindfulness practices were identified by seven subjects and were the third most frequently referenced internal sensory practice ( $r = 7, f = 20$ ). Being present is described as focusing on the here and now without the preoccupation of memories or future thoughts and plans (Black, 2010). An example of being present came from Subject 10 when asked how she dealt with stress using mindfulness, “Oh my gosh, I was able to be present, not thinking about anything else, but being very present in the moment. . . . I love it.” Subject 2 stated, “It helps to be present, and mindfulness techniques can help with that.”

*Meditation mindfulness practices.* Meditation mindfulness practices were identified by five subjects and were the fourth most frequently referenced internal sensory practice ( $r = 5, f = 11$ ). An example of how meditation is used as a mindfulness practice came from Subject 4: “It starts with meditation and quieting and looking inward.” Subject 7 stated, “I started learning how to meditate.”

### **Summary of Findings**

This chapter included the study’s purpose, research question, methodology, population and sample, and a summary of both quantitative and qualitative data collected from 15 study participants. To collect the quantitative data, each participant answered a 10-question survey designed to give a view of how stress was perceived in the previous 30 days when focusing on their role as a schoolteacher. To collect the qualitative data each participant responded to interview questions designed to find how mindfulness practices were used to deal with perceived stress.

The 15 participants were all veteran teachers, meaning they have taught for a minimum of 3 years, who have used mindfulness practices for at least 1 year. Upon qualifying, a participant completed the PSS online and then was interviewed via Zoom. The researcher recorded the 15 subjects using the Zoom application and transcribed the interviews using the Otter.ai program. Each transcription was reviewed for accuracy of the conversation by the researcher.

This study endeavored to answer the research questions. The first was to ascertain, “To what extent do mindfulness practices impact veteran teacher perceived stress?” Both quantitative and qualitative data were used to determine the answer to this question.

The quantitative data from the PSS were analyzed by the researcher and revealed that though participants felt upset because of something that happened unexpectedly ( $M = 62\%$ ) and angered because of things that were outside their control ( $M = 72\%$ ), they also felt they were on top of things ( $M = 46\%$ ) and that they could cope with all the things they had to do ( $M = 82\%$ ). The results also showed that although participants felt they were unable to control the important things in their life ( $M = 58\%$ ), they were able to control the irritations in their life ( $M = 82\%$ ). The findings also showed that though the participants felt difficulties were piling up so high that could not overcome ( $M = 46\%$ ), they also felt things were going their way ( $M = 72\%$ ). Finally, the survey results showed that even though the participants felt nervous and stressed ( $M = 62\%$ ), they felt confident in their ability to handle their personal problems ( $M = 90\%$ ).

The analysis of the qualitative data that came from interviewing the 15 participants revealed that the teachers viewed the effectiveness of their mindfulness



techniques from three common themes with a greater than 50% agreement among the respondents. Those themes were universal effects (87%, 13 of 15), specific effects (60%, nine of 15), and effects on others (54%, eight of 15). One of the strongest statements came from Subject 8 who stated, “Mindfulness probably saved me.”

The second research question that this study addressed was “What are the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress?” Qualitative data from the 15 interviews of the teachers revealed two major themes: external sensory mindfulness practices ( $r = 15, f = 127$ ) and internal sensory mindfulness practices ( $r = 13, f = 50$ ). External sensory mindfulness practices were further divided into four subthemes: breathing ( $r = 13, f = 50$ ), auditory ( $r = 9, f = 36$ ), visual ( $r = 7, f = 22$ ), and other sensory ( $r = 9, f = 19$ ) mindfulness practices. The strongest statement in support of an external sensory mindfulness practice came from Subject 1 who stated, “When I am stressed, I use breathing practices for sure.” Internal sensory mindfulness practices were further divided into four subthemes: yoga ( $r = 6, f = 24$ ), centering ( $r = 8, f = 22$ ), being present ( $r = 7, f = 20$ ), and meditation ( $r = 5, f = 11$ ) mindfulness practices. Chapter V examines in more detail the data collected in this study and provides analysis of the major findings.

## CHAPTER V: FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

### **Overview**

Chapter V starts with an overview of the research study's purpose statement, research questions, methodology, population, and sample. The chapter then provides a summary of the major findings, unexpected findings, and conclusions. This chapter goes on to offer implications for action. Furthermore, the researcher offers recommendations for further research and concludes this chapter with remarks and reflections garnered from this study.

### **Purpose Statement**

The purpose of this mixed methods study was to measure and describe the extent to which mindfulness practices impact veteran teacher perceived stress. In addition, it was the purpose of the study to capture the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress.

### **Research Questions**

1. To what extent do mindfulness practices impact veteran teacher perceived stress?
2. What are the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress?

### **Methodology, Population, and Sample**

This study used a mixed methods study research methodology. Data were collected from 15 teachers in the form of answers to the quantitative survey Perceived Stress Scale (PSS) and interviews to gather their lived experiences. The findings from the 10-question PSS and interviews of veteran teachers who have used mindfulness for at least 1 year were analyzed with the objective of detailing specific mindfulness techniques

that have helped to reduce their perceived stress. This analysis endeavored to find common themes and specific techniques that were effective at reducing the perceived stress of the veteran teachers who participated in this study. The data collected are organized by themes to assist in identification and understanding of mindfulness techniques used by the 15 veteran teachers at various locations across California and Washington.

This study sought to collect the lived experiences of veteran teachers who have used mindfulness practices for at least 1 year. The researcher began by identifying potential subjects who indicated they were both veteran teachers and mindfulness practitioners. An attempt was made to connect with those teachers and upon connecting, determine whether they were interested in participating in this study. Teachers were then qualified for participation and provided the opportunity to share their awareness of their perceived stress. This study then captured the mindfulness techniques used and described the effect those techniques had on the teachers who were selected to participate. The intention of this study was to learn from those veteran teachers their specific mindfulness techniques that might be successfully replicated for all schoolteachers during times of stress.

## **Major Findings**

### **Major Finding 1: Veteran Teachers Were Affected by Stressors**

Research Question 1 asked, “To what extent do mindfulness practices impact veteran teacher perceived stress?” This first major finding focused on what the data revealed concerning veteran teachers’ perceived stress. The results in Chapter IV from the PSS survey of the 15 research subjects on a Likert 5-point scale showed that veteran

teachers are subjected to stressful situations that cause them to feel angry ( $M = 3.6$ ), upset ( $M = 3.1$ ), nervous and stressed ( $M = 3.1$ ). To further understand these findings, consider that seven out of 15 respondents sometimes felt angered, seven respondents fairly often felt angered, and one respondent often felt angered. As to the feeling of being upset because of something that happened unexpectedly, nine out of 15 respondents sometimes felt upset, one respondent fairly often felt upset, two respondents very often felt upset, and only two respondents almost never felt upset. As to the feeling of being nervous and stressed, 11 of 15 respondents sometimes felt nervous and stressed, two respondents very often felt nervous and stressed, and only two almost never felt nervous and stressed. These findings are in keeping with the research that shows teaching to be one of the most stressful professions (Greenberg et al., 2016). When teachers remain in their profession, the stress they face not only affects their psychological and emotional well-being, but it also affects their ability to teach effectively (Flook et al., 2013).

### **Major Finding 2: Teachers Felt Mindfulness Practices Have Helped Them Deal With Their Perceived Stress**

Research Question 1 asked, “To what extent do mindfulness practices impact veteran teacher perceived stress?” First, for this to be a valid question to address, the assumption had to be made that veteran teachers were affected by stressors that needed some method of mitigation. Major Finding 1 addressed this point. Second, there had to be evidence that teachers who used mindfulness as the method of mitigation, found it to be effective at reducing their perceived stress. The second major finding addressed the second point and examined the data concerning the issue of whether mindfulness practices helped veteran teachers to deal with their perceived stress. The results from the

PSS showed that these veteran teachers who have used mindfulness for at least 1 year state that by using mindfulness practices they felt confident in their abilities to handle problems ( $M = 4.5$ ), and that they could cope ( $M = 4.1$ ). They also felt by using mindfulness practices they could control the irritations in their life ( $M = 4.1$ ). These findings are further understood when considering that six out of 15 respondents felt confident fairly often and eight respondents felt confident very often because of their use of mindfulness practices. Of the 15 respondents, one only sometimes felt confident in the ability to control the important things in life. This is in keeping with the research that indicates teacher professional development programs that foster the well-being and social-emotional skills of teachers have been shown to “provide optimal emotional and instructional support to their students” (Jennings et al., 2011, p. 37). One such program is the implementation of mindfulness practices to develop teacher self-efficacy (Jennings, 2014). The benefits of mindfulness have been documented across a wide range of topics to include reducing stress and anxiety (Iberlin & Ruyle, 2017).

### **Major Finding 3: Breathing Was the Most Often Used Mindfulness Practices to Reduce Perceived Stress**

Research Question 2 asked to identify, “What are the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress?” The data gathered from interviews with 15 veteran teachers indicated that the number one practice used to reduce perceived veteran teacher stress was the practice of mindful breathing. Breathing was used by 13 respondents with a frequency of 127. This is in keeping with the research that showed techniques to be most effective in reducing feelings of stress included breathing (Austin et al., 2005). Researchers Herman and Reinke (2015) found

that individuals who were experiencing stress could use techniques such as breathing to release feelings of tension.

#### **Major Finding 4: External Sensory Mindfulness Practices Were Used to Reduce Perceived Stress**

Research Question 2 asked, “What are the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress?” The data gathered from interviews with 15 veteran teachers indicated that in addition to mindfulness breathing practices, other external sensory mindfulness practices such as auditory, visual, and other sensory experiences were used to reduce perceived stress. External sensory mindfulness practices were used by all 15 respondents with a frequency of 127 to reduce perceived stress. The subtheme of auditory mindfulness practices was used by nine of the 15 respondents with a frequency of 36. An example of auditory practices is listening and focusing on a chime or music. The subtheme of visual practices was used by seven of the 15 respondents with a frequency of 22. An example of visual practices is watching a calming video on a TV monitor. The subtheme of other sensory mindfulness practices was used by nine of the 15 respondents with a frequency of 19. An example of other sensory experiences is the use of a body scan.

These practices were described in Jennings’s (2015) book *Mindfulness for Teachers: Simple Skills for Peace and Productivity in the Classroom*, which laid out the case for the use of mindfulness practices by teachers. Her Chapter 6 on classroom dynamics is rife with mindfulness techniques with no empirical and only ancillary evidence of efficacy. This study offers data to support these external sensory mindfulness practices.

## **Major Finding 5: Internal Sensory Mindset Mindfulness Practices Were Used to Reduce Perceived Stress**

Research Question 2 asked, “What are the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress?” The data gathered from interviews with 15 veteran teachers indicated that in addition to breathing mindfulness practices and external sensory mindfulness practices, internal sensory mindset mindfulness practices including yoga, centering, being present in the moment, and meditation were used to reduce perceived stress. All 15 study participants used some type of internal mindset mindfulness practice with a frequency of 77 to reduce perceived stress. Yoga as a mindfulness practice to reduce perceived stress was used by six of the 15 respondents with a frequency of 24. Centering mindfulness practices to reduce perceived stress was used by eight of the 15 respondents with a frequency of 22. Being present in the moment as a mindfulness practice to reduce stress was used by seven of the 15 respondents with a frequency of 20. Meditation as a mindfulness practice to reduce perceived stress was used by five of the 15 respondents with a frequency of 11. Yoga and meditation are not exclusive to mindfulness and can be practiced independent of mindfulness. It was the focus by the respondents of using yoga and meditation techniques to focus on the present nonjudgmentally that made their use a mindfulness practice for the purpose of this study. These mindfulness techniques are foundational and discussed in Salgado’s (2016) work *Real World Mindfulness for Beginners*.

## **Unexpected Findings**

### **Unexpected Finding 1: Veteran Teachers Self-Trained on Mindfulness to Reduce Their Perceived Stress**

An unexpected finding was the number of veteran teachers who were self-taught mindfulness rather than through a formal school program. One of the interview questions to the 15 veteran teachers was “Would you please share your personal and professional experiences with mindfulness training”? This question was asked to establish the training methodology used by the subjects with an expectation that they received some form of mindfulness training through their school or school district. However, the data revealed that 12 of the 15 subjects were self-taught. Of the remaining three subjects, two stated they had a brief introduction to mindfulness presented in school district training that enticed them to go on and learn about mindfulness on their own. The one remaining teacher was the only subject who participated in a school-district led formal multi-week mindfulness training program.

### **Unexpected Finding 2: The Stress Associated With the 2020 COVID Pandemic Was Reduced Using Mindfulness Techniques**

When this study began, no one could have predicted that the world would change in the spring of 2020 with the confirmation of a global pandemic caused by what became known as the COVID-19 virus. Within weeks of the outbreak, schools were shut down and students and teachers were sent home to wait out the spread, and hopefully, resolution of the disease. The stress that was placed on teachers was perhaps the most they had experienced since their beginning years of teaching. The first three of 15 interviews were conducted prior to the ending of the 2019–2020 school year in the spring



of 2020. The remaining 12 interviews were post-school closures when uncertainty and stress were at their highest. Despite this increased stress, the results of the PSS did not show a marked difference between the first three surveys and the remaining 12. Several teachers commented during their interviews that their mindfulness practices helped them to deal with the uncertainty and stress of the pandemic.

### **Conclusions**

This study focused on the lived experiences of veteran teachers who used mindfulness practices for at least 1 year to reduce their perceived stress in their teaching profession. The two research questions focused on what extent mindfulness practices had on veteran teacher perceived stress and what mindfulness practices were effective at reducing that stress. The findings led to five conclusions that are addressed in implications with recommendations for action.

#### **Conclusion 1: Veteran Teachers Will Continue to be Affected by Stressors**

The results of the PSS and interviews with the 15 participants of the study showed that stress will continue to be an issue for veteran teachers. Veteran teachers face different challenges than new teachers, mainly because they find themselves unsure of how to deal with new innovations and ever-changing standardized tests (Clement, 2017). Classroom management is ranked among the top teacher stressors, and dealing with disruptive students' behavior is a prime contributing factor to teacher burnout (Evers et al., 2004; Pines, 2002).

Teachers referred to the stress from the difficulty of teaching during the COVID-19 pandemic while schools were shut down. The stress veteran teachers will continue to have includes having to plan for student learning loss that occurred over that time. This

could add stress to already overworked teachers, and those teachers will need to manage their stress in appropriate ways. Teachers will benefit from practices that help to manage that stress.

Teachers will also need to address the physical and emotional damage that might occur when stress is not addressed. Teachers will need to incorporate the use of some strategy that will address these future issues. The teachers in this study indicated that they could engage mindfulness techniques and strategies when they felt that their perceived stressors from work were overwhelming. When stress is managed, teachers are more productive at their jobs.

### **Conclusion 2: Mindfulness Practices Will Reduce Veteran Teacher Perceived Stress**

Mindfulness has been studied for the past 4 decades in America for its effectiveness at reducing stress (Bishop, 2002; Brown & Ryan, 2003, 2004; Brown et al., 2007). The findings of this study prove that mindfulness practices are effective at reducing perceived stress in veteran teachers. Even though the subjects of this study indicated that they felt upset, angered, nervous, and stressed, by using mindfulness practices they felt confident in their ability to handle their problems. They also found that they could cope with all the things that they had to do. Greenberg et al. (2016) suggested a program that has proven to be useful in helping teachers manage their well-being: mindfulness stress management. This study confirms that research with veteran teachers. Teachers who engaged in mindful strategies knew that they would be able to handle their perceived stress by using such techniques because they had used them successfully in their lived experiences.

### **Conclusion 3: Teachers Who Use Mindfulness Breathing Will Reduce Stress**

Mindfulness breathing was the most frequently cited mindfulness practice by 13 of the 15 study participants to reduce their perceived stress. Whether it is because no materials are needed or because breathing can be addressed anywhere, teachers who use mindfulness use breathing techniques as one of their leading mindfulness strategies. This can be especially helpful and very efficient in dealing with stress quickly. Several teachers in this study stated that the first thing they do when confronted with stress is breathe. When stress is dealt with quickly, teachers can be more proficient at handling their work duties. In addition to helping the teachers deal with stress, Zenner et al. (2014) found that the benefits of mindfulness have been documented across a wide range of topics to include reducing stress and anxiety (Iberlin & Ruyle, 2017). Teachers in this study proved that point when they asked students to breathe with them.

### **Conclusion 4: Other Mindfulness Practices Such as External and Internal Sensory Techniques Will Reduce Veteran Teacher Perceived Stress**

The reduction of stress is a vitally important task that teachers need to address. It assists not only with their quality of life but also with their ability to deliver effective instruction to students. The benefits of mindfulness have been documented across a wide range of topics to include reducing stress and anxiety (Iberlin & Ruyle, 2017). When teachers have managed their own stressors, they can be more efficient in the duties of their daily work. Both external and internal sensory techniques will reduce veteran teacher perceived stress when used regularly as needed over the course of the school year. This will allow teachers to conduct their duties in a more proficient manner. Mindfulness programs were developed to train teachers on how to use mindfulness

practices to reduce their stress (Jennings, 2015; Jennings et al., 2017; Jennings & Greenberg, 2009).

### **Conclusion 5: Teachers Who Choose to Teach Themselves Mindfulness Practices Will Reduce Their Perceived Stress**

Although there are certified professionals and programs that can be utilized by school districts and teacher to learn mindfulness practices, this study has proven that teachers can teach themselves how to reduce their perceived stress using mindfulness. Those teachers who are proactive in wanting to manage their stress using mindfulness practices will experience the ability to be more productive at their jobs. Teachers consistently rank among the top stressful professions in America (Greenberg et al., 2016). Teachers can teach themselves how to use mindfulness practices. Many schools struggle to develop and maintain a support system of professional development for beginning or veteran teachers (Hargreaves & Fullan, 2012; Payne, 2008). However, school districts that offer mindfulness techniques as a priority for teachers' professional development can decrease the cost of stress on the teaching workforce.

### **Implications for Action**

This study concluded that veteran teachers would benefit from the use of mindfulness practices. This conclusion leads to four implications for action that can improve the lives of veteran teachers when implemented.

#### **Implication 1: School Districts Should Conduct Mindfulness Orientation Sessions**

School districts should provide an initial mindfulness practices orientation as one of the topics for the beginning of the year training to all teachers. Additional subsequent training could be conducted in a variety of methods with teachers who are interested in

learning more about these strategies. School districts that adopt this idea should track teachers through survey on their perception of the training and any subsequent mindfulness training that the teachers choose to participate in. School districts should make it a part of this program to offer confidentiality for those participating to prevent perception of mental health stigma that some may feel.

Of the 15 veteran teachers who participated in this study, 12 teachers taught themselves how to use mindfulness practices to reduce their perceived stress, which improved their quality of life and effectiveness as a teacher. Two more teachers were introduced to mindfulness through their school districts in an orientation session and upon learning how mindfulness practices could improve their reaction to stress, chose to teach themselves additional mindfulness practices that helped them to reduce their stress. The 15th teacher learned mindfulness from the school district in a formal program. School districts that see the benefits to having teachers use mindfulness to control the stressful situations in their profession, improving retention and teacher effectiveness, should offer an orientation on the use of mindfulness for stress reduction. This training could be conducted in one hour, citing studies and giving examples of how mindfulness practices help both new and veteran teachers deal with stress. Additionally, the school district should offer resources in the form of recommended training that teachers could do on their own should they feel a need for stress reduction techniques.

### **Implication 2: Mindfulness Breathing Practices Should Be Taught in School Districts**

School districts, at a minimum, should offer the mindfulness overview and provide the time and resources to teach their teachers the value and methodology of using

mindfulness breathing. A plan should be formed during the summer with a kick-off during the preservice days before the start of the school year with a keynote speaker who is an expert in the field of mindfulness. Each month, cohorts of staff members would continue with training and practice and reflect on their mindfulness practices journey, logging their results. The results should be monitored through anonymous surveying throughout the year to ensure confidentiality and to validate the efficacy of this practice. This training could be conducted via web-based learning with a mindfulness practitioner trainer so that teachers could engage in this training on their own during planning time or before/after school. The orientation to mindfulness practices should be conducted at the beginning of the school year, and the mindfulness breathing practice web-based training should be made available to all teachers immediately following the orientation.

Of the eight specific mindfulness practices cited by the 15 study participants, breathing mindfulness practices was the most effective with 13 respondents with a frequency of 50 occurrences during the interviews. This single technique rose to the top of the list of effective techniques because it was a foundational mindfulness technique that gave immediate stress release when used, even during a teaching moment in front of or with students.

### **Implication 3: School Districts Should Provide Time and Resources to Train Teachers on Other Mindfulness Practices**

School districts that have launched the initial training in mindfulness practices would provide a pathway for staff to become certified experts in mindfulness practices. Teachers who volunteer to become trainers could serve as ongoing support for staff members. Training the trainer of mindfulness experts could be accomplished through a

web-based mindfulness certification course available on the Internet. School districts could utilize this trained staff to train other teachers to use mindfulness. Teachers should be able to use the mindfulness training as one of their options for continuing education credits. School districts should track teachers who choose to pursue mindfulness training through confidential surveys to determine the efficacy of this program to justify the expenditure in time and money to conduct this training.

Mindfulness practices continue to stand up to the scrutiny of researchers and continue to prove effective at reducing stress and decreasing teacher burnout. With burnout caused by stress being cited by teachers as one of the factors that contributes to quitting the profession, school districts would be wise to find a way to expend the time and resources necessary to teach teacher mindfulness practices as part of teacher professional development.

**Implication 4: School Districts Must Evaluate the Effectiveness of Mindfulness Practices for the Reduction of Perceived Stress**

School districts will use a survey instrument that has been validated to measure and describe to what extent mindfulness practices have or have not reduced stress for new and veteran teachers. This survey would be deployed in August, October, March, and May of the school year. Each of the recommendations given contains an element of evaluation. School districts need to understand that the issue of stress and how one teacher finds stress easy to deal with while another finds stress too difficult to bear is a highly personal experience. Caution and understanding need to be at the forefront of any assessment process for the mindfulness training that a school district undergoes. This begins at the mindfulness orientation session when the stigma of mental health is

addressed, and teachers are encouraged to seek help without fear of public exposure or incrimination. When any training is conducted, teacher participants must be encouraged to be careful in disclosing any personal information they may regret later. Surveys that can be used to collect data should go through a third-party trainer to protect the identity of those completing the surveys. Only aggregate collected data should be shared from the third-party trainer to the school district. With proper orientation and respect for the anonymity of participants in stress reduction mindfulness training, school districts should be able to ascertain the viability of the program and justify the time and money that this program saves over the cost of hiring new teachers, lost work time, health issues, and poor teaching in their districts by teachers who otherwise would be negatively affected by stress.

### **Recommendations for Further Research**

The use of mindfulness practices for populations other than K-12 students and teachers entering the profession is an under researched topic. Additionally, there is a lack of depth of research into longitudinal studies on the efficacy of mindfulness practices. There are still gaps in the literature that can be filled by future studies on the use of mindfulness practices to reduce teacher stress.

#### **Recommendation 1. Teacher Perceived Stress During Year 2 of the COVID-19 Pandemic and Mindfulness as a Stress Reduction Practice**

It is recommended that a replication study be conducted to investigate the effectiveness of mindfulness practices on perceived teacher stress during the second year of the COVID-19 as this study only covered the beginning of year one. The second COVID-19 year added additional stress to teachers as schools were transitioning between



online and on-ground, partial and fulltime education delivery. The COVID-19 pandemic began after the bulk of this study was complete. Interviews with 12 of the 15 teachers occurred during the spring of 2020 when schools were closing because of the unknown outcome of the virus.

### **Recommendation 2: Social-Emotional Competence and Mindfulness as a Stress Reduction Practice**

It is recommended that a mixed methods study be conducted to correlate social-emotional competence with mindfulness as a stress reduction strategy. This study would be used to determine how the level of social-emotional competence, with or without mindfulness training, helps to reduce teacher perceived stress. The results of this study would reveal whether social-emotional competence, mindfulness, or both reduce perceived stress the most.

### **Recommendation 3: Effects of Mindfulness Practices on School Culture**

It is recommended that a mixed methods case study be conducted to determine the effect of mindfulness practices on a school's culture. The effectiveness of mindfulness to mitigate stress has received attention in research. The impact that teachers using mindfulness have on the overall school culture may be a more broadly appealing interest to school leadership to determine the efficacy of mindfulness training as well as justify the expenditure of resources to facilitate such training.

### **Recommendation 4: The Perception of Mindfulness Practices of People Not Using Mindfulness**

It is recommended that a qualitative case study be conducted to determine the effect that teachers using mindfulness have on parents, administrators, staff, and other

teachers not using mindfulness. This study would collect and examine artifacts, conduct observations, interview staff at staff meetings, and interview parents on information nights to determine the impact of teachers using mindfulness. The relationship between those teachers using mindfulness and those not using mindfulness would be explored.

### **Recommendation 5: Effectiveness of Mindfulness for Stress Reduction of Teachers by Length of Service**

It is recommended that a longitudinal study be conducted with school districts and teachers who have been trained in mindfulness practices and have implemented these practices for over a year. This study would have the goal of determining the correlation between length of time using mindfulness and its effectiveness for the reduction of teacher stress.

### **Concluding Remarks and Reflections**

When I began this study, I knew little about mindfulness. My passion is hypnosis, and I wanted to do my research on hypnosis in education. As I researched the ability to conduct research on hypnosis, it became increasingly clear that I would find it extremely difficult to gather the data. I was encouraged to switch my topic to mindfulness, which had a foothold in our education system and was more socially accepted. I began reading and learning about the use of mindfulness in education and was encouraged by what I discovered. I am an advisor and therapist by profession, and I found that mindfulness has become an accepted technique throughout the mental health industry for effective stress reduction.

As I continued my research into mindfulness, I found studies conducted in schools with both students and teachers. These studies focused on the effectiveness of

mindfulness to help with focus and stress. I found that the primary research with teachers was for new teachers or on how mindfulness impacted teachers measured soon after learning about mindfulness. I became increasingly interested in knowing whether more experienced teachers who had already learned coping methods to deal with the stress of their profession early in their career could benefit from the use of mindfulness practices. Additionally, I was curious to know what mindfulness techniques veteran teachers, those who had taught for at least 3 years, used after using mindfulness for at least a year to reduce their perceived stress.

This led me to focus on the two research questions. Initially, I believe I had two sources for subjects for my study and felt it would be an easy process of collecting the data needed to evaluate my research questions. When I was ready to begin collecting my data, both of those sources proved to be invalid. This caused me to reevaluate my methodology for identifying and collecting data. I found myself having to locate teachers who qualified for the study and reach out to them individually. This was a difficult process for me. I was thrilled each time I found another teacher willing to participate and devastated each time I was rejected. This began a long roller-coaster process of hits and misses. Eventually I collected enough teachers to have a viable study, and I moved on to the interview stage of collecting data. I found the process of interviewing teachers to be a wonderful experience. We are blessed to have many caring and compassionate teachers helping our students to learn and grow.

As I collected the data, I started to see emerging patterns and analysis of the data through the NVivo software confirmed my early assessment: Breathing was a nearly universal mindfulness technique, and the majority of the teachers I interviewed taught

themselves how to use mindfulness. The implication of these two perceptions was that school districts did not need to expend time and funding to train teachers how to use mindfulness; they just had to make teachers aware of the positive effect mindfulness practices had on their stress reduction and offer resources to allow teachers who need the help to learn on their own.

As I conclude my study, I can say I am grateful for the pivot from hypnosis to mindfulness. I now consider myself to be an expert in the subject and look forward to being an advocate of mindfulness in education as I continue my life's work. Mindfulness is an effective tool in reducing veteran teachers' perceived stress.

## REFERENCES

- Aguilar, E. (2018). Emotional resilience: The missing ingredient. *Educational Leadership, 75*(8), 24–30.
- American Institute of Stress. (2018). *Workplace stress*. Retrieved from <https://www.stress.org/workplace-stress/>
- American Psychological Association. (2011). *Stress in America*. Retrieved from <https://www.apa.org/news/press/releases/stress/2011/final-2011.pdf>
- American Psychological Association. (2017). *Stress in America*. Retrieved from <https://www.apa.org/news/press/releases/stress/2017/state-nation.pdf>
- Ansley, B. M., Houchins, D., & Varjas, K. (2016). Optimizing special educator wellness and job performance through stress management. *Teaching Exceptional Children, 48*(4), 176–185.
- Armstrong, P. A. (2017). Hearing the voices of teachers in the national reform movement. In T. T. Miranda & J. Herr (Eds.), *The value of academic discourse: Conversations that matter* (pp. 157–176). Lanham, MD: Rowman and Littlefield.
- Austin, V., Shah, S., & Muncer, S. (2005). Teacher stress and coping strategies used to reduce stress. *Occupational Therapy International, 12*(2), 63–80.  
<https://doi.org/10.1002/oti.16>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191–215. Retrieved from <https://www.uky.edu/~eushe2/Bandura/Bandura1977PR.pdf>

- Bannirchelvam, B., Bell, K. L., & Costello, S. (2017). A qualitative exploration of primary school students' experience and utilization of mindfulness. *Contemporary School Psychology, 21*(4), 304–316.
- Barbour, C. (2012). Using data to realign resources. *Principal Leadership, 13*(1), 24–29.
- Baum, A. (1990). Stress, intrusive imagery, and chronic distress. *Health Psychology, 9*(6), 653–675.
- Beese, J. A., & Martin, J. L. (2018). The bathroom case: Creating a supportive school environment for transgender and gender nonconforming students. *Journal of Cases in Educational Leadership, 21*(2), 65–76.
- Belfield, C. R., & Levin, H. M. (2015). *Privatizing educational choice: Consequences for parents, schools, and public policy*. New York, NY: Routledge.
- Benn, R., Akiva, T., Arel, S., & Roeser, R. W. (2012). Mindfulness training effects for parents and educators of children with special needs. *Developmental Psychology, 48*(5), 1476–1487.
- Bethany, M. K. (2016). *Managing anxiety through mindfulness meditation* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 10007631)
- Bishop, S. R. (2002). What do we really know about mindfulness-based stress reduction? *Psychosomatic Medicine, 64*, 71–84.
- Black, D. S. (2010). Mindfulness research guide: A new paradigm for managing empirical health information. *Mindfulness, 1*(3), 174–176. <https://doi.org/10.1007/s12671-010-0019-0>

- Black, D. S., & Fernando, R. (2014). Mindfulness training and classroom behavior among youth: A review of treatment efficacy. *Pediatrics, 124*(3), 532–541.
- Boyd, W. L., Crowson, R. L., & Mawhinney, H. M. (2015). *The politics of education and the new institutionalism: Reinventing the American school*. New York, NY: Routledge.
- Bressman, S., Winter, J. S., & Efron, S. E. (2018). Next generation mentoring: Supporting teachers beyond induction. *Teaching and Teacher Education, 75*, 162–170.
- Bridgeland, J., Bruce, M., & Hariharan, A. (2013). *The missing piece: A national teacher survey on how social and emotional learning can empower children and transform schools*. Retrieved from <https://casel.org/library/the-missing-piece-a-national-teacher-survey-on-how-social-and-emotional-learning-can-empower-children-and-transform-schools-2013/>
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*(4), 822–848.
- Brown, K. W., & Ryan, R. M. (2004). Perils and promise in defining and measuring mindfulness: Observations from experience. *Clinical Psychology: Science and Practice, 11*(3), 242–248.
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for salutary effects. *Psychological Inquiry, 18*(4), 211–237.

- Cahn, B. R., & Polich, J. (2006). Meditation state and traits: EEG, ERP, and neuroimaging studies. *Psychological Bulletins*, *132*(2), 180–211.  
<https://doi.org/10.1037/0033-2909.132.2.180>
- California Department of Education. (n.d.). DataQuest. Retrieved January 20, 2019 from <http://data1.cde.ca.gov/dataquest>
- California Department of Education. (2019). *Fingertip facts on education in California*. Retrieved March 4, 2019 from <https://www.cde.ca.gov/ds/sd/cb/cef/fingertipfacts.asp>
- Calvert, S. L., Appelbaum, M., Dodge, K. A., Graham, S., Hall, G. C. N., Hamby, S., . . . Hedges, L. V. (2017). The American Psychological Association Task Force assessment of violent video games: Science in the service of public interest. *American Psychologist*, *72*(2), 126–143.
- Centers for Disease Control and Prevention. (2016). Youth risk behavior surveillance—United States, 2015. *Morbidity and Mortality Weekly Report*, *65*(6), 1–174.  
<https://doi.org/10.15585/mmwr.ss6506a>
- Centers for Disease Control and Prevention. (2018). *Coping with stress*. Retrieved from [https://www.cdc.gov/violenceprevention/pub/coping\\_with\\_stress\\_tips.html](https://www.cdc.gov/violenceprevention/pub/coping_with_stress_tips.html)
- Chambers, R., Lo, B. C. Y., & Allen, N. B. (2008). The impact of intensive mindfulness training on attentional control, cognitive style, and affect. *Cognitive Therapy and Research*, *32*, 303–322.
- Chang, M. (2013). Toward a theoretical model to understand teacher emotions and teacher burnout in the context of student misbehavior: Appraisal, regulation and coping. *Motivation and Emotion*, *37*, 799–817.



- Cheung, W. M., Huang, Y., & Tsang, H. W. (2016). Improving sustainability of cognitive-behavioral therapy (CBT) by complementary and alternative medicine approaches (CAM) on reducing workplace stress of teachers. *Journal of Pain & Relief*. <https://doi.org/10.4172/2167-0846.S4-002>
- Clarke, B. L., Sheridan, S. M., & Woods, K. L. (2009). Elements of healthy school-family relationships. In S. Christenson, & A. Reschly (Eds.), *Handbook of family-school partnerships* (pp. 61–79). New York, NY: Routledge.
- Clement, M. (2017). Why combating teachers' stress is everyone's job. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 90(4), 135–138. <https://doi.org/10.1080/00098655.2017.1323519>
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385–396.
- Cohen, S., & Williamson, G. (1988). Perceived stress in a probability sample of the United States. In S. Spacapan & S. Oskamp (Eds.), *The social psychology of health* (pp. 31–67). Newbury Park, CA: Sage.
- Comstock, P. W. (2015). The politics of mindfulness. A response to “mindfulness, democracy, and education.” *Democracy & Education*, 23(2), 1–4.
- Corcoran, K. M., Farb, N., Anderson, A. & Segal, Z. V. (2010). Mindfulness and emotional regulation: Outcomes and possible mediating mechanisms. In A. M. Kring & D. M. Sloan (Eds.), *Emotional regulation and psychopathology: A transdiagnostic approach to etiology and treatment* (pp. 339–355). New York, NY: Guilford Press.

- Corry, T. H. H. (2009). *Factors affecting retention of veteran classroom teachers: A Q-method study*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3379878)
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- Cunningham, E. (2018, April). Great recession, great recovery? Trends from the current population survey. *Monthly Labor Review*, *141*(4), 1–27. <https://doi.org/10.21916/mlr.2018.10>
- Davidson, R., Dunne, J., Eccles, J., Engle, A., Greenberg, M., Jennings, P., . . . Vago, D. (2012). Contemplative practices and mental training: Prospects for American education. *Child Development Perspectives*, *6*(2), 146–153. <https://doi.org/10.1111/j.1750-8606.2012.00240.x>
- Davidson, R. J., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S. F., . . . Sheridan, J. F. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine*, *65*(4), 564–570. <https://doi.org/10.1097/01.psy.0000077505.67574.e3>
- de Haymes, M. V., Avrushin, A., & Coleman, D. (2018). Educating unaccompanied immigrant children in Chicago, Illinois: A case study. *Children and Youth Services Review*, *92*, 77–88. <https://doi.org/10.1016/j.childyouth.2018.03.046>
- Dicke, T., Elling, J., Schmeck, A., & Leutner, D. (2015). Reducing reality shock: The effects of classroom management skills training on beginning teachers. *Teaching and Teacher Education*, *48*, 1–12. <https://doi.org/10.1016/j.tate.2015.01.013>
- Doan, K., & Peters, M. (2009). Scratching the seven-year itch. *Principal*, *89*(1), 18–22.

- Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York, NY: Ballantine Books.
- Dworkin, A. G., & Tobe, P. F. (2014). The effects of standards-based school accountability on teacher burnout and trust relationships: A longitudinal analysis. In D. Van Maele, P. B. Forsyth, & M. Van Houtte (Eds.), *Trust and school life* (pp. 121–143). New York, NY: Springer Science Business Media. [https://doi.org/10.1007/978-94-017-8014-8\\_6](https://doi.org/10.1007/978-94-017-8014-8_6)
- Eros, J., (2011). The career cycle and the second stage of teaching: Implications for policy and professional development. *Arts Education Policy Review*, *112*(2), 65–70.
- Evers, W. J. G., Tomic, W., & Brouwers, A. (2004). Burnout among teachers: Students' and teachers' perceptions compared. *School Psychology International*, *25*(2), 131–148.
- Farmer, L. (2017). How to beat teacher burnout: With more education. *Education Digest*. Retrieved from <https://www.governing.com/topics/education/gov-stem-teachers-education.html>
- Fitchett, P. G., McCarthy, C. J., Lambert, R. G., & Boyle, L. (2018). An examination of US first-teachers' risk for occupational stress: Associations with professional preparation and occupational health. *Teachers and Teaching: Theory and Practice*, *24*(2), 99–118.
- Flannery, M. E. (2016, March 15). Survey: Number of future teachers reaches all-time low. *neaToday*. Retrieved from <http://neatoday.org/2016/03/15/future-teachers-at-all-time-low/>

- Flook, L., & Fuligni, A. J., (2008). Family and school spillover in adolescents' daily lives. *Child Development, 79*, 776–787.
- Flook, L., Goldberg, S. B., Pinger, L., Bonus, K., & Davidson, R. J. (2013). Mindfulness for teachers: A pilot study to assess effects on stress, burnout, and teaching efficacy. *Mind, Brain, and Education, 7*, 182–195. <https://doi.org/10.1111/mbe.12026>
- Flook, L. & Smalley, A. J. (2010). Effects of mindfulness awareness practices on executive functions in elementary school children. *Journal of Applied Psychology, 26*, 70–95.
- Friedman, A. A., (2000). Burnout in teachers: Shattered dreams of impeccable professional performance. *Journal of Clinical Psychology, 56*(5), 595–606.
- Galey, S. (2015). Education politics and policy: Emerging institutions, interests, and ideas. *Policy Studies Journal, 43*(S1), S12–S39.
- Gallup. (2014). *State of American schools*. Retrieved from <http://www.gallup.com/services/178709/state-America-schools-report.aspx>
- Goddard, R., O'Brien, P., & Goddard, M. (2006). Work environment predictors of beginning teacher burnout. *British Educational Research Journal, 32*(6), 857–874.
- Gold, Y. (1985). Does teacher burnout begin with student teaching? *Education, 105*, 254–257.
- Goldin, P. R., & Gross, J. J. (2010). Effects of mindfulness-based stress reduction (MBSR) on emotion regulation in social anxiety disorder. *Emotion, 10*(1), 83–91. <https://doi.org/10.1037/a0018441>

- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York, NY: Bantam Books.
- Gonzalez, A., Peters, M. L., Orange, A., & Grigsby, B. (2017). The influence of high-stakes testing on teacher self-efficacy and job-related stress. *Cambridge Journal of Education*, 47(4), 513–531. <https://doi.org/10.1080/0305764X.2016.1214237>
- Goodwin, B. (2012). Research says/New teachers ace three common challenges. *Educational Leadership*, 69(8), 84–85. Retrieved from <http://www.ascd.org/publications/educational-leadership/may12/vol69/num08/New-Teachers-Face-Three-Common-Challenges.aspx>
- Greenberg, M. T., Brown, J. L., & Abenavoli, R. M. (2016, September). *Teacher stress and health: Effects on teachers, students, and schools* (Issue Brief). Edna Bennett Pierce Prevention Research Center, Pennsylvania State University. Retrieved from <http://wpsudev2.vmhost.psu.edu/prc/uploads/content-images/Teacher-Brief-Final-rwjf430428.pdf>
- Greeson, J. M. (2009). Mindfulness research update: 2008. *Complementary Health Practice Review*, 14(1), 10–18. <https://doi.org/10.1177/1533210108329862>
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495–513.
- Hanh, T. N., & Weare, K. (2017). *Happy teachers change the world: A guide for cultivating mindfulness in education*. Berkeley, CA: Parallax Press.
- Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York, NY: Teachers College Press.

- Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school*. New York, NY: Teachers College Press.
- Haygeman, E. A. (2017). *An adaptation of the Mindful Schools curriculum for adolescents: Feasibility and preliminary effectiveness on stress, depression, and mindfulness of adolescents in an after-school setting* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 10271420)
- Herman, K. C., Hickmon-Rosa, J., & Reinke, W. M. (2018). Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated student outcomes. *Journal of Positive Behavior Interventions, 20*(2), 90–100. <https://doi.org/10.1177/1098300717732066>
- Herman, K. C., & Reinke, W. M. (2015). *Stress management for teachers: A proactive guide*. New York, NY: The Guildford Press.
- Hertel, R., & Johnson, M. (2013). How the traumatic experiences of students manifest in school settings. In E. Rossen & R. Hull (Eds.), *Supporting and educating traumatized students: a guide for school-based professionals* (pp. 27–44). New York, NY: Oxford University Press.
- Hoffman, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effects of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 78*(2), 169–183.
- Holzel, B. K., Ott, U., Gard, T., Hempel, H., Weygandt, M., Morgan, K., & Vaitl, D. (2008). Investigation of mindfulness meditation practitioners with voxel-base morphometry. *Social Cognitive and Affective Neuroscience, 3*(1), 55–61.

- Hursh, D. W. (2015). *The end of public schools: The corporate reform agenda to privatize education*. New York, NY: Routledge.
- Iberlin, J. M., & Ruyle, M. (2017). *Cultivating mindfulness in the classroom*. Bloomington, IN: Marzano Research.
- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38(3), 499–534.
- Ingersoll, R., Merrill, L., & Stuckey, D. (2014). *Seven trends: The transformation of the teaching force*. University of Pennsylvania, CPRE Research Report. Retrieved from [https://repository.upenn.edu/cpre\\_researchreports/79](https://repository.upenn.edu/cpre_researchreports/79)
- Ivancevich, J. M., Matteson, M. T., Freedman, S. M., & Phillips, J. S. (1990). Worksite stress management interventions. *American Psychologist*, 45, 252–261.
- Jackson, M. (2012). The pursuit of happiness: The social and scientific origins of Hans Selye's natural philosophy of life. *History of the Human Sciences*, 25(5), 13–29. <https://doi.org/10.1177/0952695112468526>
- Jacobs, S. J. & Blustein, D. L. (2008). Mindfulness as a coping mechanism for employment uncertainty. *Career Development Quarterly*, 57(2), 174–180.
- Jennings, P. A. (2011). Promoting teachers' social and emotional competencies to support performance and reduce burnout. In A. Cohan & A. Honigsfeld (Eds.), *Breaking the mold of pre-service and in-service teacher education: Innovative and successful practices for the 21st century* (pp. 133–144). New York, NY: Rowman and Littlefield.
- Jennings, P. (2014). Cultivating awareness and resilience in education [Video file]. Retrieved from <http://www.care4teachers.org>

- Jennings, P. (2015). *Mindfulness for teachers: Simple skills for peace and productivity in the classroom*. New York, NY: W. W. Norton & Company.
- Jennings, P. A., Brown, J. L., Frank, J. L., Doyle, S., Oh, Y., Davis, R., . . . Greenberg, M. T. (2017). Impacts of the CARE for teachers' program on teachers' social and emotional competence and classroom interactions. *Journal of Educational Psychology, 109*(7), 1010–1028. <https://doi.org/10.1037/edu0000187>.supp
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teachers social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 79*(1), 491–525.
- Jennings, P. A., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2011). Improving classroom learning environments by cultivating awareness and resilience in education (CARE): Results of two pilot studies. *Journal of Classroom Interaction, 46*(1), 37–48. <https://www.jstor.org/stable/23870550>
- Jha, A. P., Stanley, E. A., Kiyonaga, A., Wong, L., & Gelfand, L. (2010). Examining the protective effects of mindfulness on working memory capacity and affective experience. *Emotion, 10*(1), 54–64.
- Kabat-Zinn, J. (1994). *Wherever you go there you are: Mindfulness meditations in everyday life*. New York, NY: Hachette Books.
- Katz, D. A., Harris, A., Abenavoli, R., Greenberg, M. T., & Jennings, P. A. (2017). Educator's emotional regulation strategies and their physiological indicators of chronic stress over 1 year. *Stress and Health, 34*, 278–285.
- Keengwe, J. (Ed.). (2018). *Handbook of research on pedagogical models for next-generation teaching and learning*. Hershey, PA: IGI Global.



- Keng, S., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical Psychology Review, 31*, 1041–1056.
- Langer, E. J. (1989). *Mindfulness*. Reading, MA: Addison-Wesley.
- LaRock, B. (2014). *Mindfulness in K-12 education: Transforming students, schools, and educational leadership* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3582010)
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.
- Lundberg, U., & Cooper, G. L. (2011). *The science of occupational health: Stress, psychobiology, and the new world of work*. Chichester, United Kingdom: Wiley-Blackwell.
- Mandel, D. E. (2008). *Addicted to stress: A Woman's 7 step program to reclaim joy and spontaneity in life*. San Francisco, CA: Jossey-Bass.
- Marinell, W. H., & Coca, V. M. (2013). "Who stays and who leaves?" Findings from a three-part study of teacher turnover in NYC middle schools. Retrieved from <https://files.eric.ed.gov/fulltext/ED540818.pdf>
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*, 397–422.
- Mayer, J. D., & Salovey, P. (1997). *Emotional development and emotional intelligence: Educational implications*. New York, NY: Basic Books.

- McCarthy, C. J., Lambert, R. G., & Reiser, J. (2014). Vocational concerns of elementary teachers: Stress, job satisfaction, and occupational commitment. *Journal of Employment Counseling, 51*, 59–74.
- McKim, R. D. (2008). *Rumination as a mediator of the effects of mindfulness: Mindfulness based stress reduction (MBSR) with a heterogeneous community sample experiencing anxiety, depression, and/or chronic pain*. Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3290022)
- McMillan, J. H., & Schumacher, S. (2010). *Research in education: Evidence-based inquiry* (7th ed.). Upper Saddle River, NJ: Pearson.
- McRobbie, E. J. (2017). *Mindfulness in the professional lives of K-12 educators* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 10274927)
- MetLife. (2013). *The MetLife survey of the American teacher: Challenges for school leadership*. Retrieved from <https://www.metlife.com/content/dam/microsites/about/corporate-profile/MetLife-Teacher-Survey-2012.pdf>
- Mindful Schools. (2019). *Certified instructor directory*. Retrieved from <https://www.mindfulschools.org/resources/directory/>
- Mindful Staff. (2017, December 6). 10 mindfulness researchers you should know. Retrieved from [https://www.mindful.org/10-mindfulness-researchers-know/?utm\\_content=buffer86f91&utm\\_medium=social&utm\\_source=facebook.com&utm\\_campaign=buffer](https://www.mindful.org/10-mindfulness-researchers-know/?utm_content=buffer86f91&utm_medium=social&utm_source=facebook.com&utm_campaign=buffer)
- Moir, E. (2014). Phases of first-year teaching. *New Teacher Handbook*. Retrieved from <http://weac.org/articles/new-teacher-handbook/phases/>

- Moore, A., & Malinowski, P. (2009). Meditation, mindfulness and cognitive flexibility. *Consciousness and Cognition, 18*, 176–186.
- Morris, S. R. (2014). *Finding the space: A workbook that aims to reduce occupational stress through the use of mindfulness-based techniques* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3628650)
- Nixon, A. E., & Spector, P. E. (2014). The impact of technology on employee stress, health, and well-being. In M. D. Covert & L. F. Thompson (Eds.), *The psychology of workplace technology* (pp. 238–255). New York, NY: Routledge Taylor & Francis Group.
- Office of Superintendent of Public Instruction. (2016, September). *Hot Topic: Education facts* (Publication No. 16-0044). <https://www.k12.wa.us/sites/default/files/public/communications/hottopics/hottopic-educationfacts.pdf>
- Orsillo, S. M., & Roemer, L. (2011). *The mindful way through anxiety: Break free from chronic worry and reclaim your life*. New York, NY: Guilford Press.
- Ortner, C. N. M., Kilner, S. J., & Zelazo, P. D. (2007). *The happiness equation: Want nothing + do anything = have everything*. New York, NY: G. P. Putman's Sons.
- Ouellette, R. R., Frazier, S. L., Shernoff, E. S., Cappella, E., Mehta, T. G., Marinez-Lora, A., . . . Atkins, M. S. (2018). Teacher job stress and satisfaction in urban schools: Disentangling individual-, classroom-, and organizational-level influences. *Behavior Therapy, 49*(4), 494–508.
- Panksepp, J., & Biven, L. (2012). *The archaeology of mind: Neuroevolutionary origins of human emotions*. New York, NY: Norton.

- Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Los Angeles, CA: Sage.
- Payne, C. (2008). *So much reform, so little change*. Cambridge, MA: Harvard Education Press.
- Perfect, M. M., Turley, M. R., Carlson, J. S., Yohanna, J., & Saint Gilles. (2016). School-related outcomes of traumatic event exposure and traumatic stress symptoms in students: A systematic review of research from 1990 to 2015. *School Mental Health, 8*(1), 37–43.
- Pezalla, A. E., Pettigrew, J., & Miller-Day, M. (2012). Researching the researcher-as-instrument: An exercise in interviewer self-reflexivity. *Qualitative Research, 12*(2), 165–185.
- Phillips, O. (2015, March 30). Revolving door of teachers cost schools billions every year. *NPR Ed*. Retrieved from <https://www.npr.org/sections/ed/2015/03/30/395322012/the-hidden-costs-of-teacher-turnover>
- Pines, A. M. (2002). Teacher burnout: A psychodynamic existential perspective. *Teachers and Teaching, 8*(2), 121–140.
- Plecki, M., Elfers, A., & Van Windekens, A. (2017, May). *Examining beginning teacher retention and mobility in Washington state*. University of Washington, College of Education, Center for the Study of Teaching and Policy. [https://www.governor.wa.gov/sites/default/files/documents/BESTReportFinal\\_May\\_2017.pdf](https://www.governor.wa.gov/sites/default/files/documents/BESTReportFinal_May_2017.pdf)
- Prilleltensky, I., Neff, M., & Bessell, A. (2016). Teacher stress: What it is, why it's important, how it can be alleviated. *Theory Into Practice, 55*, 104–111.

- Primack, A. J., & Johnson, K. A. (2016). Student cyberbullying inside the digital schoolhouse gate: Toward a standard for determining where a “school” is. *First Amendment Studies*, 51(1), 30–48.
- Raab, D. (2017, May 23). Are you grounded? Centered? Or both? [Blog post]. Retrieved from <https://www.psychologytoday.com/us/blog/the-empowerment-diary/201705/are-you-grounded-centered-or-both>
- Ramel, W., Goldin, P. R., Carmona, P. E., & McQuaid, J. R. (2004). The effects of mindfulness meditation on cognitive processes and affect in patients with past depression. *Cognitive Therapy and Research*, 28, 433–455.
- Ravitch, D. (2016). *The death and life of the great American school system: How testing and choice are undermining education*. New York, NY: Basic Books.
- Reardon, M. S. (2016). *The effects of a brief mindfulness program on teacher stress*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 10242079)
- Rechtschaffen, D. J. (2014). *The way of mindful education: Cultivating well-being in teachers and students*. New York, NY: W. W. Norton & Company.
- Redding, C., & Smith, T. M. (2016). Easy in, easy out: Are alternative certified teachers turning over at increasing rates? *American Education Research Journal*, 53(4), 1086–1125. <https://doi.org/10.3102/0002831216653206>
- Richardson, K. M., & Rothstein, H. R. (2008). Effects of occupational stress management intervention programs: A meta-analysis. *Journal of Occupational Health Psychology*, 13(1), 69–93.

- Richardson, P. W., & Watt, H. M. G. (2018). Teacher professional identity and career motivation: A lifespan perspective. Eds. In P. A. Schutz, J. Hong, & D. C. Francis, *Research on teacher identity: Mapping challenges and innovations* (pp. 37–48). Cham, Switzerland: Springer International.
- Roberti, J. W., Harrington, L. N., & Storch, S. A. (2006). Further psychometric support for the 10-item version of the perceived stress scale. *Journal of College Counseling, 9*, 135–147.
- Roberts, C. M. (2010). *The dissertation journey: A practical and comprehensive guide to planning, writing, and defending your dissertation* (2nd ed.). Thousand Oaks, CA: Sage.
- Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, M., Wallace, L., Wilensky, R., . . . Harrison, J. (2013). Mindfulness training and reductions in teacher stress and burnout: Results from two randomized, wait-controlled field trials. *Journal of Educational Psychology, 105*(3), 787–804. <https://doi.org/10.1037/a0032093>
- Roeser, R. W., Skinner, E., Beers, J., & Jennings, P. A. (2012). Mindfulness training and teachers' professional development: An emerging area of research and practice. *Child Development Perspectives, 6*, 167–173.
- Rogers, B. (2012). *The essential guide to managing teacher stress*. Harlow, United Kingdom: Pearson.
- Roness, D. (2011). Still motivated? The motivation for teaching during the second year in the profession. *Teaching and Teacher Education, 27*(3), 628–638.

- Ross, T., Kena, G., Rathbun, A., KawalRamani, A., Zhang, J., Kristapovich, P., & Manning, E. (2012). *Higher education: Gaps in access and persistence study* (NCES 2012-046). Washington, DC: National Center for Education Statistics. Retrieved from <https://files.eric.ed.gov/fulltext/ED534691.pdf>
- Ryan, S. V., von der Embse, N. P., Pendergast, L. L., Saeki, E., Segool, N., & Schwing, S. (2017). Leaving the teaching profession: The role of teacher stress and educational accountability policies on turnover intent. *Teaching and Teacher Education, 66*, 1–11. <https://doi.org/10.1016/j.tate.2017.03.016>
- Saad, L. (2017, December 20). Eight in 10 Americans afflicted by stress. *Well-Being*. Retrieved from <https://news.gallup.com/poll/224336/eight-americans-afflicted-stress.aspx>
- Salgado, B. (2016). *Real world mindfulness for beginners*. New York, NY: Fall River Press.
- Salovey, P., & Mayer, J. D. (1995). *The experiment on self-awareness and handling stress well*. Washington, DC: American Psychological Stress.
- Saltman, K. J. (2015). *Failure of corporate school reform*. New York, NY: Routledge.
- Santos, C. E., Menjivar, C., VanDaalen, R. A., Kornienko, O., Updegraff, K. A., & Cruz, S. (2018). Awareness of Arizona's immigration law SB1070 predicts classroom behavioral problems among Latino youths during early adolescence. *Ethnic and Racial Studies, 41*(9), 1672–1690.
- Schanzenbach, D. W. (2014, February 18). *Does class size matter?* (Policy brief). Boulder, CO: National Education Policy Center. Retrieved from <http://nepc.colorado.edu/publication/does-class-size-matter>

- Schaufeli, W. B., Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(30), 293–315.
- Schonert-Reichl, K. A., & Lawlor, M. S. (2010). The effect of mindfulness-based programs on pre- and early adolescents' well-being and social and emotional competence. *Mindfulness*, 1(3), 137–151.
- Schwerdtfeger, A., Konermann, L., & Schonhofen, K. (2008). Self-efficacy as a health-protective resource in teachers? A biopsychological approach. *Health Psychology*, 27(3), 358–368.
- Selye, H. (1956). *The stress of life*. New York, NY: McGraw-Hill.
- Selye, H. (1973). The evolution of the stress concept: The originator of the concept traces its development from the discovery in 1936 of the alarm reaction to modern therapeutic applications of syntoxic and catatoxic hormones. *American Scientist*, 61(6), 692–699. Retrieved from <http://www.jstor.org/stable/27844072>
- Shapiro, S. L., Astin, J. A., Bishop, S. R., & Cordova, M. (2005). Mindfulness-based stress reduction for health care professionals: Results from a randomized trial. *International Journal of Stress Management*, 12(2), 164–176.
- Shapiro, S. L., Brown, K. W., & Biegel, G. M. (2007). Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapist in training. *Training and Education in Professional Psychology*, 1(2), 105–115. <https://doi.org/10.1037/1931-3918.1.2.105>



- Shelton, A. N., & Manning, A. N. (2018, April). *Protecting our youth: Gun control in schools*. Paper presented at the 2018 Pacific Undergraduate Research and Creativity Conference, Stockton, CA. Retrieved from <https://scholarlycommons.pacific.edu/purcc/2018/events/8/>
- Sherretz, C. E. (2011, Fall-Winter). Mindfulness in education: Case studies of mindfulness teachers and their teaching practices. *Journal of Thought*, 79–96.
- Siegel, D. J. (2007). *The mindful brain: Reflections and attunement in the cultivation of well-being*. New York, NY: Norton.
- Siegel, D. J. (2010). *The mindful therapist: A clinician's guide to mindsight and neural integration*. New York, NY: Norton.
- Siegel, D. J. (2013). *Positive psychology: Harnessing the power of happiness, person strength, and mindfulness*. Boston, MA: Harvard Health.
- Singer, J. (2012). *The teacher's ultimate stress mastery guide: 77 proven prescriptions to build your resilience*. New York, NY: Skyhorse.
- Siu, O. L. (2017). Stress management techniques in the workplace. In Cooper, C. L. & Leiter, M. P. (Eds.), *The Routledge companion to wellbeing at work* (pp. 284–297). New York, NY: Routledge.
- Slavich, G. M. (2016). Life stress and health: A review of conceptual issues and recent findings. *Teaching of Psychology*, 43(4), 346–355. <https://doi.org/10.1177/0098628316662768>
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016, September 15). A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S. Retrieved from <https://learningpolicyinstitute.org/product/coming-crisis-teaching>

- Tang, Y.-Y., Ma, Y., Wang, J., Fan, Y., Feng, S., Lu, Q., . . . Posner, M. I. (2007). Short-term meditation training improves attention and self-regulation. *Proceedings of the National Academy of Science*, *104*(43), 17152–17156. <https://doi.org/10.1073/pnas.0707678104>
- Taylor, J. M. (2015). Psychometric analysis of the ten-item perceived stress scale. *Psychological Assessment*, *27*(1), 90–101.
- Tobin, R. (2010). Descriptive case study, 288-289. In J. M. Albert, G. Durepos, & E. Wiebe (Eds.), *Encyclopedia of case study research*. Los Angeles, CA: Sage.
- Turgut, G. (2013). Educational reform and ethical use of research to inform readers. *Educational Forum*, *77*(3), 371–378.
- Van Droogenbroeck, F., Spruyt, B., & Vanroelen, C. (2014). Burnout among senior teachers: Investigating the role of workload and interpersonal relationships at work. *Teaching and Teacher Education*, *43*, 99–109. <https://doi.org/10.1016/j.tate.2014.07.005>
- von der Embse, N. P., Kilgus, S. P., Solomon, H. J., Bowler, M., & Curtiss, C. (2014). Initial development and factor structure of the Educator Test Stress Inventory. *Journal of Psychoeducational Assessment*, *33*(3), 223–237. <https://doi.org/10.1177/0734282914548329>
- Walker, J. M., & Dotger, B. H. (2012). Because wisdom can't be told: Using comparison of simulated parent-teacher conferences to assess teacher candidates' readiness for family-school partnership. *Journal of Teacher Education*, *63*(1), 62–75.

- Walker, S. D. (2017). *The effects of mindfulness training on teacher perception of stress and teaching self-efficacy*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 10757181)
- Watkins, W. (2015). *The assault on public education: Confronting the politics of corporate school reform*. New York, NY: Teacher College Press.
- Wayment, H. A., Wiist, B., Sullivan, B. M., & Warren, M. A. (2011). Doing and being: Mindfulness, health, and quiet ego, characteristics among Buddhist practitioners. *Journal of Happiness Studies*, 12(4), 575–589. <https://doi.org/10.1007/s10902-010-9218-6>
- Williams, M., Teasdale, J., Segal, Z., & Kabat-Zinn, J. (2007). *The mindful way through depression: Freeing yourself from chronic unhappiness*. New York, NY: Guilford Press.
- Wolever, R. Q, Bobinet, K. J., McCabe, K., Mackenzie, E. R., Fekete, E., Kusnick, C. A., & Baime, M. (2012). Effective and viable mind-body stress reduction in the workplace: A randomized controlled trial. *Journal of Occupational Health Psychology*, 17(2), 246–258. <https://doi.org/10.1037/a0027278>
- Zenner, C., Herrnleben-Kurz, S., & Walach, H. (2014). Mindfulness-based interventions in schools—A systematic review and meta-analysis. *Frontiers in Psychology*, 5, 1–20. <https://doi.org/10.3389/fpsyg.2014.00603>
- Zins, J. E., & Elias, M. J. (2006). Social and emotional learning. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III* (pp. 1–13). Bethesda, MD: National Association of School Psychologists.

## APPENDICES



Austin, V., Shah, S., & Muncer, S. (2005). Teacher stress and coping strategies used to reduce stress. <i>Occupational Therapy International</i> , 12(2), 63-80. <a href="https://doi.org/10.1002/oti.16">https://doi.org/10.1002/oti.16</a>						X					X							X	
Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. <i>Psychological Review</i> , 84(2), 191-215. Retrieved from <a href="https://www.uky.edu/~eushe2/Bandura/Bandura1977PR.pdf">https://www.uky.edu/~eushe2/Bandura/Bandura1977PR.pdf</a>													X						
Bannirchelvam, B., Bell, K. L., & Costello, S. (2017). A qualitative exploration of primary school students' experience and utilization of mindfulness. <i>Contemporary School Psychology</i> , 21(4), 304-316.																	X		X
Barbour, C. (2012). Using data to realign resources. <i>Principal Leadership</i> , 13(1), 24-29.						X													
Baum, A. (1990). Stress, intrusive imagery, and chronic distress. <i>Health Psychology</i> , 9(6), 653-675.	X																		
Beese, J. A., & Martin, J. L. (2018). The bathroom case: Creating a supportive school environment for transgender and gender nonconforming students. <i>Journal of Cases in Educational Leadership</i> , 21(2), 65-76.					X														
Belfield, C. R., & Levin, H. M. (2015). <i>Privatizing educational choice: Consequences for parents, schools, and public policy</i> . New York, NY: Routledge.					X														
Benn, R., Akiva, T., Arel, S., & Roeser, R. W. (2012). Mindfulness training effects for parents and educators of children with special needs. <i>Developmental Psychology</i> 48(5), 1476-1487.																	X		X
Bethany, M. K. (2016). <i>Managing anxiety through mindfulness meditation</i> (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 10007631)																	X		X
Bishop, S. R. (2002). What do we really know about mindfulness-based stress reduction? <i>Psychosomatic Medicine</i> , 64, 71-84.																	X		X
Black, D. S. (2010). Mindfulness research guide: A new paradigm for managing empirical health information. <i>Mindfulness</i> , 1(3), 174-176. <a href="https://doi.org/10.1007/s12671-010-0019-0">https://doi.org/10.1007/s12671-010-0019-0</a>														X	X				X















Haygeman, E. A. (2017). <i>An adaptation of the Mindful Schools curriculum for adolescents: Feasibility and preliminary effectiveness on stress, depression, and mindfulness of adolescents in an after-school setting</i> (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 10271420)																X	X								
Herman, K. C., Hickmon-Rosa, J., & Reinke, W. M. (2018). Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated student outcomes. <i>Journal of Positive Behavior Interventions</i> , 20(2), 90-100. <a href="https://doi.org/10.1177/1098300717732066">https://doi.org/10.1177/1098300717732066</a>						X															X				
Herman, K. C., & Reinke, W. M. (2015). <i>Stress management for teachers: A proactive guide</i> . New York, NY: The Guildford Press.												X													
Hertel, R., & Johnson, M. (2013). How the traumatic experiences of students manifest in school settings. In E. Rossen & R. Hull (Eds.), <i>Supporting and educating traumatized students: a guide for school-based professionals</i> (pp. 27-44). New York, NY: Oxford University Press.						X																			
Hoffman, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effects of mindfulness-based therapy on anxiety and depression: A meta-analytic review. <i>Journal of Consulting and Clinical Psychology</i> , 78(2), 169-183.																						X			
Holzel, B. K., Ott, U., Gard, T., Hempel, H., Weygandt, M., Morgan, K., & Vaitl, D. (2008). Investigation of mindfulness meditation practitioners with voxel-base morphometry. <i>Social Cognitive and Affective Neuroscience</i> , 3(1), 55-61.																						X			
Hursh, D. W. (2015). <i>The end of public schools: The corporate reform agenda to privatize education</i> . New York, NY: Routledge.						X																			
Iberlin, J. M., & Ruyle, M. (2017). <i>Cultivating mindfulness in the classroom</i> . Bloomington, IN: Marzano Research.																						X			X
Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. <i>American Educational Research Journal</i> , 38(3), 499-534.						X																X			

Ingersoll, R., Merrill, L., & Stuckey, D. (2014). <i>Seven trends: The transformation of the teaching force</i> . University of Pennsylvania, CPRE Research Report. Retrieved from <a href="https://repository.upenn.edu/cpre_researchreports/79">https://repository.upenn.edu/cpre_researchreports/79</a>				X	X			X										
Ivancevich, J. M., Matteson, M. T., Freedman, S. M., & Phillips, J. S. (1990). Worksite stress management interventions. <i>American Psychologist, 145</i> , 252-261.			X															
Jackson, M. (2012). The pursuit of happiness: The social and scientific origins of Hans Selye's natural philosophy of life. <i>History of the Human Sciences, 25</i> (5), 13-29. <a href="https://doi.org/10.1177/0952695112468526">https://doi.org/10.1177/0952695112468526</a>	X																	
Jacobs, S. J. & Blustein, D. L. (2008). Mindfulness as a coping mechanism for employment uncertainty. <i>Career Development Quarterly, 57</i> (2), 174-180.			X															
Jennings, P. A. (2011). Promoting teachers' social and emotional competencies to support performance and reduce burnout. In A. Cohan & A. Honigsfeld (Eds.), <i>Breaking the mold of pre-service and in-service teacher education: Innovative and successful practices for the 21st century</i> (pp. 133-144). New York, NY: Rowman and Littlefield.						X												
Jennings, P. (2014). Cultivating awareness and resilience in education [Video file]. Retrieved from <a href="http://www.care4teachers.org">http://www.care4teachers.org</a>												X						
Jennings, P. (2015). <i>Mindfulness for teachers: Simple skills for peace and productivity in the classroom</i> . New York, NY: W. W. Norton & Company.						X								X	X			
Jennings, P. A., Brown, J. L., Frank, J. L., Doyle, S., Oh, Y., Davis, R., . . . Greenberg, M. T. (2017). Impacts of the CARE for teachers' program on teachers' social and emotional competence and classroom interactions. <i>Journal of Educational Psychology, 109</i> (7), 1010-1028. <a href="https://doi.org/10.1037/edu0000187.supp">https://doi.org/10.1037/edu0000187.supp</a>						X					X				X			
Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teachers social and emotional competence in relation to student and classroom outcomes. <i>Review of Educational Research, 79</i> (1), 491-525.						X						X		X	X			





















Williams, M., Teasdale, J., Segal, Z., & Kabat-Zinn, J. (2007). <i>The mindful way through depression: Freeing yourself from chronic unhappiness</i> . New York, NY: Guilford Press.	X																		X	
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Zenner, C., Herrnleben-Kurz, S., & Walach, H. (2014). Mindfulness-based interventions in schools—A systematic review and meta-analysis. <i>Frontiers in Psychology, 5</i> , 1-20. <a href="https://doi.org/10.3389/fpsyg.2014.00603">https://doi.org/10.3389/fpsyg.2014.00603</a>																		X	X	
Zins, J. E., & Elias, M. J. (2006). Social and emotional learning. In G. G. Bear & K. M. Minke (Eds.), <i>Children's needs III</i> (pp. 1-13). Bethesda, MD: National Association of School Psychologists.													X							



## APPENDIX B

### Personal Demographics Questionnaire

#### Effective Mindfulness Practices for Reducing Veteran Teacher perceived stress

Note: The following demographic survey was emailed to participants via the researcher's Brandman University's email using Google Forms.

Thank you for taking the time to complete this survey. Your responses will contribute to the knowledge on mindfulness practices on veteran teacher perceived stress. Your participation in this survey is greatly appreciated and will be completely confidential.

1. Are you currently a public-school teacher teaching in a classroom?
  - Yes
  - No
  
2. Have you trained in Mindfulness practices?
  - Yes
  - No
  
3. How many years have you used, or been using mindfulness practices?
  - I Do not use mindfulness
  - Less than 1 year
  - 1 year or more
  
4. Have you used, or do you use mindfulness practices to reduce your stress as a teacher?
  - Yes
  - No
  
5. Have you used, or do you use mindfulness practices to reduce your stress in the classroom?
  - Yes
  - No
  
6. Would you be willing to participate in a 15- to 30-minute interview about your experiences with mindfulness practices on teacher perceived stress?
  - Yes
  - No

Thank you again for completing this survey. Once you submit your results, if you are selected, you will be sent a second survey called the Perceived Stress Scale. This instrument is only 10 multiple choice questions and will take less than 5-minutes.

If you are interested in receiving a copy of the aggregate data, data analysis, or a link to the electronic file once the manuscript has been electronically submitted to ProQuest database, please contact the researcher at xxxxx@xxxxx.xxx.

Thank you for your assistance in this important endeavor. Your responses will advance the scholarly knowledge of effective mindfulness practices for reducing veteran teacher perceived stress.

Sincerely,

Michael Brouillette, Brandman University

## APPENDIX C

### Perceived Stress Scale

Note: The following Perceived Stress Scale (PSS) instructions and questions were emailed to participants via the researcher's Brandman University's email using Survey Monkey.

Thank you for taking the time to complete this PSS survey. **IMPORTANT:** When you respond to the questions below, please focus on your experiences in your role as a teacher.

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 by circling how often you felt or thought a certain way.

1. In the last month, how often have you been upset because of something that happened unexpectedly?  
Never = 1, Almost Never = 2, Sometimes = 3, Fairly Often = 4, Very Often = 5
2. In the last month, how often have you felt that you were unable to control the important things in your life?  
Never = 1, Almost Never = 2, Sometimes = 3, Fairly Often = 4, Very Often = 5
3. In the last month, how often have you felt nervous and "stressed"?  
Never = 1, Almost Never = 2, Sometimes = 3, Fairly Often = 4, Very Often = 5
4. In the last month, how often have you felt confident about your ability to handle your personal problems?  
Never = 1, Almost Never = 2, Sometimes = 3, Fairly Often = 4, Very Often = 5
5. In the last month, how often have you felt that things were going your way?  
Never = 1, Almost Never = 2, Sometimes = 3, Fairly Often = 4, Very Often = 5
6. In the last month, how often have you found that you could not cope with all the things that you had to do?  
Never = 1, Almost Never = 2, Sometimes = 3, Fairly Often = 4, Very Often = 5
7. In the last month, how often have you been able to control irritations in your life?  
Never = 1, Almost Never = 2, Sometimes = 3, Fairly Often = 4, Very Often = 5
8. In the last month, how often have you felt that you were on top of things?  
Never = 1, Almost Never = 2, Sometimes = 3, Fairly Often = 4, Very Often = 5

9. In the last month, how often have you been angered because of things that were outside of your control?

Never = 1, Almost Never = 2, Sometimes = 3, Fairly Often = 4, Very Often = 5

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Never = 1, Almost Never = 2, Sometimes = 3, Fairly Often = 4, Very Often = 5

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385-396. doi:10.2307/2136404

## APPENDIX D

### **Veteran Teacher Interview Questions**

Effective Mindfulness Practices for Reducing Veteran Teacher perceived stress

#### Veteran Teacher Interview Questions

Thank you for taking the time for an interview for a study on effective mindfulness practices for reducing veteran teacher perceived stress. My name is Michael Brouillette and I am the primary researcher for this study. You have been chosen to for this interview because of your years of experience as a Pre-K - 12 teacher and experience with mindfulness.

The interview should take no more than 30 minutes of your valuable time. I will be taking notes during our interview, however, in order to accurately capture your comments, I would like your permission to record our session. Your responses will be transcribed verbatim for future reference.

All responses will be kept confidential. That means that only I and my dissertation committee members will see your responses. I guarantee that any information that you provide that is included in my dissertation will not identify you in any way. You are also free to pass on any question that I ask, and you can terminate the interview for any reason at any time.

Are you willing to participate in the interview?

Participants in this study who are interviewed will be given a unique identification number that is known only to the researcher. This will help to eliminate possible identification and bias with the answers to the interview questions.

I am assigning you the number X.

Thank you for previously submitting a Demographic Survey and submitted answers to the Perceived Stress Scale.

Do you have any questions before we begin?

Interview Questions:

How would you describe your stress as a schoolteacher prior to learning about mindfulness?

How would you assess the difference between the stress you experienced as a beginning teacher in your first three years of full-time teaching and the stress that you have experienced as a veteran teacher?

What are some of the stressors in your professional life as a teacher that you have had to contend with?

Would you please share your personal and professional experiences with mindfulness training?

To what extent has your mindfulness practices affected your teacher perceived stress?

Would you reflect on the most effective mindfulness practices that you have used to reduce your stress?

Please share any other comments that you may have concerning the topic of mindfulness practices reducing teacher perceived stress.

Thank you again for giving your time and sharing your insights for this important research.

If you are interested in receiving a copy of the aggregate data, data analysis, or a link to the electronic file once the manuscript has been electronically submitted to ProQuest database, please contact the researcher at xxxxx@xxxxx.xxx.

Thank you for your assistance in this important endeavor. Your responses will advance the scholarly knowledge of how mindfulness practices effect veteran teacher perceived stress.

Sincerely,

Michael Brouillette, Brandman University

APPENDIX E

**Veteran Teacher Interview Protocol Pilot**

Effective Mindfulness Practices for Reducing Veteran Teacher perceived stress

Veteran Teacher Interview Protocol Pilot

Veteran Teacher Expert Instructions: Thank you for agreeing to participate in validating interview questions that will be used to help identify effective mindfulness practices for reducing veteran teacher perceived stress. Please fill out the demographic data below for identification and to confirm your expertise as a veteran teacher. Should you choose to offer suggestions to improve the interview questions, please providing your contact information which will allow the researcher to contact you and make those revisions that you as the expert suggested. The researcher is looking for feedback from at least five experts. Your willingness to participate is voluntary and appreciated.

Please mark each question as “acceptable” if you believe the question is clear and understandable. If the question is not acceptable, please offer your suggestion to revise the question or to remove the question. When you have completed your input, please email to Michael Brouillette at xxxxx@xxxxx.xxx. Thank you in advance for your time, energy, and expertise.

**Expert’s Name** \_\_\_\_\_

**Years of experience as a Pre-K - 12 school teacher** \_\_\_\_\_

**Years of experience with mindfulness practices** \_\_\_\_\_

**Phone Number** \_\_\_\_\_ **Email** \_\_\_\_\_

**How would you prefer that I contact you if I have follow-up questions from your feedback:** Phone \_\_\_\_\_ Email \_\_\_\_\_

**Interview Protocol Prior to Interview**

Thank you for taking the time to provide feedback on interview questions for a study on effective mindfulness practices for reducing veteran teacher perceived stress. My name is Michael Brouillette and I am the primary researcher for this study. You have been chosen to provide feedback on potential interview questions because of your years of experience as a Pre-K - 12 school teacher and experience with mindfulness.

The interview should take no more than 30 minutes of your valuable time. I will be taking notes during our interview, however, in order to accurately capture your comments I would like your permission to record our session. Your responses will be transcribed verbatim for future reference.

All responses will be kept confidential. That means that only I and my dissertation committee members will see your responses. I guarantee that any information that you provide that is included in my dissertation will not identify you in any way. You are also free to pass on any question that I ask, and you can terminate the interview for any reason at any time.

Do you have any questions about what we are going to do today?

Are you willing to participate in the interview?

Participants in this study who are interviewed will be given a unique identification number that is known only to the researcher. This will help to eliminate possible identification and bias with the answers to the interview questions.

I am assigning you the number X.

Thank you for previously submitting a Demographic Survey and submitted answers to the Perceived Stress Scale.

Interview Questions:

How would you describe your stress as a schoolteacher prior to learning about mindfulness?

How would you assess the difference between the stress you experienced as a beginning teacher in your first three years of full-time teaching and the stress that you have experienced as a veteran teacher?

What are some of the stressors in your professional life as a teacher that you have had to contend with?

Would you please share your personal and professional experiences with mindfulness training?

To what extent has your mindfulness practices affected your teacher stress?

Would you reflect on the most effective mindfulness practices that you have used to reduce your stress?

Please share any other comments that you may have concerning the topic of mindfulness practices in reducing teacher perceived stress.

Thank you again for giving your time and sharing your insights for this important research.



If you are interested in receiving a copy of the aggregate data, data analysis, or a link to the electronic file once the manuscript has been electronically submitted to ProQuest database, please contact the researcher at xxxxx@xxxxx.xxx.

Thank you for your assistance in this important endeavor. Your responses will advance the scholarly knowledge of how mindfulness practices effect veteran teacher perceived stress.

Sincerely,

Michael Brouillette, Brandman University

APPENDIX F

**Brandman University Institutional Review Board Approval**

**BUIRB Application Approved: Michael Brouillette**

---

**MyBrandman** <my@brandman.edu>

Sun, Jul 14, 2019 at 4:45 PM

Reply-To: webmaster <webmaster@brandman.edu>

To: "xxxxx@mail.xxxxx.xxx" <xxxxx@xxxxx.xxx>

Cc: "Devore, Douglas" <xxxxx@xxxxx.xxx>, "Goodman, Laurie" <xxxxx@xxxxx.xxx>

Dear Michael Brouillette,

Congratulations! Your IRB application to conduct research has been approved by the Brandman University Institutional Review Board. Please keep this email for your records, as it will need to be included in your research appendix.

If you need to modify your BUIRB application for any reason, please fill out the "Application Modification Form" before proceeding with your research. The Modification form can be found at [IRB.Brandman.edu](http://IRB.Brandman.edu)

Best wishes for a successful completion of your study.

Thank You,

BUIRB

Academic Affairs

**Brandman University**

[16355 Laguna Canyon Road](http://16355.Laguna.Canyon.Road)

Irvine, CA 92618

[buirb@brandman.edu](mailto:buirb@brandman.edu)

[www.brandman.edu](http://www.brandman.edu)

A Member of the Chapman University System

## APPENDIX G

### Participant Invitation Letter

#### The Effects of Mindfulness Practices on Veteran Teacher Perceived Stress

Dear Participant,

February 1, 2019

This is an invitation for you to participate in a research study entitled *The Effects of Mindfulness Practices on Teacher Perceived Stress*. You are being asked to participate in this study because your lived experiences in the classroom are of value to the teaching community at large. I am currently a doctoral candidate with Brandman University (BU) and this research project is the culminating project to be published in my dissertation. The purpose of this study is to measure and describe the extent to which mindfulness practices impact veteran teacher perceived stress through a quantitative and qualitative data collection process that includes a survey using the Perceived Stress Scale (PSS). Upon completion of this survey, you will be placed in a pool of others who have completed this survey and a random sample will be selected for a short follow-up interview via a web application such as Zoom.

Your participation in this 10-question, multiple choice, online survey is completely voluntary. Within this research participants will **NOT** be identified in this study or in the research report. Participants will be anonymous; the final research report will not associate their responses with their names or other identifying information. Participants will be asked to respond to a questionnaire distributed through BU email. Data will be collected through a 10-question demographic survey, and if selected based on your demographics, the PSS (Cohen, Kamarck, & Mermelstein, 1983) assessment tool. Participants will receive an email invitation from the researcher's BU email stating the name and purpose of the research and how their responses to the material will be analyzed for this doctoral research. The aggregate data will be kept on a password protected computer. Each teacher will be assigned a participant number so that no individual names or identifying responses will be associated with their data. If you agree to participate in this project, please answer the questions on the questionnaire to the best of your ability. It should take about 5 minutes to complete. Once you complete the survey, please select submit. If you are selected to take the PSS, you will receive additional instructions. Following the receipt of the PSS results, participants will be randomly selected for an interview. Should you be selected for an interview, you will receive additional instructions.

If you are interested in receiving a copy of the aggregate data, data analysis, or a link to the electronic file once the manuscript has been electronically submitted to ProQuest database, please contact the researcher at xxxxx@xxxxx.xxx.

Thank you for your assistance in this important endeavor. Your responses will advance the scholarly knowledge of how mindfulness practices effect veteran teacher perceived stress.

Sincerely,  
Michael Brouillette, Brandman University

## APPENDIX H

### Brandman University's Bill of Rights



CHAPMAN UNIVERSITY SYSTEM

#### BRANDMAN UNIVERSITY INSTITUTIONAL REVIEW BOARD

##### Research Participant's Bill of Rights

Any person who is requested to consent to participate as a subject in an experiment, or who is requested to consent on behalf of another, has the following rights:

1. To be told what the study is attempting to discover.
2. To be told what will happen in the study and whether any of the procedures, drugs or devices are different from what would be used in standard practice.
3. To be told about the risks, side effects or discomforts of the things that may happen to him/her.
4. To be told if he/she can expect any benefit from participating and, if so, what the benefits might be.
5. To be told what other choices he/she has and how they may be better or worse than being in the study.
6. To be allowed to ask any questions concerning the study both before agreeing to be involved and during the course of the study.
7. To be told what sort of medical treatment is available if any complications arise.
8. To refuse to participate at all before or after the study is started without any adverse effects.
9. To receive a copy of the signed and dated consent form.
10. To be free of pressures when considering whether he/she wishes to agree to be in the study.

If at any time you have questions regarding a research study, you should ask the researchers to answer them. You also may contact the Brandman University Institutional Review Board, which is concerned with the protection of volunteers in research projects. The Brandman University Institutional Review Board may be contacted either by telephoning the Office of Academic Affairs at (949) 341-9937 or by writing to the Vice Chancellor of Academic Affairs, Brandman University, 16355 Laguna Canyon Road, Irvine, CA, 92618.

Brandman University IRB

Adopted

November 2013 B

## APPENDIX I

### Participant's Informed Consent Form



#### Informed Consent

**INFORMATION ABOUT:** Effective Mindfulness Practices for Reducing Veteran Teacher Perceived Stress.

**RESPONSIBLE INVESTIGATOR:** Michael Brouillette, MA

**PURPOSE OF STUDY:** You are being asked to participate in a research study conducted by Michael Brouillette, MA, a doctoral student from the School of Education at Brandman University. The purpose of this research study is to measure and describe the extent to which mindfulness practices impact veteran teacher perceived stress. In addition, it is the purpose of this study to identify the most effective mindfulness practices of veteran teachers to reduce veteran teacher perceived stress.

**BY PARTICIPATING IN THIS STUDY:** I agree to participate in an individual interview that will last approximately 20 – 30 minutes and will be conducted either in person or through the video conferencing platform, Zoom. In addition, I agree to complete an electronic survey using Google Forms. The survey will take approximately 5 minutes to complete. Completion of the individual interview and electronic survey will take place between August and November 2019.

#### I UNDERSTAND THAT:

- a) There are minimal risks associated with participating in this research. I understand that the Investigator will protect my confidentiality by keeping the identifying codes and research materials in a locked file drawer that is available only to the researcher.
- b) I understand that I will be contacted by phone to set-up a date, time, and location for the interview that will be most conducive to me to protect my identity. I also understand that the interview will be audio recorded. The recordings will be available only to the researcher and the professional transcriptionist. The audio recordings will be used to capture the interview dialogue and to ensure the accuracy of the information collected during the interview. All information will be identifier-redacted and my confidentiality will be maintained. Upon completion of the study all recordings will be destroyed. All other data and consents will be securely stored for three years after completion of data collection and then shredded and/or fully deleted.
- c) The possible benefit of this study to me is that my input may help add to the research regarding effective mindfulness practices for reducing perceived stress. The findings will be available to me at the conclusion of the study and may provide new insights to me about using mindfulness practices. I understand that I will not be compensated for my participation.

d) If I have any questions or concerns about the research, I can contact Michael Brouillette at xxxxx@xxxxx.xxx or by phone at xxx.xxx.xxxx; or Dr. Laurie Goodman (Advisor) at xxxxx@xxxxx.xxx.

e) My participation in this research study is voluntary. I may decide to not participate in the study and I can withdraw at any time. I can also decide not to answer particular questions during the interview if I so choose. I understand that I may refuse to participate or may withdraw from this study at any time without any negative consequences. Also, the Investigator may stop the study at any time.

f) No information that identifies me will be released without my separate consent and all identifiable information will be protected to the limits allowed by law. If the study design or the use of the data is to be changed, I will be so informed and my consent re-obtained. I understand that if I have any questions, comments, or concerns about the study or the informed consent process, I may write or call the Office of the Vice Chancellor of Academic Affairs, Brandman University, at 16355 Laguna Canyon Road, Irvine, CA 92618, (949) 341-7641.

I acknowledge that I have received a copy of this form and the Research Participant's Bill of Rights. I have read the above and understand it and hereby consent to the procedures set forth.

_____ Signature of Participant or Responsible Party	_____ Date
_____ Signature of Principal Investigator	_____ Date