Mindful Matters; The Efficacy of an Eight-Week Mindfulness Intervention on Boarding School Teacher Burnout

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Mindful Matters: The Efficacy of an Eight-Week Mindfulness Intervention on Boarding School Teacher Burnout

A Dissertation
Presented to the Faculty of the
College of Education and Social Work
West Chester University
West Chester, Pennsylvania

In Partial Fulfillment of the Requirements for the
Degree of
Doctor of Education

By
Nicole Campbell
May 2021

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Dedication

There are so many people that came across my mind when trying to decide who to dedicate this dissertation to. In the end, there was only one obvious choice. Amy Sue Walp, West Chester University Incomparable Golden Rams colorguard coach, passed away unexpectedly on November 18th, 2020 at the young age of 50 after succumbing to Covid-19 complications.

Amy taught me so many things during my time as a West Chester University colorguard member. She taught me that in order to be great, resilience, humility, and grit is required. Every run through is a performance. Rain? Expect to get whipped in the face with wet fabric. Wind? Don’t cheat your toss. Snow? Dress warm. A barrel roll in the mud? Yes, you guessed it. Prepare to be covered. You can’t cheat these things in a performance so you need to develop the resilience to push through during practice. I’ve never worked so hard at anything in my life as I did under Amy Walp. She pushed me. Hard. It was the most challenging and most rewarding experience of my life. I felt what it was like to be excellent at something for the first time. To experience what it was like to earn that feeling of greatness, to feel the satisfaction of knowing that I made it happen because I put in the work; it was because of Amy.

Writing this dissertation reminds me of the experience I had as a WCU colorguard member. The lessons I learned from Amy are forever embedded in my heart and in my mind. The same resilience, humility, and grit was needed to get to this point in the dissertation process. She prepared me for this!

Amy, I know you are watching from above, karma-capping me and telling me to kick some butt. Thank you for all of the life lessons you taught me and the never-ending support you’ve given me even long after my time in the colorguard. I couldn’t have done it without you.
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“Gratitude is the healthiest of all human emotions. The more you express gratitude for what you have, the more likely you will have even more to express gratitude for.” - Zig Ziglar

The definition of gratitude is the quality of being thankful; a readiness to show appreciation and to return kindness. In my own mindfulness journey, I learned that practicing gratitude is the key to a happy life. I am so grateful for each and every person that has been a part of this journey for me. There are many people I owe a multitude of thanks to for helping me and getting me to the finish line and I would be remised if I didn’t take a moment to acknowledge these phenomenal people.

First and foremost is the entire Cohort 3 group. We became family over the past three years. Many laughs and tears were shared between us and I couldn’t imagine this Falcornian experience without you all. I am so excited for the work we will continue to do together in the future.

I would like to thank my boss, Mr. Christopher Seeley for his ongoing support in my professional pursuits during this process. Chris met with me several times to discuss career goals and never failed to encourage me along the way. For that, I am forever grateful.

Next, I would like to thank my committee members, Adam Linetty and Emily Duckett. These two have been a constant in my life throughout this program. You have all pushed me to be a better student, researcher, and person. You are all role models in my book and I aspire to live up to you every day. Thank you for being a source of inspiration.

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Finally, I would like to express gratitude to my boyfriend, Ian Weigand. Ian is the reason I went for my doctorate. While standing in my cap and gown during my master’s graduation, he said, “I can’t wait until I can call you doctor.” That statement stuck with me and I knew it had to be done. In addition to planting the doctorate seed in my brain, Ian continued his own academic pursuits in a BSN program. His work ethic and enthusiasm for nursing was a huge inspiration to me. Thank you for being my rock throughout this entire endeavor. Going to school during a global pandemic isn’t easy, but we both did it! We are the dream team! Love you!
Abstract

Teacher burnout is a serious issue. Studies show that burnout decreases teacher instruction efficacy, increases absenteeism, interferes with student/teacher relationships, and causes attrition, which costs the system millions of dollars each year (Suh, 2015). While there is ample research on traditional teachers and burnout, boarding school teachers are a largely understudied population. These teachers educate students in residential school settings, housing students on evenings and weekends throughout the school year. Many boarding school teachers must work additional hours stretching into evenings and weekends and fulfill multiple roles beyond a classroom teacher. Therefore, most of these teachers work well beyond a typical 40-hour workweek. These extra hours are considered Extra Role Time (ERT), and teachers who invest more in ERT are more likely to experience burnout (Brown & Roloff, 2011).

Mindfulness interventions are associated with reductions of burnout symptoms (Brown et al., 2007; Jennings et al., 2013; Jennings et al., 2017). Many schools are piloting programs to introduce these practices to teachers. Mindfulness-based interventions for teachers provide teachers with skills to cope with stressful situations, improving teachers’ overall well-being for a more effective learning environment.

This study will employ an exploratory sequential mixed-methods design to assess the efficacy of an eight-week strengths-based mindfulness intervention on boarding school teacher burnout. Additionally, the study will explore how boarding teachers employ mindfulness techniques when dealing with stressful situations. Finally, the researcher will analyze the impact a strengths-based approach to group discussions in a mindfulness intervention impacts participant wellbeing.

Keywords: teacher burnout, mindfulness, boarding school teachers, logic model, strengths-based approach, mindfulness intervention
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Chapter 1: Introduction

Teaching is a stressful and taxing profession. Teachers work an average of sixty or more hours per week (Kanbayashi, 2016). Responsibilities during the workweek include educational activities (i.e., classroom and club activities), duties indirectly concerned with educational activities (i.e., lesson planning and grading), school management issues (i.e., paperwork and trainings), and other school duties concerned with external affairs (i.e., meeting with parents) (2016).

Despite the extensive list of responsibilities and long work weeks teachers experience, people in the field are primarily dedicated to their jobs. Since teaching is considered a calling by many, teachers want to do right by their students and colleagues. It involves even more of a time commitment where teachers sacrifice their downtime to cater to others. Lindqvist and Nordänger (2016) point out that many teachers never take breaks. Some even go as far as using recess time for planning, organization, and meeting time with pupils, colleagues, and school managers.

Although teachers work almost twenty hours beyond a "full-time" work schedule, many spend about the typical forty-hour workweek in the workplace's physical brick and mortar buildings. Additional work completed at home includes grading, lesson planning, and phone calls with parents. Teachers typically work during the average workweek and have nights and weekends off. While many in the field agree that work is done on the weekends, teachers can typically find some time for respite and personal care.

Imagine if those teachers dealt with everything mentioned above, but they were also required to coach a sport, live in a dorm with students, and work on the weekends. A boarding school teacher typically lives this life. A great example of a school with teachers with these requirements is the Millbrook School.
A full-time faculty member at Millbrook School embodies the boarding school model known as the "triple threat." Traditionally, this includes the roles of teacher, coach, and dorm parent. Each role requires energy and commitment to the unique lifestyle in a boarding school community (Millbrook School, 2021).

The "triple threat" is a term commonly used among boarding schools to describe the ideal teacher. Boarding schools pride themselves on this model. It provides students various touchpoints with teachers throughout the day and encourages building relationships beyond what a student would experience at a public, charter, or day school. Schools like the Saint Andrews School "celebrates the art of teaching and mentoring by making the classroom and its full potential extend through the morning, afternoon, and evening" (2021).

Surely teachers in this setting can appreciate the unique bond they build with students, and many feel that they make a true and lasting impression in the classroom, on the athletic fields, and in the dorms. It is a very gratifying feeling. However, what does this mean for these "triple threat" teachers? When do they get a break? Here is an example of what a boarding school teacher's schedule may entail.

Typically, a teacher will do one evening duty a week and is likely to finish between 9:30 pm and 10 pm, when the housemistress or housemaster takes over. Oh, and there are also Saturday lessons, which go on up until lunchtime – after which comes more sport, with some teachers having to take sports teams to away fixtures. Many colleagues do not return on a Saturday until late into the evening. Like most teachers, Sunday is a day for marking and planning, unless you are on duty when you have to supervise the school, or run activities and detentions (James, 2018).
This is the typical boarding school model. Grueling teaching schedules are the norm across the globe in schools like these. Regardless of how much one is dedicated to their work, the continuation of long hours, constantly shifting roles and mindsets, and not attending to personal needs will wear teachers down. An increase of depersonalization, emotional exhaustion and a decrease of personal accomplishment will occur. This is what we call teacher burnout.

**Rationale and Significance**

The ever-mounting pressures placed on teachers are causing talented educators to leave the profession in droves. Between 40-50% of teachers leave the profession within the first five years (Ingersoll, 2003, p.13). For teachers that remain in the profession, 61% of educators and school staff find that work is "often" or "always" stressful, and more than half of respondents reported that they have less enthusiasm now than they did when they first began their careers, according to a survey published in 2017 by the American Federation of Teachers (AFT & BATs, 2017).

Studies show that burnout decreases teacher instruction efficacy, increases absenteeism, interferes with student/teacher relationships, and causes attrition, which costs the system millions of dollars each year (Suh, 2015). Teachers attuned to their emotions report lower burnout levels (Ju et al., 2015). Additionally, teachers who feel supported through workplace social support also report lower burnout levels (Ju, et al., 2015; Kovess-Masféty et al., 2007). Administrators and school leaders can support teachers and reduce burnout by fostering supportive environments through emotional intelligence and stress reduction training. The practice of mindfulness is a theoretical technique associated with the reduction of stress and teacher burnout (Crain et al., 2017; Reiser et al., 2016; Roeser et al., 2013).

**Purpose of Study**
The purpose of this study was to investigate the efficacy of an eight-week strengths-based mindfulness intervention on boarding school teacher burnout. This study utilized a pragmatic worldview and an exploratory sequential mixed methods research design with an embedded convergent design in phase 2 (Creswell & Plano-Clark, 2018). Specifically, this study is grouped in three overarching phases with a preliminary qualitative input, followed by a convergent quantitative and qualitative input in the second phase (qual → QUAN [qual]) (Morgan, 2014). The third phase involves the triangulation and generalization of the data from Phase II.

**Problem Statement**

According to a survey conducted in 2015 by The American Federation for Teachers and the Badass Teachers Association, 30,000 respondents identified "uncertain job expectations, negative portrayals of educators in media, and adoption of new initiatives without proper training" as the primary stress sources. "Educators also felt pressed for time, including lack of time to use the restroom at work" (American Federation for Teachers & BATs, 2017, p.1). Many studies have examined burnout in the teaching profession (Maslach & Jackson, 1981; Shen et al., 2015; Skaalvik & Skaalvik, 2010). Burnout has many adverse effects on personal and institutional factors. When a teacher experiences burnout, cognitive functioning, overall health, and relationships with others may decline (Maslach et al., 2018). There are physical implications from burnout as well. As a result of burnout, teachers can suffer from fatigue and exhaustion, chronic symptoms of the cold, gastrointestinal issues, sleep disruptions, shortness of breath, and headaches (Freudenberger, 1974). A decline in a teacher's physical and mental health can cause negative student interactions, ineffective instruction, absenteeism, and attrition (Suh, 2015).

Mindfulness interventions are associated with reductions in burnout symptoms (Brown et al., 2007; Jennings et al., 2013; Jennings et al., 2017). Many schools are piloting programs to
introduce these practices to teachers. Mindfulness-based interventions for teachers provide teachers with skills to cope with stressful situations, improving teachers' overall wellbeing for a more effective learning environment.

**Research Questions**

1. What is the effect of a virtual eight-week mindfulness-based intervention program on boarding school teachers' response to stress and burnout?

2. How do teachers employ mindfulness techniques in stressful situations in the workplace during a virtual mindfulness-based intervention?

**Rationale for Mixed Methods Research**

Many previous studies have quantitatively assessed the efficacy of various mindfulness-based interventions (MBIs) on teacher burnout (Crain et al., 2017; Reiser et al., 2016; Roeser et al., 2013), but few studies address the lived experience of teachers during mindfulness interventions through an Appreciative Inquiry lens. As the philosophy of mindfulness is primarily about the lived experience of being in the present moment, it is ironic that the majority of studies done on MBIs are solely quantitative. This study will add to the literature by bringing a mixed-methods approach to mindfulness-based interventions for teachers that are primarily analyzed under a quantitative-only lens.

Research modeled on (or aspiring to) the so-called gold standard of the randomized control trial (RCT) is still widely perceived to endow scientific legitimacy. However, its approach to outcomes is positivist, reductionist, and individualist (Micozzi & Cassidy, 2015).

There are essential benefits to studying mindfulness from a quantitative lens, but as mentioned above, much potential understanding of the participants' lived experiences have been
lost. Therefore, adding a qualitative, postpositivist, component to this study adds an essential dimension to the literature. There are also many reasons for adding qualitative research into an intervention trial. Before starting the intervention, it is vital to understand the participants, context, and environment so that an intervention is more likely to work by adapting or designing elements in the intervention specifically relevant to the participants and setting. This naturally occurs during phase I of the exploratory sequential design. During the intervention, it is important to identify key constructs that might impact the trial outcomes, such as changes in the socio-cultural environment. The main component of a mindfulness intervention is the constructionist perspective of participants co-creating a reality together. The weekly reflective journals used in this study allowed the researcher to understand the socio-cultural environment changes from week to week. After the intervention, qualitative data can help the researcher understand how the mechanisms worked in a theoretical model. The quantitative pre and posttest data can shed some light on an intervention's efficacy, but participants' affect can impact how they answer survey data on any given day. Therefore, collecting qualitative data around participants' experiences of the theoretical model components is vital to understanding the lived experiences and can help the researcher interpret the quantitative data.

**Study Design**

A case study design was utilized to identify the number of appropriate participants in the study and the subsequent appropriate data collection. A case study design uses a core design (in this study, the exploratory sequential design) within a single or multiple case study framework. Both quantitative and qualitative data are collected in a case study design, and the end product is the generation of a case of multiple cases (Creswell & Plano-Clark, 2018). The case studies in
This research design comprised data collected in phase II of the study and are reported out in chapter IV.

For this exploratory sequential mixed-methods study, the researcher first used an adapted logic theoretical model to design the mindfulness intervention. A logic model is an overview of how an effort or initiative is supposed to work (Emerson et al., 2017). The process of developing the model brings together stakeholders to articulate the program's goals and the values that support it and to identify strategies and desired outcomes of the initiative.

This study utilizes a time series design to collect and analyze data. "A time series design consists of studying one group, over time, with multiple pretest and posttest measures or observations made by the researcher. This design does not require access to large numbers of participants, and it requires only one group for the study" (Creswell & Gutterman, 2019, p. 317). Since the number of participants in this study is small (n=7), a time-series data collection and analysis design are appropriate for this study.

This study is structured using an exploratory sequential research design to collect and analyze the data using this time series design. An exploratory sequential study design involves the collection of qualitative and quantitative data in sequential order. "Integration in my exploratory sequential design will consist of building from the exploration of personal experiences to generate a context-specific mindfulness intervention and conveying this link through a display that summarizes how qualitative results informed each aspect of the quantitative instruments. I will also involve interpreting at the end of the study the extent to which I have an improved intervention over those interventions already available" (Creswell & Plano Clark, 2018, p. 299).
This research design will follow a (qual → QUAN [qual]) design (Morgan, 2014). A typical exploratory sequential mixed-methods research model employs a (qual → QUAN) design; this study utilizes a convergent design embedded in phase II of the exploratory sequential design. See Figure 1.1.

**Figure 1.1**

*Exploratory Sequential Mixed-Methods with Embedded Convergent Phase 2 Design*

The first phase of the exploratory sequential design included semi-structured interviews with a small sample of study participants to gain insight into the institution and its strengths and weaknesses. The researcher analyzed the interview data using a constant comparative coding method of grounded theory to generate a "positive core" topic that will frame group discussions and didactic activities within the intervention. The purpose of grounded theory is to generate theory that is grounded in or emerges from the field (Lichtman, 2013).

Between the first and second phases of the exploratory sequential design is the development of the intervention. In this study, the mindfulness intervention will be supplemented with group discussions and activities centered around positive psychology. Since the participants in this study are participating in a workplace intervention, the Appreciative Inquiry protocol will be used to approach these discussions and activities from a positive psychology lens. Appreciative Inquiry (AI) is the cooperative, coevolutionary search for the best in people and their organizations (Cooperrider & Whitney, 2005).
Within the second phase of the exploratory sequential design used in this study, quantitative measures will consist of a demographic survey before the start of the intervention, two pre/posttest surveys; the Maslach Burnout Inventory for Educators (MBI-ES) (Maslach et al., 2018) and the Five Facets of Mindfulness Questionnaire (FFMQ) (Baer et al., 2006), and a weekly measure of wellbeing using the Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988).

In phase two of this study, the qualitative data collection will involve a weekly reflective journal entry citing a stressful situation each participant encountered and how they handled it. Additionally, the participants will answer additional journal questions about mindfulness and the perception of the intervention during pre and posttest measures. The journal entries will be analyzed through a phenomenological lens and will be represented by significant statements that support the participants' experiences.

**Significance of Study**

No mindfulness intervention study has focused on a boarding school teacher population. This study’s unique population highlights balancing an overpacked, stressful schedule with a somewhat time-consuming intervention to mitigate stress. If "triple threat" boarding school teachers in this study benefit from this intervention, teachers with fewer time constraints may benefit even more. Additionally, if teachers in this study benefit from this intervention, other boarding schools can model mindfulness interventions to meet their faculty's needs. Most mindfulness interventions take place in a group setting. The group dynamic is an integral part of the intervention design because mindfulness interventions focus on co-creating reality (McCown et al., 2016). Since students need to be under supervision at all times in a boarding school, they may have trouble coordinating schedules to find a common meeting time. Offering a
virtual, synchronous mindfulness intervention for teachers in boarding schools could provide flexibility and increase the feasibility of running similar programs.

Offering virtual synchronous programs to public, charter, and other day school teachers could increase accessibility and feasibility. When the global pandemic, COVID-19, struck the world, society relied on teachers more than ever. Teachers may have benefited from a mindfulness intervention during this time. However, since in-person instruction and meetings were banned, teachers could not meet in a group setting to practice mindfulness. A virtual, synchronous intervention could be beneficial as the world of education will continue to feel the shockwaves of this global pandemic for years to come.

Another significant angle to this study is using the Theory of Wellbeing (PERMA) (Seligman, 2011) to include a strengths-based design in the intervention. Mindfulness interventions are often misinterpreted as being approached from a deficit lens (Gergen, 1994). After a negative behavior or trait is recognized (i.e., burnout), an intervention is implemented to mitigate burnout factors. When the negative behavior is addressed and discussed, it can cause the rumination of the negative behavior. This can magnify the problem instead of reducing it. Although negative traits and behaviors may be why someone becomes involved with a mindfulness intervention, the structure of a mindfulness intervention itself is not a deficit approach. Whereas the participants in this study were self-identified as feeling burnout (deficit behavior), this study's intervention will intentionally focus on a strengths-based approach to group discussion. Participants will be led through group discussions about the school's strengths and the most favorable parts of their job.

Limitations
Every researcher should be concerned with ethical concerns and limitations. No research study design is perfect, so the primary investigator needs to consider any ethical concerns or limitations and devise a plan to address the situation. In this study, four primary considerations will be discussed. First, the sample size and the generalizability of this study to other populations will be addressed. Second, the researcher will explain their dual role as the primary investigator and the intervention facilitator. Additionally, the primary investigator is a colleague of the participants in the study. The third ethical consideration is about the impact COVID-19 has had on the study’s research design and implementation. The last ethical consideration associated with this study that will be addressed lies within the research design.

**Sample Size**

The sample for this study is limited to teachers from one small independent boarding school (n=7). Therefore, it will be challenging to generalize the results to others beyond the institution. Moreover, quantitative computing analysis for group effect sizes may yield inaccurate results (Creswell & Gutterman, 2019).

**Addressing the Limitations in Sample Size in This Study.** Employing a case study design will allow the researcher to dive into the lived experiences of each participant in the study and draw conclusions on similarities and differences from participant to participant (Hays, 2004). While this may not promote generalizability, it may encourage other researchers to employ the same study in other schools, which will help to build the literature for future studies.

**Principal Investigator (PI) as Facilitator**

In addition to the limitation mentioned above, the researcher is also serving as the intervention facilitator. Researcher bias may present itself in the interpretation of the qualitative data that is collected.
Addressing the Limitations of PI as Facilitator in This Study. Before the start of the intervention, the researcher engaged in the transcendental phenomenological practice of epoché. Epoché is a four-step process that engages the researcher in self-reflection and allows the researcher to be transparent and address any biases that may come to fruition during the data analysis process (Moustaskas, 1994). More about researcher bias and self-reflection can be found in Chapter 4.

Covid-19 Limitations

The original study design focused on an in-person mindfulness intervention on boarding school teacher burnout. Covid-19 quickly became a long-lasting global pandemic, and the researcher was forced to pivot to a virtual intervention to protect the participants' physical health.

Addressing the Limitations of Covid-19. Research is just starting to emerge regarding virtual mindfulness interventions (Hulsbosch et al., 2020; Lilly et al., 2019; Ma et al., 2018). This study will contribute to a significant gap in the literature. Moreover, this study's intervention utilizes best practices from in-person mindfulness interventions and adapts them to live, synchronous, weekly sessions. While the participants are not sharing the physical space, synchronous sessions will allow them to continue co-creating the space through group discussions and live videos and discussions.

...More pedagogically valuable than exercising excessive overcontrol would be to use the less-than-satisfactory characteristics of the meeting space as an opportunity to talk about mindfulness. A teacher can call participants' attention to the balky heating or air conditioning system, or the traffic noise outside the room, not to make excuses, but to highlight how the practice helps us in real-life situations, which are seldom perfect or even the way we would prefer. (McCown, 2016 pg. 7)
**Study Design**

The researcher chose an exploratory sequential research design but did not include a control group in the study. While the sole intent is employing a case study design and triangulating the quantitative data with the qualitative data in order to understand the experiences of the participants in the intervention, comparing pre and post data from a control group with the experimental group could highlight differences in teachers who participate in the intervention versus those who do not.

**Addressing the Limitations of Study Design in This Study.** Since this study does not have a control group, utilizing a case study exploratory sequential mixed methods design will allow the researcher to approach data analysis and interpretation from a phenomenological perspective. This within-group case study design will highlight similarities and differences between members experiencing the same phenomenon (the mindfulness intervention) and help the researcher control extraneous variables (Hays, 2004).

**Definition of Terms**

The following terms are associated with this area of study and will be used throughout this dissertation.

**Teacher Burnout.** Burnout is defined as a syndrome of emotional exhaustion and cynicism that frequently occurs among individuals who do 'people work' of some kind (Maslach & Jackson, 1981). The three main categories of burnout are emotional exhaustion, depersonalization, and personal accomplishment (Maslach et al., 2018).

**Boarding School Teachers.** In this study, boarding school teachers are any faculty or staff member working at a residential (boarding) school that interacts with students. Employees at boarding schools are considered "in loco parentis," which means that these adults are fulfilling a
Parental role while the students are at school. Therefore, it is considered that any adult who interacts with students at boarding schools is an educator somehow.

**Mindfulness.** Kabat-Zinn (1994) describes mindfulness as "paying attention in a particular way; on purpose, in the present moment, and nonjudgmentally" (p.4).

**Intervention.** A program designed to mitigate a negative behavior or undesirable behavior.

**Synchronous Virtual Intervention.** An intervention that will be held online through an online video conferencing platform synchronously.

**Strengths-Based Approach.** Intervention design focused on the group's strengths and the organization instead of the negative behavior that led participants to the intervention.

**Appreciative Inquiry.** Cooperrider, Whitney, and Stavros (2008) define appreciative inquiry as “the cooperative co-evolutionary search for the best in people, their organizations, and the world around them” (p.3).

**Summary**

This exploratory sequential mixed-methods research study aims to assess the efficacy of an eight-week, strengths-based mindfulness intervention on boarding school teacher burnout. Using a time-series design in the data analysis, changes from pre to posttest can be analyzed. Additionally, using a convergent component in phase 2 of the exploratory sequential mixed-methods design will allow the researcher to understand the participants' experiences throughout the intervention. This is important because many mindfulness interventions are studied from a randomized control trial (RCT) design that treats these interventions the same as pharmaceutical compounds. While this helps support the legitimacy of mindfulness in the scientific sector, it ignores the fact that mindfulness is co-created, and the individual voices and experiences of the participants that make up the group experience are ignored.
Chapter II will provide a full review of the literature regarding teacher burnout, facets of mindfulness, and the benefits of mindfulness-based interventions in school settings. Moreover, the theoretical framework built off of the logic model and including the Theory of Wellbeing (PERMA) (Seligman, 2011) and mindfulness theory (Baer et al., 2006; Bishop et al., 2004; Kabat-Zinn, 1990; McCown & Micozzi, 2011) will be discussed.
Chapter 2: Review of Literature

The focus of this literature review will consist of three main components: the personal and institutional impacts of teacher burnout, the positive outcomes of participation in mindfulness-based interventions, and a theoretical framework that includes mindfulness and a strengths-based approach. This review will provide a contextual background of the research problem, a synthesis of the current research related to this study, and provide a rationale for the necessity of the study. Through this review of literature, this chapter will demonstrate that teacher burnout is a serious issue both individually and institutionally, mindfulness-based interventions are beneficial for participants, and that mindfulness-based interventions can mitigate teacher burnout. Finally, this literature review will articulate how the logic model, a strengths-based intervention approach, and the theory of mindfulness are crucial to understanding this study's results and presenting recommendations from those results.

Teacher Burnout

Teachers cite both personal and institutional factors as causes for stress and burnout in education. Teachers' personal factors include age, education level, work experience (Gold, 1985), and job dissatisfaction (Skaalvik & Skaalvik, 2010). Institutional factors that contribute to occupational stress in education include work climate, violence, disruptive students, inadequate salaries, repeated layoffs, community and student attitudes towards education, collective bargaining issues, poor relationships within the school, lack of job mobility, large caseloads (1985), time constraints, relations with parents (Skaalvik & Skaalvik, 2010), role conflicts, and external locus of control (Byrne, 1999).

Stress can lead to burnout, and burnout can have many adverse effects on personal and institutional factors. When a teacher experiences burnout, cognitive functioning, overall health,
and relationships with others may decline (Maslach et al., 2018). Negative student interactions, ineffective instruction, absenteeism, and attrition (Suh, 2015) can occur. There are physical implications from burnout as well. As a result of burnout, teachers can suffer from fatigue and exhaustion, chronic symptoms of the cold, gastrointestinal issues, sleep disruptions, shortness of breath, and headaches (Freudenberger, 1974).

Many times, due to the exact causes and symptoms of teacher burnout (finances, work pressures, personal life matters, and psychological/mental health factors), teachers find that absenteeism is not an option. This leads to a phenomenon called presenteeism (Hansen & Anderson, 2008). "Presenteeism is defined as the act of going to work when sick. Occupations that have a high degree of human interaction, such as healthcare providers and educators, have been found to exhibit the highest rates of presenteeism" (Rhodes & Collins, 2015, p.27). Presenteeism impacts a teacher's ability to perform at an acceptable level. Students, therefore, also feel the impact of teacher stress and burnout. Shen and his colleagues (2015) examined the relationship between teacher burnout and students' autonomous motivation, emphasizing the students' perception of teachers' emotional wellbeing. The researchers discovered that students were less likely to perceive teachers who scored low on the Maslach Burnout Inventory (MBI-ES) subscales of emotional exhaustion and depersonalization as giving autonomy support. Teachers exhibiting burnout based on the MBI-ES are likely to lack autonomy themselves, therefore teaching only what they are familiar content.

Many teachers cite burnout as a reason for leaving the profession altogether (Collie et al., 2011; Lindqvist & Nordäng, 2016). In 2020, pre-retirement attrition made up 59% of teacher demand (Sutcher et al., 2016). National estimates have suggested that new teachers leave at rates of somewhere between 19% and 30% over their first five teaching years. (2016). High teacher
turnover rates impact institutional memory, teacher-student relationships, teacher-teacher relationships, and costs the institution upwards of $20,000 per person that leaves the profession each year (Sutcher et al., 2016). Additionally, the high rate of teacher attrition between pre-retirement and retirement contributes to the national teacher shortage, accounting for nearly 90% of an annual teacher demand (Sutcher et al., 2019). 55% of teachers cite that dissatisfaction in the career is why leaving the profession (2016).

**Teachers Serving Historically Disadvantaged Students and Burnout**

Studies link teaching historically disadvantaged students in urban areas with teacher burnout (Abraham-Cook, 2012). Teachers in these settings often report institutional factors such as large class sizes, a lack of resources, and administrative support as reasons for burnout (Sutcher et al., 2016). Additional studies related to urban teacher burnout mention violence, disruptive students, and community attitudes towards education. While many studies look at the broad scope of burnout within the school system, few studies focus on how students' lived experiences outside of school impact teacher burnout. When understanding teacher burnout in schools serving this population of students in a less restrictive institutional environment, this is important to consider. When students leave home to attend a "better" school, they can leave behind the teachers experiencing large class sizes, a lack of recourses, and administrative support. Since trauma history is related to adverse mental and physical health, social, educational, and economic outcomes (Oh et al., 2018), students cannot leave behind the trauma and personal struggles they experience at home when attending school outside of their neighborhood.

Forty-one percent of children under 18 live in low-income families, and 19 percent, approximately one in five, are considered poor. Hispanic children experience the highest poverty
rates, followed by black children (Koball & Jiang, 2018). Many of these children live in poor urban neighborhoods. Living in poor urban neighborhoods increases the risk of experiencing community, family, and individual traumas such as crime, gang activity, family violence, victimization/incarceration, chronic illness, or a family member's death. The impact of poverty on students can cause Posttraumatic Stress Disorder (PTSD). Such experiences can disrupt functioning across multiple domains and impact learning and interacting in social situations (Black & Krishnakumar, 1998; Oh et al., 2018).

Teaching students from low-income neighborhoods where students experience traumatic situations can be challenging regardless of where they are attending school. Secondary Traumatic Stress (STS) is experienced by teachers or other helping professionals who hear stories of others affected by trauma and mirrors stress reactions or symptoms of Post-Traumatic Stress Disorder (PTSD) (Caringi et al., 2015). STS is conceptualized by some researchers as a type of burnout (Figley, 2013). Teachers in lower-income, higher-minority schools have reported higher STS levels and burnout than their counterparts (Abraham-Cook, 2012).

**Mindfulness**

Mindfulness is the act of paying attention, on purpose, in a particular way (Kabat-Zinn, 1990). To fully understand the true intention of practicing mindfulness and approach the practice from a culturally responsive lens, it is essential to learn about the origin of mindfulness and its evolution in the Western world over the past century. Culturally Responsive Teaching is a pedagogy that recognizes the importance of including cultural references in all aspects of learning (Ladson-Billings, 1994). Culture is central to learning about mindfulness. Unfortunately, as mindfulness practices have gained popularity over the last thirty years, the true essence of practicing mindfulness has been lost, and misconceptions have formed due to a lack
of cultural understanding. To truly understand this study and the subsequent results, the next section will provide an overview of mindfulness's origins, how it evolved into clinical practice, and current misconceptions in the field.

**Origins of Mindfulness**

Mindfulness practices developed through yoga and Vedic meditation in Hinduism, which arose more than four thousand years ago. Siddhartha Gautama (now known as the Buddha) formed Buddhism between 400-500 B.C.E. He was raised in Hinduism regions and therefore carried Hinduism concepts over to Buddhism. Although both religions practice forms of meditation, Buddhism considers mindfulness (or Sati) as the first step to enlightenment and therefore weighs a heavier emphasis of mindfulness on its teachings than Hinduism (Selva, 2017). The origins of mindfulness are of an ontological orientation. The art of practicing mindfulness is to bring attention to the present moment, being aware of the wandering mind without judgment, accepting things as they are, and releasing thoughts (Kabat-Zinn, 1990). The intention of mindfulness is not to search for or create answers but rather to develop a way of being (McCown & Micozzi, 2011). "It is the method of no method" (Kabat-Zinn, 2018, p.50).

Postpositivist views compliment this organic state of mindfulness. Each person's experiences in a situation are a private experience, and feelings and emotional states are not an actual event occurring but instead are the response to an event (Bishop et al., 2004). Mindfulness in Buddhist teaching is viewed as a fundamental pathway to become aware of the internal causes and sources of suffering and to attain the awakening that will allow the individual to break free from those thoughts (Xiao et al., 2017).
The "Method of No Method" Becomes a Method

The practice of mindfulness was popularized in Western society by Jon Kabat-Zinn in the mid-1970s (1979). Kabat-Zinn was a graduate student at The Massachusetts Institute for Technology (MIT) and was involved in anti-war protests. He experienced a decent amount of violence during these protests. As a testament to his personal mindfulness practice's success impacting his coping skills related to the violence, he developed a mindfulness-based stress reduction (MBSR) course at the University of Massachusetts Medical School for chronic pain patients in 1979. He was careful to use meditation ideas from the Buddhist religion without bringing Buddhism's spiritual aspect into the course (Booth, 2017; Kabat-Zinn, 1990). Through Mindfulness-Based Stress Reduction (MBSR), mindfulness developed into a structured curriculum. Kabat-Zinn laid the foundation for clinical mindfulness and accelerated a shift from mindfulness as an ontological orientation to an epistemological orientation in Western culture.

The clinicalization of mindfulness intrigued many people working with trauma victims and professionals in occupational health fields burning out. Various scales such as the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981) were used in pre and posttest measures to assess the efficacy of mindfulness interventions on burnout over time. Additionally, mindfulness interventions became "tools" for suffering populations (depression, substance abuse, pain), thus becoming a method of therapeutic devices (Lomas & Iv tzan, 2016). The epistemological stance of mindfulness shifted from a postpositivist view to a constructionist view in clinical mindfulness. Social Constructionism emphasizes the communal basis of knowledge and radical questioning of everything taken for granted as objective. It invites us to find ways to increase our capacity of knowledge through relationships (Gergen, 1994). A theoretical basis for mindfulness interventions is social constructionism (McCown et al., 2016). Mindfulness has become less
about the internal experience and more about the group experience and making sense of things from the outside to internalize in this clinical setting.

**Popularization and Misconstruction**

Mindfulness in the clinical setting has demonstrated positive outcomes from the postpositivist orientation to the social constructionist orientation. An exhaustive amount of literature supports the correlation of group mindfulness-based interventions and improvement in mind and body (Harris et al., 2016; Hülsheger et al., 2015; Janssen et al., 2018; Kim & Park, 2016). We have been able to study these effects by conceptualizing mindfulness and developing various tools of measurement. Although group mindfulness-based interventions have a strong group of advocates, it is essential to recognize that they have just as many critics.

When TIME Magazine published a special issue titled *Mindfulness; The New Science of Health and Happiness* in 2016, the theory of mindfulness grew in the public domain. Kabat-Zinn sensed several years before TIME published the special issue that interest in mindfulness was picking up rapidly and warned that "the rush to define mindfulness within Western psychology may wind up denaturing it in fundamental ways," and thus, there is "the potential for something priceless to be lost" (Williams & Kabat-Zinn, 2011, p.4).

Kabat-Zinn's inclinations are proven to be correct. Ronald Purser, author of *McMindfulness; How Mindfulness Became the New Capitalist Spirituality* (2019), is one of the most prominent clinical mindfulness critics. Purser admits that there are worthy dimensions to mindfulness practice, but the way it has been packaged and promoted is problematic and promotes the acceptance and complacency of neoliberal philosophy. He claims that "mindfulness, like positive psychology and the broader happiness industry, has depoliticized and
privatized stress” (p. 16), and in turn, has become a coping mechanism when mitigating tensions in a capitalist society.

I am skeptical. Anything that offers success in our unjust society without trying to change it is not revolutionary—it just helps people cope. However, it could also be making things worse. Instead of encouraging radical action, it says the causes of suffering are disproportionately inside us, not in the political and economic frameworks that shape how we live (Purser, 2019, p.7-8).

Many skeptics, like Purser, argue that mindfulness is viewed as a prescription that results in the mind going completely blank and the ultimate reward for practicing is the calm and peacefulness of the "meditative" state (Kabat-Zinn, 2018). The origins of mindfulness, the postpositivist view of internal experiences, and acceptance of what they are have been completely erased in this "popular" view.

In response to Purser's publication, practicing Buddhist and lecturer in philosophy at Boston University, Dr. Amod Lele, offered his critique of McMindfulness. Lele agrees with Purser that some mindfulness-based interventions are incorrectly packaged and promoted. He admits that MBIs are not revolutionary, but they are not supposed to be. "For while Purser often takes himself to be chiding modern mindfulness for being insufficiently Buddhist, I think overall he is unwittingly criticizing it for being too Buddhist" (Lele, 2019). Publications like the TIME Magazine special mindfulness issue falsely portray a woman wholly calm and at peace. Overall, the general public has developed an expectation for mindfulness as an agent for institutional change and instant peace. Lele argues that mindfulness should solely be considered a way to help people cope with stress in the true Buddhist sense. If mindfulness does not promote radical action, it should not be expected to politicize and publicize stress. Purser, like many others,
seems genuinely ignorant to what the philosophy and intention of mindfulness is. Therefore, mindfulness facilitators must be transparent when educating others about mindfulness and mindfulness-based interventions.

**Benefits of Mindfulness on Mind and Body**

Once mindfulness interventions became clinicalized, researching these interventions' impact became extremely popular in the social sciences. Many studies have demonstrated that participating in MBIs impact both physiological and psychological health. Researchers have seen significant improvements in sleep outcomes, cardiovascular and cognitive functioning, neural affect regulation, and social interactions after participants completed MBIs.

Participants in an eight-week Mindfulness Based Stress Reduction (MBSR) course were observed for sleep patterns. Each participant was labeled either a novice or a long-term meditator (Brand et al., 2011). Novice meditators noticed a significant decrease in sleep disturbances for the eight-week intervention and a significant mindfulness increase. Moreover, cortisol awakening response (CAR) decreased significantly from the start to the end of the MBI, but cortisol levels did not differ during or after the intervention. Long-term meditation experience was associated with lower HPA SA (hypothalamus-pituitary-adrenocortical system activity) in the morning. Novice meditators noticed a decrease throughout the intervention. These findings suggest that regardless of when one practices mindfulness, sleep outcomes may improve if they do so consistently.

Mindfulness has been linked to improvements in cardiovascular functioning (Kimmes et al., 2018; Marquez et al., 2019) and cognitive functioning (Diener et al., 2002). Research at Heart Math Institute reveals that coherent heart rhythms alter both the body's biochemistry and its immune system. The research they produced also revealed that when heart rhythm patterns
are smooth, people become relaxed and calm and think more clearly. However, when heart rhythm patterns are disordered, the ability to reason clearly and organize thoughts is diminished (Childre & Rozman, 2005).

Mindfulness has also been linked with improvements in emotional health. For example, lower levels of emotional disturbance (i.e., depressive symptoms, anxiety, and stress), and higher levels of subjective wellbeing (i.e., lower negative affect, higher positive affect, and satisfaction with life), and eudemonic wellbeing (i.e., vitality, expressiveness, and self-actualization) were reported in participants practicing mindfulness (Diener et al., 2002).

A positive association between dispositional mindfulness and activation of MPFC, a neural area that is activated during self-relevant tasks, such as monitoring one's emotional state, has been observed (Creswell et al., 2007). In the same study, mindfulness was also associated with enhancements in neural affect regulation pathways. Affect labeling practices encourage individuals to treat affective states as "objects" of attention, thus promoting a certain detachment from these negative states and discouraging rumination. These findings suggest that one neurocognitive pathway that may link mindfulness meditation practices with reductions in negative affect, mood disturbance, and other physical symptoms across several patient populations.

Practicing mindfulness is also associated with an improved quality of interactions between people. Middle school teachers' training in mindfulness, for example, is associated with high quality and emotionally supportive teacher-student interactions with students in what the teachers identified as their most challenging classrooms (Braun et al., 2018).
Benefits of Teacher Mindfulness in Education

Exercising self-regulatory skills (managing one's emotions and behaviors positively) is vital for teachers' success in and out of the classroom. Practicing mindfulness is a way to exercise self-regulatory skills. Adopting Richard Davidson's framework on Emotional Styles and Their Six Dimensions to observe the Mindfulness Education Heuristic (MEH) used in an undergraduate physics course for teacher education, Powietrzyńska and Gangji (2016) discovered that pre-service teachers exposed to reflective practices in this course exhibited higher levels of mindfulness (a self-regulatory skill) after only two interactions with the practices. A participant in the study stated,

I understand why people need to ease their emotions in the educational field and the public field. If they are capable of controlling themselves, then they can pay attention or learn something from others. As a future teacher, I believe everyone should have controlling power, and then we can pass our knowledge to children who need help by educating with lots of care. (Serena, pre-service teacher, Fall 2012) (p. 694)

Teachers who exhibit higher mindfulness skills are met with success in and out of the classroom. Many researchers observe that teachers who feel more comfortable with the content, committed to the work, and supported by the administration regarding programs like mindfulness for SEL (Social Emotional Learning) are less likely to feel burnout or stress, feel relatively good about efficacy, and feel better about school culture. These teachers, therefore, feel less emotionally exhausted, which is a factor of burnout (Brackett et al., 2012, Collie et al., 2011, Collie et al., 2015).

Teachers who have higher emotional intelligence (EI) and social-emotional competence experience more success in the academic classroom. After administering various survey
questions about social-emotional perceptions, beliefs, student-teacher relationships, strengths, and difficulties, Poulou (2017) observed that teachers who reported higher EI levels and social-emotional competence reported better relationships with students, fewer issues with hyperactivity, and experience less conflict in the classroom.

**Mindfulness-Based Interventions (MBI) for Educators**

Researchers have conducted many studies to investigate the effects of mindfulness on mental health and overall performance, specifically with teachers. A review of literature compared sixteen different studies surrounding the concept of mindfulness studies and in-service teachers. The three thematic objectives that kept appearing that these studies attempted to address were "teacher wellbeing," "teacher performance," and "experiences of learning and practicing mindfulness" (Hwang et al., 2017, p. 29). Other popular topics of research in the field are on the efficacy and feasibility of mindfulness interventions directly targeted at teachers. Below is an example of the effectiveness and feasibility of three different MBIs for teachers.

One of the first types of training provided to teachers to help regulate emotions was Mindfulness-Based Stress Reduction (MBSR), created by Jon Kabat-Zinn. MBSR is a formal, eight-week program that provides training in formal mindfulness practices, including body scan, sitting meditation, and yoga (Khoury et al., 2015). Mindfulness-Based Interventions (MBI), like MBSR, can improve psychological functioning (Brown et al., 2007). While various studies demonstrate the effectiveness of MBSR and other MBIs, these interventions require a significant amount of time (usually eight weeks) may not be practical for teachers (Reiser et al., 2016). Other programs aimed at teacher wellbeing and social-emotional competence have been developed and widely researched for effectiveness.
Among the most popular programs for teachers, SEL training is the Cultivating Awareness and Resilience in Education (CARE) for Teachers program. CARE is a mindfulness-based curriculum designed to reduce stress and improve teachers' performance and classroom learning environments. "CARE combines emotion skills instruction, mindful awareness practices, and compassion building activities to provide teachers with skills to reduce their emotional stress and to improve the social and emotional skills required to build supportive relationships with their students, manage challenging student behaviors, and provide modeling and direct instruction for effective social and emotional learning" (Jennings et al., 2013, p. 377).

CARE is a 30-hour program that takes place in four day-long sessions over a four to six-week span. Coaching phone calls and a booster held approximately two months later are supplemental to the workshops. The curriculum combines direct instruction in specific skills with opportunities to practice these skills, individual reflective writing activities, small and large group discussion, and homework.

Teachers who received CARE training reported significant improvement in adaptive emotion regulation and mindfulness and lowered psychological distress and time urgency levels. Classroom climate, increased emotional sensitivity and support, and improved classroom organization and productivity were also reported (Jennings et al., 2013; Jennings et al., 2017). Teachers in CARE also reduced sleep disturbances and emotional exhaustion (Jennings et al., 2017).

CARE brought awareness to how participants physically held stress in their bodies and how they responded to the stress. They became more aware of their struggle to practice self-care and how important it is to do so, their speed and manner with which they responded to others, and their own emotions in response to conflict (Schussler et al., 2016). The teachers involved in
this study felt that CARE was a powerful model for professional development because it adopted a strengths-based approach instead of a deficit approach and wanted to expand the program to reach more colleagues.

Reiser and her colleagues (2016) wanted to reduce further the number of hours programs like MBSR and CARE require while still providing a quality program for SEL for teachers. Like CARE for Teachers, Stress Prevention and Management (SPAM) was designed in response to teachers’ specific needs. SPAM utilizes elements of MBSR and incorporates psychoeducation about stress. Unlike CARE and MBSR, SPAM considers teachers’ busy schedules, only lasting six hours (six sessions at one hour each). The goal of SPAM is to work in a group setting to manage stress by sharing knowledge of the stress process, training in mindfulness skills, and enhancing a network. The SPAM curriculum incorporates psychoeducation about stress, instruction, and practice with mindfulness skills, group processing, and homework. SPAM participants reported slightly higher job satisfaction levels and motivation to practice the techniques learned throughout the sessions (Reiser et al., 2016).

Virtual Interventions

Most mindfulness-based interventions (MBIs) occur in in-person group settings. While there are many benefits to participating in in-person MBIs, this may not always be a practical option. Virtual interventions open up the possibility of increasing accessibility to participants and costing much less to participate than in person. Researchers have only recently begun observing the efficacy and feasibility of online interventions. Especially with the current global climate, further investigation into the efficacy of virtual mindfulness interventions is needed to draw significant conclusions.
What we have learned about virtual mindfulness interventions thus far is extremely important to the development of new interventions. A self-guided virtual mindfulness intervention was correlated with a significant increase in mindfulness and psychological flexibility for the participants who completed the entire course (Forbes et al., 2018). However, many participants (roughly 47%) did not adhere to the entire intervention and therefore did not benefit the same way full-adherence participants did. Participants stated that adherence was challenging due to privacy, distractions, interruptions, and slightly declined motivation over time.

Group mindfulness-based interventions have been much more successful than self-directed interventions (Ma et al., 2018). Seventy-six people participated in a study that measured the differences between self-direct mindfulness-based interventions and group mindfulness-based interventions. While both groups experienced a decrease, those in the group mindfulness-based intervention experienced a significant shift in mindfulness, emotion regulation difficulties, and psychological distress from pre to posttest. In contrast, those in the self-directed mindfulness intervention saw only a minimal improvement in the subjects mentioned above.

Those interested in developing new virtual mindfulness interventions should consider the importance of the group dynamic. Providing live-time virtual sessions where participants can discuss and interact with one another can foster this group environment. Moreover, participants in group settings may feel more engaged and exhibit better adherence than those participating in self-direct mindfulness-based interventions.

Addressing the Tensions in the Study

A deficiency in the current literature on mindfulness interventions is the lack of qualitative data collected. The theory of mindfulness in its organic state is about lived
experiences. It is somewhat of a paradox that most literature on mindfulness interventions is mainly quantitative. As of now, I have only found one qualitative article that investigates how utilizing mindfulness practices in a disorienting situation can enhance mindfulness skills (i.e., self-awareness and self-knowledge) upon inquiry and reflection. Burrows' (2015) study did not focus on reducing burnout, an increase in wellbeing, or a deficit behavior change. Instead, she used the theory of transformation to observe how teachers were using mindfulness skills in stressful situations. The examples her participants provided in the data suggest that learning more about how mindfulness techniques can be used in disorienting situations is an applicable report for other teachers. I will address this tension by conducting a mixed-methods study. Not only do I want to observe changes over time, but I also want to learn about the lived experiences of my participants as they practice mindfulness.

Another tension of mindfulness research that will be addressed in the study is the lack of observation of the postpositivist, organic mindfulness experience. Many mindfulness studies focus on improving a symptom, yet they do not focus on developing mindfulness skills themselves. Mindfulness, therefore, has just become a tool rather than a way of life. The intervention design's intentionality will weigh heavily on the Western conceptual side of mindfulness initially and gradually become less structured to make way for a more organic, non-instrumental way of practicing mindfulness. It is vital to lay the foundational skills before participants can take off on their own. Participants will be assigned daily homework using both formal and informal meditation practices. This work will allow for the growth of the organic state of mindfulness as well.

The two ways of understanding mindfulness meditation (organic and clinical) are paradoxical yet complimentary. They are essential to one another because they inform each
other. "After living with these two descriptions of meditation for a time, the instrumental and the non-instrumental, you will find that they slowly become comfortable old friends and allies" (Kabat-Zinn, 2018, p.53). Thus, it is essential to anyone researching mindfulness to understand the history and origins of the practice and the progression from the individual to the group practice.

**Summary**

This literature review provided an overview of the current literature on teacher burnout, the history of mindfulness, and the benefits of practicing mindfulness. Teacher burnout can be detrimental to student learning (Burrows, 2015). The increase in teacher demand and accountability measures, coupled with a global pandemic and the shift to virtual and hybrid learning without proper training and preparation, have added multiple stressors to the teaching profession. Moreover, teachers working with historically disadvantaged students have even more stress to mitigate (Abraham-Cook, 2012). The research suggests that practicing mindfulness in a group setting may help teachers cope with stressful situations and reduce burnout levels (Brown et al., 2007; Jennings et al., 2013; Jennings et al., 2017). In the next section, the theoretical framework guiding this study will be described in detail. The theoretical framework is considered the foundation from which all knowledge is constructed (metaphorically and literally) for a research study and supports its purpose and significance (Grant & Osanloo, 2014).

**Theoretical Framework**

Eisenhart defined a theoretical framework as "a structure that guides research by relying on a formal theory...constructed by using an established, coherent explanation of certain phenomena and relationships" (1991, p. 205). This research study utilizes the logic model to weave together the theory of mindfulness (Baer et al., 2006; Bishop et al., 2004; Kabat-Zinn,
1990; McCown & Micozzi, 2011) and positive psychology (PERMA) (Csikszentmihalyi & Seligman, 2000) as a response mechanism for burnout. In addition to guiding the study design, the logic model will allow the researcher to draw conclusions based on the study results on the efficacy of weaving mindfulness and PERMA theories together to reduce teacher burnout.

**Logic Model**

A logic model is an overview of how an effort or initiative is supposed to work (Alter & Murty, 1997). The process of developing the model brings together stakeholders to articulate the program's goals and the values that support it and to identify strategies and desired outcomes of the initiative. It can be used both forwards and in reverse to develop a model. The desired outcomes are expressed, followed by identifying the strategies and resources that will help accomplish the outcomes when working backward. Specific steps are developed to produce the desired effects when combining forward logic with backward logic. Logic models integrate planning, implementation, and evaluation and help planners to set priorities for allocating resources. They reveal data needs and provide a framework for interpreting results. They also enhance learning by integrating research findings and practice wisdom. Logic models define a shared language and shared vision for community change.

The steps for developing a logic model include (1) finding the logic in existing written materials to produce your first draft, (2) determining the appropriate scope of the model for its intended users and uses, (3) check whether the model makes sense and is complete, and (4) carry out the activity or intervention (1997). Logic models should include a purpose, or mission; context, or conditions; inputs, resources or infrastructure, activities, or interventions, outputs, effects, consequences, outcomes, or impacts.
Burnout and Stress

Maslach & Jackson define burnout as "a syndrome of emotional exhaustion and cynicism that frequently occurs among individuals who do 'people work' of some kind" (1981). The three main categories of burnout are emotional exhaustion, depersonalization, and personal accomplishment. The fundamental aspect of burnout that teachers experience is emotional exhaustion. Emotional exhaustion is the tired and fatigued feeling that develops as emotional energies are drained, becoming chronic over time. The second aspect of burnout that teachers face is depersonalization. Educators who no longer have positive feelings about their students experience this second stage of burnout. The third and most crucial aspect of teacher burnout is a lack of personal accomplishment. When educators no longer feel that they contribute to the development of students or a school community, they are vulnerable to experiencing profound disappointment (Maslach et al., 2018).
Mindfulness

The practice of mindfulness has both ontological and epistemological roots associated with reducing stress and teacher burnout (Crain et al., 2017; Reiser et al., 2016; Roeser et al., 2013). The term "mindfulness" comes from the Pali word sati, meaning memory. It signifies "the presence of mind, attentiveness to the present, rather than the faculty of memory regarding the past" (Bodhi, 2000, p. 86). Kabat-Zinn (1994) describes mindfulness as "paying attention in a particular way; on purpose, in the present moment, and nonjudgmentally" (p.4). It is not the goal of mindfulness to solve problems, reflect on the past, or plan for the future. Instead, mindfulness is a practice that enables participants to see situations for what they are and understand that interpretation is both internal and individual.

Researchers from the University of Kentucky (Baer et al., 2006) examined the facet structure of mindfulness by comparing and analyzing the content of five mindfulness questionnaires. Findings suggest that conceptualizing mindfulness as five facets helps the operationalization of mindfulness in research and understanding its practice components. The five main facets of mindfulness the researchers identified were observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience.

Another popular way of defining and operationalizing mindfulness is a model Bishop and his team (2004) developed. Their definition builds on a two-component model of mindfulness. The first component involves the self-regulation of attention. Practicing mindfulness is associated with attention skills, which are required to maintain awareness of current experience. Awareness leads to the identification of a thought that arises. Attention is drawn to the thought. Once the thought is recognized, the brain self-regulates the release of the thought and returns the attention to an anchor (focus on the breath, feet, rising of the chest). In turn, self-regulation
discourages rumination of thoughts and allows a non-elaborative observation of thoughts and feelings as they arise.

The second component of mindfulness Bishop and his colleagues identify is an orientation to experience. "This orientation begins with making a commitment to maintaining an attitude of curiosity about where the mind wanders whenever it inevitably drifts away from the breath, as well as curiosity about the different objects within one's experience at any moment" (Bishop et al., 2004, p.233). Orientation to experience posits a mindset that what each person experiences in a situation is a private experience and that feelings and emotional states are not the actual phenomena occurring, rather the response to the events themselves.

Both the five facets of mindfulness and the two-component definition of mindfulness will be used in this study. The five facets of mindfulness will serve as the action model. In contrast, the two-component definition of mindfulness will serve as the intended consequences for practicing said actions (i.e., when participants practice observing, describing, acting with awareness, and non-judging, they will gain better access to self-regulating their attention and orienting themselves to an experience).

**Theory of Wellbeing (PERMA)**

Most mindfulness interventions occur in clinical settings (Lomas & Ivtzan, 2016). The nature of most interventions, including MBIs, approaches topics from a deficit lens, as the purpose of an intervention is to "intervene" in negative behavior and change it. However, this position is counter-intuitive to instituting a mindfulness intervention and encourages the rumination of thoughts on the deficit behavior by highlighting it. American social psychologist, Ken Gergen (1994), addresses the idea of "deficit language" by suggesting that deficit language can lead to deficit thinking.
According to Martin Seligman and Mihaly Csikszentmihalyi, positive psychology aims to "begin to catalyze a change in the focus of psychology from preoccupation only with repairing the worst things in life to also building positive qualities" (2000, p. 5). Under the umbrella of positive psychology lies the Well-Being Theory. This theory, also known as PERMA, categorizes five factors that work together to achieve "flourishing," which means one's life is prosperous and thriving (2000). PERMA is the term used to describe these five factors; positive emotions (P), engagement (E), relationships (R), meaning (M), and accomplishments (A) (Kern et al., p. 262).

Seligman (2000) refers to feelings of joy, content, and being cheerful as components of happiness attributed to positive emotion. Within limits, we can increase our positive emotions about the past (by accepting things and letting them go), the present (savoring each moment), and the future (building optimism) (2011). Engagement is the psychological state of feeling attached to a task or activity. Csikszentmihalyi's idea of "flow" is produced when we are engaged. Flow shows us that people will do something for the sake of doing it because they enjoy it so much. Examples of engaging activities that lead to flow are playing an instrument, reading a book, and participating in sports (Seligman, 2011). Relationships include feeling socially integrated, feeling connected with others, and feeling cared for. They are vital to wellbeing. Evolutionary speaking, we depend on one another for survival. Therefore, relationships increase wellbeing. (2011). According to PERMA, the meaning is finding the value in life, and the work one does to be part of something bigger than oneself. Examples of meaning can be serving in politics, work, on a team, in church, or participating in service to others. Accomplishments involve working towards goals and achieving them. People pursue
accomplishment individually, at work, or on a team. Accomplishments are not always sought after for a specific reason (2011).

Using PERMA to approach mindfulness interventions from a strengths-based approach allows teachers to connect to inner strengths, thus increasing teachers' sense of self-efficacy (Fisher, 2011; Schussler et al., 2016). While the strengths-based approach focuses on the individual (McCashen, 2005), this study's intervention will also focus on reflecting, reframing, envisioning, and co-constructing environmental/community strengths as teachers firmly situate themselves within a unique teaching community.

Teachers connected to their emotions and feel supported through workplace social support report lower burnout levels (Ju et al., 2015; Kovess-Masféty et al., 2007). Administrators and school leaders can support teachers and reduce burnout by fostering supportive environments through emotional intelligence and stress reduction training. Researchers have reported a correlation between mindfulness-based interventions (MBI) for teachers and reducing burnout symptoms (Jennings et al., 2013; Jennings et al., 2016; Rieser et al., 2016; Roeser et al., 2013; Schussler et al., 2016). These studies specifically demonstrated a decrease in emotional exhaustion and depersonalization and increased feelings of personal accomplishment. Additionally, minimal studies exist using a strengths-based approach to mindfulness interventions. Still, evidence suggests that this design is worthwhile and is associated with more significant correlational changes in burnout and wellbeing than the traditional deficit model (Lomas & Ivtzan, 2016).

An adapted logic model, therefore, is essential in depicting the relationships in this study. It can reveal what specific outputs of mindfulness and the strengths-based model lead to the intervention's intended outcomes and the impact these outcomes have on particular components
of teacher burnout. Moreover, the logic model can help the researcher design the intervention to meet a specific group of participants where they are. In this case, the group of participants in this study is boarding school teachers. The following section will highlight a boarding school teacher's role and why conducting a study with this particular population of people is essential.

**Boarding School Teachers and Burnout**

Boarding School teachers are a largely understudied population of teachers on the topic of burnout. Boarding school teachers work in a residential school setting that houses students on evenings and weekends throughout the school year and provides them with an education. In most cases, boarding school teachers must work additional hours beyond the school day, including nights and weekends, and often fulfill multiple roles beyond a classroom teacher. Since this schedule promotes a lack of separation between work life and personal life, it is not surprising that teachers in this setting tend to dedicate a significant more amount of time holding professional conversations, participating in meetings, and talking with students than regular teachers (Azulay, 2019), thus furthering the amount of time boarding school teachers tend to their work.

Beginning at just 44 hours per week, the number of hours a person works can be detrimental to overall health symptoms (Sparks et al., 1997). Since most boarding school teachers are required to work additional hours stretching into evenings and weekends, it can be assumed that most of these teachers work well beyond a typical 40-hour workweek. These extra hours are considered Extra Role Time (ERT), and teachers who invest more in ERT are more likely to experience burnout and decreased commitment to teaching, as well as accommodative coping, the downgrading of goals, and reframing of outcomes (Brown & Roloff, 2011).
Administrators in boarding schools should consider the impact burnout has on teachers and the potential for dangerous institutional implications when teachers cannot function properly. Since many boarding school teachers are expected to fulfill multiple job roles; some are required as part of the contract, some voluntary, it is vital for the institution to provide teachers in this setting with social support to help mitigate burnout. Gains such as social support and other forms of support have been shown to help mitigate burnout (Azulay, 2019; Halbesleben, 2006; Ju et al., 2015; Kovess-Masféty et al., 2007). Teachers attuned to their emotions report lower levels of burnout (Ju et al., 2015). Administrators and school leaders can support teachers and reduce burnout by fostering supportive environments through emotional intelligence and stress reduction training.

The practice of mindfulness has both ontological and epistemological roots associated with reducing stress and teacher burnout (Crain et al., 2017; Reiser et al., 2016; Roeser et al., 2013). In this study, the researcher will assess the efficacy of an eight-week strengths-based mindfulness intervention on boarding school teacher burnout. The next chapter will detail the methodology of this study.
Chapter 3: Methodology

Overview

Studies show that burnout decreases teacher instruction efficacy, increases absenteeism, interferes with student/teacher relationships, and causes attrition, which costs the system millions of dollars each year (Sutcher et al., 2016). Mindfulness interventions are associated with reductions in burnout symptoms. Many schools are piloting programs to introduce these practices to teachers (Jennings et al., 2013; Jennings et al., 2017; Reiser et al., 2016; Roeser et al., 2013). Mindfulness-based interventions for teachers provide teachers with skills to cope with stressful situations, improving teachers' overall wellbeing for a more effective learning environment. These interventions are often perceived as a mitigation effort for deficit behaviors such as stress and burnout.

Appreciative Inquiry (AI) is a framework that allows us to utilize mindfulness in response to stress and burnout from a strengths-based lens (Cooperrider & Whitney, 2005). The researcher developed an eight-week mindfulness-based intervention (MBI) with an AI lens to address teacher burnout in this study design. This chapter will provide an overview of this lens and the study's setting and participant pool. Moreover, this chapter will define the different instrumentation tools and map out how data will be collected and analyzed using an exploratory sequential design. To conclude, this chapter will address threats to validity and reliability and the limitations accompanying the study's design.

Problem Statement

Recently, teachers identified “uncertain job expectations, negative portrayals of educators in media, lack of time, and adoption of new initiatives without proper training” as the primary sources of stress and burnout. (American Federation for Teachers & BATs, 2017, p. 1).
Burnout is prominent in the teaching profession. (Maslach & Jackson, 1981; Shen et al., 2015; Skaalvik & Skaalvik, 2010). It has many adverse effects on personal and institutional factors. Personal effects of burnout include a decline in cognitive functioning, overall health, and relationships with others (Maslach et al., 2018). Moreover, there are physical implications from burnout as well. As a result of burnout, teachers can suffer from fatigue and exhaustion, chronic symptoms of the cold, gastrointestinal issues, sleep disruptions, shortness of breath, and headaches (Freudenberger, 1974). A decline in a teacher's physical and mental health can cause negative student interactions, ineffective instruction, absenteeism, and attrition (Suh, 2015). Moreover, teacher burnout can cost upwards of $20,000 per teacher that leaves the field due to pre-retirement attrition each year (Sutcher et al., 2019).

Research Questions

This study seeks to address the issue of teacher burnout. More specifically, the population of teachers in this study is boarding school teachers. Since boarding school teachers require different and unique demands, this population of teachers is worth studying. It is not only important to observe if boarding school teachers experience a change in burnout during a mindfulness intervention, but how this population uses mindfulness to cope with stress in the workplace. Therefore, two main research questions are guiding this study. The first question will be answered quantitatively and asks,

1. What is the effect of a virtual eight-week mindfulness-based intervention program on boarding school teachers’ response to stress and burnout?

The second question seeks to learn more about the individual experiences of the participants in this study. Therefore, the second question will be addressed qualitatively and asks,
2. How do teachers employ mindfulness techniques in stressful situations in the workplace during a virtual mindfulness-based intervention?

Description of Setting

This study's setting was a local independent all-boys college preparatory school in the Mid-Atlantic region of the United States. The school serves boys in grades 9-12 who demonstrate a serious dedication to academics. The school's mission is to prepare a diverse group of boys in grades 9-12 with academic ability and good character to lead productive and fulfilling lives by making a college preparatory education financially accessible (School Mission, 2021). The school serves students for whom this education represents an extraordinary opportunity. They offer opportunities to boys of ability and promise who are working to achieve their full potential. The school intentionally provides significant financial aid to welcome students from a wide range of economic circumstances. Moreover, the school embraces unique ethnic, geographic, and socio-economic diversity. Finally, the school is single-sex and serves boys from various family situations, particularly those with a single parent.

Participants

Purposeful and convenience sampling was used in this study to recruit participants. Participants were seven self-selected teachers from a suburban single-sex college preparatory boarding school in the Mid-Atlantic Region. Teachers in the study represent a variety of subjects and teach in grades 9-12. The majority of the student population is comprised of underprivileged students from urban areas across the United States. To accurately depict each of the participants, the following demographic survey was distributed before the intervention.
Table 3.1

Participant Demographics

<table>
<thead>
<tr>
<th>Question</th>
<th>Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your gender?</td>
<td>(a) Male (b) Female (c) Other</td>
</tr>
<tr>
<td>What is your age?</td>
<td>(a) Under 18 (b) 18-24 (c) 25-34 (d) 45-54 (e) 55-64 (f) 65-74 (g) 75-84 (h) 85 or older</td>
</tr>
<tr>
<td>How would you describe yourself? Please select all that apply.</td>
<td>(a) White (b) Black or African American (c) Hispanic/LatinX (d) American Indian or Alaska Native (e) Asian (f) Native Hawaiian or Pacific Islander (g) Other</td>
</tr>
<tr>
<td>What is the highest degree or level of school you have completed?</td>
<td>(a) Less than a high school diploma (b) High school degree or equivalent (e.g., GED) (c) Some college, no degree (d) Associate’s Degree (e.g., AA, AS) (e) Bachelor’s Degree (e.g., BA, BS) (f) Master’s Degree (e.g., MA, MS, MEd) (g) Doctorate or professional degree (e.g., MD, DDS, EdD, PhD)</td>
</tr>
<tr>
<td>What is your current job at the school?</td>
<td>(a) Full-time academic faculty ONLY (b) Full-time cottage faculty ONLY (c) Full-time staff ONLY (d) Full-time administrator ONLY (e) Cottage AND Academic faculty.</td>
</tr>
<tr>
<td>How long have you been employed at the school?</td>
<td>(a) 0-5 (b) 6-10 (c) 11-15 (d) 16-20 (e) 20 or more</td>
</tr>
<tr>
<td>How long have you worked in education?</td>
<td>(a) 0-5 (b) 6-10 (c) 11-15 (d) 16-20 (e)20 years or more</td>
</tr>
</tbody>
</table>

Research Design

This study used an exploratory sequential mixed-methods design to combine qualitative and quantitative data. Three overarching phases in this design occur sequentially. The mixed-methods integrative data analysis begins with exploring a small qualitative sample in phase one (Creswell & Plano-Clark, 2018). In this study, semi-structured interviews using the Appreciative Interview (AI) protocol (Cooperrider & Whitney, 2005) were conducted with four participants.
The second step in phase one to integrative data analysis included building or expanding on the quantitative feature (i.e., the mindfulness intervention). In phase two, the intervention was tested with a larger sample (n=7). The results of the AI semi-structured interviews were used to frame meditations and group discussions in the MBI. Using the Appreciative Inquiry protocol, participants can create positive organizational change by analyzing the organization from a strengths-based lens (Cooperrider et al., 2018). However, this study differs from a typical exploratory sequential study due to data collection's convergent nature in phase two. The third phase of the exploratory sequential design used in this study involved data analysis and the triangulation of the qualitative and quantitative data from phase two to draw generalizations about the intervention's efficacy.

**Figure 3.1**

*Exploratory Sequential Mixed-Methods Design with Convergent Phase 2*

**Appreciative Inquiry**

Appreciative Inquiry (AI) is the cooperative, coevolutionary search for the best in people and their organizations. AI is a framework that allows us to employ mindfulness concerning stress and burnout from a positive psychology lens (Cooperrider & Whitney, 2005). It involves systematic discovery of what gives life to an organization when it is at its best (2005). The process begins by defining issues through preliminary interviews involving a cross-section of
people from throughout the organization. Once the problems are defined, AI challenges participants to reframe deficit issues into affirmative topics for inquiry.

Once the affirmative topics are defined, participants enter the cyclical phase, titled the 5-D cycle. Participants are guided through the definition phase, the discovery phase, the dream phase, the design phase, and the destiny phase. The 5-D cycle can repeat back to the discovery phase or the definition phase, where new affirmative topics are defined. There are five principles and scholarly streams of thought that are central to the AI process. The constructionist principle, simultaneity principle, poetic principle, anticipatory principle, and positive principle work together to guide participants through the 5-D cycle of AI. In short, they ensure that positive questions are imposed in group discussions by sharing stories that push for change.

When successful, appreciative inquiry works by generating six essential conditions, or six freedoms, that unleash personal and organizational potential. When the voices of an organization are liberated, members can feel the freedom to be known in the relationship, freedom to be heard, freedom to dream in the community, freedom to choose to contribute, freedom to act with support and freedom to be positive (Cooperrider & Whitney, 2005).

Figure 3.2

*Appreciative Inquiry 5-D Cycle*
Procedures

First, the researcher obtained permission to conduct the study, recruit participants, and a letter of support from the assistant head of school. The Institutional Review Board at West Chester University granted the primary investigator (PI) permission for data collection to begin in September 2020 (Appendix A). This research began during the first week of October 2020, beginning with two informational sessions for interested participants over Zoom. Each informational session lasted approximately 30 minutes. The PI provided the potential participants with a brief overview of mindfulness, information regarding the intervention's length, the frequency and length of intervention meetings, and an informed consent form (Appendix B).

Phase I

The first phase of an exploratory sequential research design involves a qualitative component which will inform some part of the quantitative component in phase II (Creswell & Plano-Clark, 2018). In this study, the primary investigator interviewed four of the participants using semi-structured interviews from the Appreciative Interview Pre-Intervention Questionnaire guide (Cooperrider & Whitney, 2005, p. 41) (Appendix C) approximately one week after recruiting the participants.

The semi-structured interviews took place over the video conferencing platform Zoom and were audio-recorded and transcribed verbatim. Each participant was given a pseudonym for data collection. Transcriptions from semi-structured interviews were anonymous. The transcriptions from the interviews were kept on a data-encrypted server. The researcher did not disclose any information from the semi-structured interviews. Transcriptions were coded using the constant comparative method of grounded theory to define emerging themes about highpoints in the school, personal accomplishments, positive school factors, and future aspirations. The
The purpose of grounded theory is to generate theory that is grounded in or emerges from the field (Lichtman, 2013). Although a limitation of this type of analysis can be seen as working from a reductionist perspective, the participants worked collaboratively through this data to develop topics for the intervention (2013). A computer-assisted qualitative data analysis software (CAQDAS), Dedoose, was used for open, axial, and selective coding. The transcriptions were coded into themes to develop the “positive core” and "affirmative action topics." Participants discussed the themes that emerged to develop a topic to focus on for the intervention duration.

**Semi-Structured Interviews**

The purpose of the semi-structured interviews is to develop a collective problem statement about what the participants perceive to be the “positive core” of the workplace. The *appreciative interview* occurs in the definition phase of Appreciative Inquiry. This one-on-one interview with each participant will occur before the mindfulness-based intervention begins. The purpose of the interview is to define what participants view as highpoint experiences of the organization. Guiding questions from AI are listed in Figure 2 below (Hammond, 2013, p.77).

**Figure 3.3**

*Appreciative Interview Questions*

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe a time in your school that you consider a highpoint experience,</td>
</tr>
<tr>
<td>a time when you were most engaged and felt alive and vibrant.</td>
</tr>
<tr>
<td>Without being humble, tell me what it is that you most value about</td>
</tr>
<tr>
<td>yourself, your work, and your school.</td>
</tr>
<tr>
<td>What are the core factors that give life to your school when it is at</td>
</tr>
<tr>
<td>its best?</td>
</tr>
<tr>
<td>Describe your three concrete wishes for the future of this organization?</td>
</tr>
</tbody>
</table>
Phase I Qualitative Data Analyzed

In an exploratory sequential design, the qualitative data is analyzed for themes and codes to describe individuals' personal experiences or advance a theory that provides a culturally-specific understanding of the phenomenon (Creswell & Plano-Clark, 2018). Thus, analyzing the data from the semi-structured interviews using grounded theory was appropriate in this study. The purpose of grounded theory is to generate theory that is grounded in or emerges from the field (Lichtman, 2013). The software program Dedoose was used to apply a constant comparative method (Glaser, 1965) to code the interviews (n=4).

Phase 1 Coding

The coding process in this study involved first and second cycle coding. First cycle coding is used to initially summarize segments of data (Miles et al., 2014). Specifically, the researcher used in vivo coding as the first cycle coding technique. In vivo coding includes statements captured from the participants' words. Therefore, in vivo coding prioritizes and honors the participants' voices (Miles et al., 2014). Second cycle coding groups the first cycle codes into themes and sub-themes. The categories and themes are used to discover what the participants view to be the "positive core" of the organization and an "affirmative action topic," in the first step of the Appreciative Inquiry 5-D cycle (Cooperrider & Whitney, 2005). During second-cycle coding, the data was evaluated for phrases or statements aligned with the positive core or affirmative action topics. This data was organized into subcategories until saturation was reached. Charmaz (2001) described coding as "the critical link between data collection and their explanation of meaning. In qualitative data analysis, a code is a researcher-generated construct that symbolizes and thus attributes interpreted meaning to each individual data for later purposes of pattern detection, categorization, theory building, and other analytic processes" (p. 3-4). The
researcher inductively coded the data to allow the themes and subthemes to emerge from the participants' perspectives of the organization's positive core and three wishes.

The integration in the exploratory sequential mixed-methods design was to build from the initial qualitative phase (phase I) of the study. A contextually appropriate quantitative feature was developed and subsequently tested in phase II (Creswell & Plano-Clark, 2018). The first step was to analyze the qualitative database from the pre-intervention appreciative interviews for themes and codes to describe the participants' positive personal experiences and the participant's perception of the school's strengths. The second step was to use the themes and codes that emerged from the pre-intervention interviews to identify what Cooperrider and Whitney (2005) call the "positive core" in the 5-D cycle of Appreciative Inquiry. The "positive core" was defined as "community." Additionally, the "affirmative action" topic defined by the participants was "intention in school culture." The positive core and affirmative action topics defined by a small subset of participants (n=4) were used to frame the weekly group discussions and didactic activities during the intervention.

**Intervention Development**

The next step in the exploratory sequential design is to determine what quantitative feature needs to be developed, and themes and codes should be linked to specific elements in the feature (Creswell & Plano-Clark, 2018). The purpose of this qualitative component in phase I of this study was to inform the didactic activity and group discussion portion of the mindfulness intervention. The principal investigator, who also served as the intervention curriculum developer and facilitator, designed each weekly discussion and activity to culminate in a participant-developed framework that addresses improvements in intentional school culture. The integration of this new part of the intervention development designed from the qualitative themes
and codes from phase I can be seen in a joint display of the intervention curriculum below (see Table 3.2).

**Intervention Design**

Before starting the research study, the researcher designed the strengths-based mindfulness intervention using data-driven evidence and best practices in mindfulness interventions. Specifically, the researcher focused on (1) the length of the intervention, (2) the seven stewardship skills of a mindfulness facilitator, (3) and the main components of a mindfulness-based intervention (MBI). These components include formal and informal mindfulness practices, group discussions, didactic activities, and a homework component. Once phase I was completed and the qualitative data was analyzed, the researcher included the "positive core" and "affirmative action topics" in the group discussion and didactic activity portion of the intervention curriculum. Each of these components will be explained below.

**Length of Intervention**

The average MBSR course lasts eight weeks, consists of two and a half hour sessions, and includes a one-day workshop lasting six to eight hours (Santorelli et al., 2017). Some adapted interventions have explored reduced program hours for participants' feasibility in school settings (Jennings et al., 2013; Reiser et al., 2016). For this study, the course lasted eight weeks and consisted of 60-minute sessions. In addition to the weekly sessions, a half-day workshop lasting two hours was included. Some studies have used a reduced number of instructional hours to meet the participants' needs (Reiser et al., 2016). The number of hours in this study, therefore, is appropriate.
Facilitation

This study uses mindfulness facilitators' seven stewardship skills (McCown, 2016). The first skill is caring for place. This is the most concrete skill involving the physical space. Ideally, participants should sit in a circle because it suggests a “meeting of equals” (2016). Due to the restrictions of Covid-19, the design was adapted to a virtual setting. Participants were asked to log into the video conferencing platform Zoom each week to attend live sessions. Additionally, the participants were asked to keep their screens on "gallery view" so all participants could be seen equally. Although this is not as ideal as the in-person setting, McCown reminds us that “we do what we can and accept what we must” (p.7) in the caring for place.

The next stewardship skill is attending to bodies (2016). This skill was addressed in the mindfulness curriculum instituted in this study. In a mindfulness intervention, the teacher is responsible for setting guidelines about caring for oneself before guiding participants through the various mindfulness activities. The facilitator would begin each practice by reminding the participants that they have agency over their own experience and stating that they should listen to their bodies and minds and adapt should they feel uncomfortable. Moreover, when guiding participants through meditations, the facilitator never demanded that the participants engage in any specific thought process. Instead, the facilitator would suggest that the participants draw their attention to certain things. At the end of each mindfulness practice, the facilitator offered space for participants to share their experiences.

Maintaining relationships, learning in the atmosphere, and sensing sublime moments are the third, fourth, and fifth stewardship skills for mindfulness facilitators (2016). Through formal and informal mindfulness practices, the group together creates an environment that feels safe. Teacher’s skills help provide pedagogical practices. For example, if the participants are in the
middle of a meditation and a loud firetruck drives by, the facilitator should encourage the participants to bring awareness to the sound instead of trying to ignore it. After the practice, the facilitator should have the members de brief about the experience as a group. In this study, it would have been easy for participants to keep home distractions as separate entities from group confluence. To co-create the space and build relationships, the facilitator asked that all participants avoid muting themselves throughout the entire workshop, regardless of what was happening in their environment.

The last two stewardship skills involve the cooperation of teacher and student. Tending the ethical space and positioning the self for teaching are the sixth and seventh skills. Qualities are located in both the actions of teaching and in the unspoken framing of the space (constructionism) when teacher and participants come together. This is the ethical space (McCown, 2016). Additionally, mindfulness teachers are formed by steeping, by being participant and teacher. When the teacher doubles as a participant, potential co-creation grows when the participants and teacher are learning together. Thus, it is essential to remember that the teacher is merely a guide, a facilitator, and therefore should not be viewed as a master of content.

*Intervention Components*

Most mindfulness-based interventions follow the same curricular structure and incorporate four main components in each lesson which are (1) Formal and informal mindfulness practices, (2) didactic activities, (3) group discussions, and (4) homework. Formal mindfulness practices usually occur at the start of each meeting to encourage settling into the environment. A variation of formal mindfulness practices was utilized in this study and included (1) the body scan, (2) yoga, and (3) sitting meditation (Kabat-Zinn, 1990). A group discussion to de brief the formal mindfulness experience typically occurred after the opening practice. Following the first
group discussion, the participants were asked to participate in a didactic activity. Each weekly session consisted of a fusion between cycling through the Appreciative Inquiry (AI) 5-D phase on affirmative choice topics defined by participants and the various facets of mindfulness. Participants were encouraged to use mindfulness techniques to process and participate in didactic activities that engage in the affirmative choice topics.

Group discussions continued to be embedded within the didactic activity and other mindfulness practices within the lesson plan. MBIs draw influence from social constructivism. Therefore, the group dynamic is the way of making sense of the world and is vital to any MBI (Kabat-Zinn, 1990), and constant group dialogue is necessary for confluence. Finally, each weekly lesson included a home practice or homework component. Formal home practice is an integral part of MBIs (McCown & Micozzi, 2011). Participants were asked to do roughly twenty to thirty minutes of homework each evening. Activities included recorded guided meditations, informal mindfulness activities, and activities related to the affirmative action topics. Table 3.2 provides an overview of the curriculum designed for this study.
### Table 3.2

**Overview of Mindfulness-Based Intervention (MBI) Curriculum**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Meditation</th>
<th>Didactic Activity</th>
<th>Group Discussion</th>
<th>Homework</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>· What is Mindfulness?</td>
<td>Sitting Meditation</td>
<td>What is mindfulness? An overview of main components</td>
<td>· What compelled you to take part in this intervention?</td>
<td>· Body Scan Recording</td>
<td></td>
</tr>
<tr>
<td>· Mindful Awareness</td>
<td></td>
<td></td>
<td>· What are you looking forward to getting out of the next eight weeks?</td>
<td>· Choose one daily activity to bring full awareness to for the week: Brushing teeth, taking out the garbage, taking a shower, feeding a pet, etc.</td>
<td></td>
</tr>
<tr>
<td><strong>Week 2</strong></td>
<td>· AI Discovery - Developing Affirmative Action Topics</td>
<td>· Guided Body Scan · Yoga (Mountain Pose, Tree Pose)</td>
<td>· 9-Dots Puzzle Exercise · Interpersonal Communication Practice (MBSR p. 30) · Use Group Discussion to identify the positive core and develop Affirmative Action Topic(s)</td>
<td>· Reflect on appreciative interview highlights.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>· perception and creative responding (non-reactivity)</td>
<td></td>
<td></td>
<td></td>
<td>· Body Scan Recording · Pleasant Events Calendar</td>
</tr>
<tr>
<td><strong>Week 3</strong></td>
<td>· AI Discovery · Non-judging to inner experience</td>
<td>· Guided Body Scan · Walking Meditation</td>
<td>· Reactivity Reflection Exercise</td>
<td>· Listening to others’ stories and practicing non-comparison/non-judging</td>
<td>· Loving-kindness recorded meditation</td>
</tr>
<tr>
<td><strong>Week 4</strong></td>
<td>Dream · Acting with awareness</td>
<td>· Expanding Awareness McCown, Donald. Teaching Mindfulness (Analysis) (p. 206). Springer New York. Kindle Edition.</td>
<td>· Pick one of the aspirations discussed in the future for our school. Develop a plan to bring awareness to this aspiration in your daily life.</td>
<td>·7 Anchors Recorded Meditation · Record each time you bring awareness to your aspiration. What did or didn’t happen that aligned with this aspiration?</td>
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<td></td>
<td>· Self-Inquiry: Investigating Confirmation Bias Worksheet by Willoughby Britton in McCown, D., Reibel.</td>
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<tr>
<td><strong>Retreat</strong></td>
<td>· AI Dream · Perception and Creative Responding</td>
<td>· Body Scan · Walking Meditation · Seated Meditation · Yoga</td>
<td></td>
<td></td>
<td>· Continue homework from Week 4</td>
</tr>
<tr>
<td>Week 5</td>
<td>AI Design</td>
<td>Body Scan</td>
<td>Draft provocative propositions (design statements) incorporating the positive core - Declaring your positive core</td>
<td>Review awareness of aspirations. How does our collective AI dream align with the positive core we identified at the beginning of the program?</td>
<td>Mindful eating exercise</td>
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<tr>
<td>· Being present</td>
<td>· Seated Meditation</td>
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<td>· Gratitude Recorded Meditation</td>
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<tr>
<th>Week 6</th>
<th>AI Design</th>
<th>Body Scan</th>
<th>Draft provocative propositions (design statements) incorporating the positive core - Framework</th>
<th>What potential barriers/supports do you see in the current community to your AI positive core? Employing mindfulness when working towards your AI positive core</th>
<th>Self-Compassion Recorded Meditation</th>
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<tbody>
<tr>
<td>· Walking Meditation</td>
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<tr>
<th>Week 7</th>
<th>AI Destiny- Invite action inspired by the discovery, dream, and design days</th>
<th>Saying “Yes” adapted from a practice used by the psychotherapist and Buddhist teacher Tara Brach. McCown, D., Teaching Mindfulness (Analysis) (p. 214).</th>
<th>Declare intended actions and ask for support</th>
<th>Discuss how the group will support one another in achieving AI design goals.</th>
<th>One guided meditation each day from the previous weeks (your choice).</th>
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<tr>
<th>Week 8</th>
<th>AI Destiny Moving Forward</th>
<th>Body Scan</th>
<th>Letter to Self (MBSR, p.40)</th>
<th>Debrief about experience</th>
<th>Continue the practice!</th>
</tr>
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<tr>
<td>· Seated Meditation</td>
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Phase II- Intervention

In Phase II of an exploratory sequential design, the quantitative feature should be tested using rigorous procedures (Creswell & Plano-Clark, 2018). Individuals who participate in the quantitative follow-up for the exploratory sequential research design are typically not the same individuals who provided the qualitative data in the initial phase since the quantitative phase intends to generalize the results to a population (2018). However, since the sample size (n=7) is small, the study is approached as a single-subject exploratory sequential design. Therefore, all participants from the initial qualitative phase also participated in the intervention phase. In phase II, the participants engaged in the eight-week, strengths-based mindfulness intervention curriculum described above. During the intervention phase, the researcher collected pre-and post-test quantitative data to measure burnout and mindfulness changes. Weekly qualitative data about participant experiences and a quantitative survey on affect were also collected. The following section will explain each of the data collection tools in detail.

Quantitative Instrumentation

Before the intervention, two surveys were distributed to gather a baseline measure of burnout and mindfulness. The Maslach Burnout Inventory for Educators (MBI-ES) (Maslach & Jackson, 1981) was used to measure burnout, and The Five Facets of Mindfulness Questionnaire (FFMQ) (Baer et al., 2006) was used to measure mindfulness. The same surveys were used after the intervention to measure any burnout or mindfulness changes throughout the intervention. Additionally, a weekly survey was distributed as a measure of wellbeing. This survey was the Positive and Negative Affect Schedule (PANAS) (Watson et al., 1985).

The Maslach Burnout Inventory for Educators (MBI-ES). The Maslach Burnout Inventory (MBI) is a standardized measure of an individual's experience of burnout. The
Maslach Burnout Inventory for Educators (MBI-ES) is a specific survey for educators and burnout. The frequency with which respondents experience feelings related to each MBI-ES scale is assessed using a seven-point, fully anchored response format. Items are written in statements about personal feelings or attitudes and using the general term students. Responses are given using a frequency scale, which is labeled at each point and ranges from 0 ("Never") to 6 ("Every day"), as shown in Figure 5 (Maslach et al., 2018).

**Figure 3.4**

*MBI-ES Survey Format*

| Item 8: I feel burned out from my work. |
|-------------------------------|-------------------|
| How often? |                      |
| 0 | Never |
| 1 | A few times a year or less |
| 2 | Once a month or less |
| 3 | A few times a month |
| 4 | Once a week |
| 5 | A few times a week |
| 6 | Every day |

Maslach & Jackson (1981) defined three categories of feelings that contribute to burnout as a means of measurement in the MBI. An adapted version of the MBI was created for Educators (MBI-ES) using the same three scales. Five questions refer to depersonalization, and nine questions refer to emotional exhaustion. Higher scores for these two measures indicate higher levels of burnout. The remaining eight questions refer to personal accomplishment. Lower scores for this measure indicate higher levels of burnout. The scales depersonalization, emotional exhaustion, and personal accomplishment are explained in detail below.

**Depersonalization.** Educators who have developed negative feelings about their students suffer from depersonalization. Teachers can display negative attitudes by using derogatory labels, becoming cold or distant, physically distancing themselves, and tuning students out.
through psychological withdrawal (1981). There is also a relation between teachers who report negative relationships with parents and depersonalization (Skaalvik and Skaalvik, 2010).

**Emotional Exhaustion (EE).** Teachers suffer from EE when they feel emotionally overextended and exhausted by the work they do. The symptoms of EE are feeling tired and fatigued. These feelings can become chronic over time and impact productivity (1981). Teachers who feel negatively about time pressures and job satisfaction suffer the most from EE (Skaalvik and Skaalvik, 2010).

**Personal Accomplishment.** Many teachers feel disappointed when they feel that they are no longer effective in helping students learn and grow. If a teacher does not feel competent, it could impact their dedication to teaching. This is what Maslach and Jackson refer to as a lack of personal accomplishment (1981).

**Five Facet Mindfulness Questionnaire (FFMQ).** FFMQ is an “instrument… based on a factor analytic study of five independently developed mindfulness questionnaires. The analysis yielded five factors that appear to represent elements of mindfulness as it is currently conceptualized. The five facets are observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience” (Baer et al., 2006). The instrument consists of 39 questions. The frequency with which respondents relate to each FFMQ factor is assessed using a five-point, fully anchored response format. Items are written in the form of statements about personal feelings or attitudes. Responses are given using a frequency scale, which is labeled at each point and ranges from 1 ("Never, or very rarely true") to 5 ("Very often or always true") and should be answered as to how the participant generally feels. Eight questions pertain to "observing," eight pertain to "describing," eight pertain to "acting with awareness," eight pertain to "non-judging," and seven pertain to "non-reactivity." "Acting with
awareness," "non-judgement," and half of the questions for "describing" are scored using a reverse scoring system.

**Qualitative Instrumentation**

Typical exploratory sequential research designs begin with a qualitative data component that informs a quantitative component of the second phase design. This study, however, utilizes an embedded convergent design within the exploratory sequential design in phase II, atypical of a traditional exploratory sequential design. The research questions in this study aimed to observe changes over time and understand what the participants were experiencing. Creswell (2013) asserted that qualitative research has the exploratory capacity to investigate, interpret, and understand the participants' lived experiences. In order to analyze participants’ experiences, they were asked to complete a weekly reflective journal prompt asking them to describe a stressful situation and how they handled it. Phenomenological reduction was used to search for emerging themes among participants (Moustakas, 1994).
### Reflective Journal Prompts

<table>
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<tr>
<th>Journal Entry</th>
<th>Prompt</th>
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<tbody>
<tr>
<td>Pre-Intervention Journal Entry</td>
<td>In your own words, define mindfulness. What previous experiences have you had with mindfulness?</td>
</tr>
<tr>
<td>Weekly Journal Entry</td>
<td>What is one stressful situation you encountered this week, and how did you handle it?</td>
</tr>
<tr>
<td>Post-Intervention Journal Entry</td>
<td>Think back to why you originally chose to participate in this program. What expectations did you have? Why did you choose to complete the course?</td>
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<tr>
<td></td>
<td>What did you want/hope for?</td>
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<td></td>
<td>What did you get out of the program, if anything? What did you learn, if anything?</td>
</tr>
<tr>
<td></td>
<td>What sacrifices did you make? What were the costs to you? What obstacles did you encounter, if any, and what did you learn about yourself in working with these obstacles?</td>
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<tr>
<td></td>
<td>If you are motivated to continue to practice mindfulness, how will you continue to practice when this program is over?</td>
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**Positive and Negative Affect Schedule (PANAS).** PANAS is a mood scale that measures both pleasant and unpleasant moods. Positive affect (PA) reflects the extent to which a person feels enthusiastic, active, and alert, whereas negative affect (NA) is a general dimension of subjective distress and unpleasurable engagement (Watson et al., 1985). The PANAS can be tailored to assess affect over different time periods. The ten primary descriptors in the positive affect category are attentive, interested, alert, excited, enthusiastic, inspired, proud, determined, strong, and active. The ten primary descriptors in the negative affect category are distressed, upset, hostile, irritable, scared, afraid, ashamed, guilty, nervous, and jittery.

**Phase III Data Analysis**
In the third phase of an exploratory sequential design, the data should be analyzed and interpreted to observe how the quantitative results support the quality and cultural specificity of the newly developed feature for the specific sample being studied (Creswell & Plano-Clark, 2018). In this study, the researcher analyzed quantitative data and interpreted qualitative data from phase two using a time-series design. "A time series design consists of studying one group, over time, with multiple pretest and post-test measures or observations made by the researcher. This design does not require access to large numbers of participants, and it requires only one group for the study" (Creswell & Gutterman, 2019, p. 317). Since this study employs a case study design with a small number of participants (n=7), a time-series data analysis design was appropriate for this study. The Statistical Package of Social Sciences, Version 24 (SPSS), was used to run multiple paired t-tests to analyze the quantitative survey data. For the convergent phase two embedded design, the researcher used phenomenological reduction and horizontalization to analyze the qualitative data. Following data analysis, the researcher triangulated the results to make conclusions about the efficacy of the study. This is the final phase of the exploratory sequential design.

**Analysis and Coding Procedures**

Data analysis in an interrupted time-series design consists of examining difference scores between the pretests and post-tests (Creswell & Gutterman, 2019). For this study, the researcher analyzed quantitative data from pre and post-test measures and interpreted qualitative data. During Quantitative Phase Two, the researcher used Statistical Package of Social Sciences, Version 24 (SPSS), to run a series of paired t-tests to analyze the pre and post-test quantitative survey data from the MBI-ES and the FFMQ. During Qualitative Phase Two for the case study embedded research, the researcher asked the participants to answer weekly reflective journals
that were completed weekly using the online survey platform Qualtrics. The journals were de-identified to ensure that the journals are identifiable by the participants only. They were otherwise anonymous. The qualitative analysis software, Dedoose, was used for phenomenological reduction.

**Qualitative Data Content Analysis.** The qualitative data collected in phase 2 of this study was analyzed through transcendental phenomenological reduction. Transcendental phenomenology focuses on people’s meaning of a lived experience of a phenomenon (Moustaskas, 1994). The purpose of transcendental phenomenology is to describe the essence of experiencing a phenomenon. The goal is to obtain objectivity (p. 88). There are four overarching steps to transcendental phenomenology; (1) epoché, (2) phenomenological reduction, (3) imaginative variation, and (4) synthesis of meanings (Moustaskas, 1994). Since the primary investigator (PI) is also the intervention facilitator, transcendental phenomenology will help the PI reduce bias.

The first step, and arguably the most critical step in transcendental phenomenology, is "Epoché." The researcher plays a pivotal role in qualitative data analysis because the realities of the data collected are constructed through the researcher's lens (Lichtman, 2013). Epoché occurs when the researcher puts aside his or her own experiences, biases, and preconceived notions to understand how the phenomenon appears to participants, instead of how the researcher perceives it. Epoché means "to stay away from or abstain" (Moustakas, 1994, p.84). In other words, epoché means to engage in "reflective-mediation" (p. 88). There are four steps in the epoché process.

The first step involves reflecting on your background, beliefs, biases, and presumptions related to the phenomenon. The second step involves the researcher listing all of their presumptions that may affect the data analysis process. The third step involves consciously putting these
presumptions aside. The last step involves the researcher is willing to accept and evaluate any idea that comes into consciousness (Moustaskas, 1994).

In stage two of transcendental phenomenology, interview questions are usually conducted until saturation occurs and are typically limited to one or two open-ended questions regarding their experiences of the phenomenon. This is what Moustaskas (1994) refers to as phenomenological reduction. In this study, participants were given weekly reflective journal questions. The prompt was the same each week. Participants were asked to describe a stressful situation and how they handled it. Each participant answered this question a total of eight times. Additionally, participants were asked a set of questions before the intervention, asking what their definition of mindfulness was and what their experience with it has been like so far. After the intervention, the participants answered various questions about their perceptions of mindfulness and what they felt they gained (if anything) from the intervention.

The third step in transcendental phenomenological reduction is called imaginative variation. During data analysis, a process called horizontalization is used to collect "significant statements" taken from transcripts to describe elements of experiencing the phenomenon. The significant statements can be sentences or quotes that describe how the participants experienced the phenomenon (1994). After the researcher identifies these statements, they are placed into clusters of meaning representing different themes the participants experience with the phenomena. From these clusters, the researchers can write a structural description, or the imaginative variation, of the phenomenon, which includes the context and setting that influenced how the participants experienced it.

The final step in transcendental phenomenological reduction is the synthesis of meaning. Significant statements identified in the previous stage are synthesized and used to write an
essential invariant structure (1994). An essential invariant structure, or the essence of the phenomenon, is a long passage of text that would give the reader an understanding of what it would be like to experience the phenomenon.

A weekly journal prompt was given to each participant at the beginning of each session. The prompt asked participants to explain a stressful situation each week and how they handled it. During the last session, in addition to the weekly journal prompt, participants were given a set of questions adapted from Kabat-Zinn’s Mindfulness-Based Stress Reduction (MBSR) course (Santorelli et al., 2017). Journals were coded and analyzed using the process of transcendental phenomenological reduction described above. The purpose of phenomenology is to describe and understand the essence of lived experiences of individuals who have experienced a particular phenomenon (Litchtman, 2013). Specifically, in this study, the researcher analyzed the phenomenon of handling stressful situations in the workplace with mindfulness.

**Quantitative Data Content Analysis.** The researcher used the software program SPSS to perform multiple paired t-tests for both pre/posttest survey measures (MBI-ES and FFMQ) and repeated measures analyses for the weekly PANAS survey questions. The t-test analysis measured the participants’ change in burnout and facets of mindfulness at two time points; before the intervention (pretest) to the end and after the intervention (posttest). Therefore, during this longitudinal data collection, implementing paired t-tests to compare two means was appropriate for this study.

**Triangulation**

Researchers develop a comprehensive understanding of a phenomenon by using multiple methods or data resources in qualitative data research. This is known as data triangulation (Patton, 1999). Method triangulation was used in this study. According to Polit and Beck (2012),
“Method triangulation involved the use of multiple methods of data collection about the same phenomenon” (p. 545). It was important in this study design to capture the phenomenon of the participants' experience in a mindfulness intervention since most of the literature on mindfulness interventions is measured quantitatively (Emerson et al., 2017). Moreover, since the sample size was small (n=7), using mixed-methods in an interrupted time-series design yielded high internal reliability. Therefore, the researcher used three sources of data collection at various points throughout the study: (1) qualitative semi-structured interviews, (2) three quantitative surveys, and (3) weekly reflection journals with the same prompt and a wrap-up journal with five prompts.

**Threats to Validity and Reliability**

Validity is the development of sound evidence to demonstrate that the intended test interpretation matches the test's proposed purpose (Creswell & Gutterman, 2019). A threat to validity occurs when an inference in an experiment is made because of covariance, causation constructs, or whether the causal relationship holds variations in persons, setting, treatments, and outcomes (Shadish et al., 2002). Considerations about validity and quality in mixed methods have long been identified as significant issues in mixed methods research and an essential aspect of a research project (Tashakkori & Teddlie, 2003). This study is no exception, and due to the importance of integrity, the recognition of these threats will be revealed in the subsequent section.

**Internal Validity**

Internal validity refers to the validity of inferences drawn about the cause-and-effect relationship between the independent and dependent variables (Creswell & Gutterman, 2019). Threats to internal validity can occur when there are problems in drawing correct inferences
about whether the covariation (i.e., the variation in one variable contributes to the variation in another variable) between the presumed treatment variable and the outcome reflects a causal relationship (Shadish et al., 2002). In this study, the threats to internal validity are related to participants’ history, maturation, and selection.

History is the first threat to internal validity in this study. Outside of the treatment, the researcher cannot control the events that happen throughout the experiment. It is impossible to have a tightly controlled environment and be able to account for all external events. Moreover, participants will experience maturation throughout the experiment. In this study, the timeline from pre to post-test is only eight weeks long. Even what seems to be a short amount of time can be long enough for maturation to occur. This is another threat to the internal validity of this study. The third threat to internal validity is the selection of participants for the study. Using purposeful and convivence sampling, participants were recruited and volunteered to participate. Volunteering could mean that the participants are more motivated and more likely to improve than randomly chosen participants (Creswell & Guterman, 2019).

A time-series design permits significant control over threats to internal validity. History's effects are not always clear-cut and can be minimized by the short time intervals between measures and observations (Creswell & Guterman, 2019). This study's research design has Timepoint 1 data collection occurring before the intervention and Timepoint 2 data collection occurring after the intervention. There is an eight-week gap between these two time points. To address internal validity concerns, the researcher intentionally supplemented the pre/post-test quantitative data collection points with weekly qualitative data collection points and a quantitative self-report measure of weekly wellbeing, the Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988).
Threats to internal validity regarding the research design include not building the quantitative feature based on the qualitative results and developing a rigorous quantitative feature (Creswell & Plano-Clark, 2018). When designing the quantitative feature, the researcher should base it on the qualitative results. The researcher should make explicit how each significant qualitative finding is used to inform the development of the quantitative feature's specific elements. In this study, the qualitative results that define the "positive core" and the "affirmative action topic" are used to develop group discussions and didactic activities to lead to a plan for positive organizational change. The other internal threat regarding design validity is not developing rigorous quantitative features. In this case, the quantitative feature being developed is the mindfulness intervention. The researcher should use systematic procedures to design the quantitative feature. In this study, the researcher used a reverse logic model to weave mindfulness and PERMA theories together to design data-driven decisions and best practices from various well-studied mindfulness interventions associated with reductions in burnout.

**Confounding Factor**

A confounding factor is an attribute or characteristic that the researcher cannot directly measure because the effects cannot be easily separated from other variables, even though they may influence the relationship between the independent and dependent variable (Creswell & Gutterman, 2019). In this study, the ongoing global pandemic, Covid-19, was a confounding factor. The original design for the intervention was to meet in person. Due to the global pandemic, COVID-19, meeting in person was deemed unsafe. Keeping with the pedagogical spirit of mindfulness, adjustments were made to ensure the facilitator and participants' safety while not sacrificing the intervention's quality. Since confluence is an essential facet of MBIs, developing an atmosphere where participants could engage in meaningful dialogue in real-time
was essential in the intervention design. Therefore, intervention meetings occurred live over the video conferencing platform, Zoom.

Participants engaged in the intervention from classrooms, school dorms, and home offices. Three weekly expectations were delivered to the participants during the first week to promote confluence. First, participants were asked to remove any possible distractions from their environment to the best of their ability. While some participants had to tend to their children or students in the dorm, other distractions such as cell phones or television usage were discouraged. Second, participants were asked to set their Zoom screens to "gallery view" to ensure that all faces could be seen at all times. Finally, and perhaps the most unsettling, participants were asked to keep their videos on and microphones unmuted, regardless of what was occurring in their personal space.

Teachers experience burnout for various reasons, and the anxiety of the pandemic, coupled with a shift to virtual and hybrid learning without proper training or time to plan, could have amplified the participants' feelings of burnout. Moreover, participants may have been too distracted by the increased amount of time needed to prepare and implement lessons that they did not dedicate as much time to practicing mindfulness during the study. While the researcher can hypothesize about these factors, they cannot truly be measured separate from life experiences pre-Covid-19.

External Validity

External validity refers to how a study's results can be generalized to other situations or groups (Creswell & Gutterman, 2019). Due to the unique population of participants in this study (boarding school teachers) and the size of participants (n=7), this study is not generalizable to other groups. Moreover, this study does not have a control group, so no between-group
comparisons were made. Although this study is not generalizable to other groups, replicating this study to other populations can add to the external validity. By replicating within-group designs across multiple participants and studies, researchers can demonstrate external validity (Creswell & Gutterman, 2019).

**Reliability**

Reliability in a research design means that individual scores from an instrument should be nearly the same as stable on repeated administrations of the instrument and that they should be free from sources of measurement error and consistent (Creswell & Gutterman, 2019, p.627). In this study, all three quantitative measures (MBI-ES, FFMQ, and PANAS) are well-developed and widely used survey measures that yield high external reliability.

Internal reliability is also essential in a research study. An interrupted time-series design allows for small sample sizes yet can yield high internal reliability (Creswell & Gutterman, 2019), which is why the researcher included weekly measures in this study. Even though group averages on the MBI-ES and FFMQ will be reported in chapter IV, the case study time-series design does not rely on group averages that may mask individual differences. Thus, participant profiles will aid in unmasking each participant's individual experience of the intervention. Finally, evidence-based practices used in the intervention design in this study will also help to yield a high internal reliability. (Heppner, et al., 2008).

**Researcher’s Bias and Observer’s Paradox**

Bias is commonly understood to be any influence that provides a distortion in a study's results (Polit & Beck, 2014). It is impossible for researchers conducting qualitative studies to separate themselves from the data, nor should they. The researcher serves as an integral part of the process and final product. To protect the validity of a study, the researcher should
systematically work to reduce bias. To do this, the researcher needs to be transparent and reflexive about their own preconceptions, relationship dynamics, and analytic focus (Polit & Beck 2014) and about the processes by which data have been collected, analyzed, and presented. In this study, the researcher engaged in the epoché process to reduce bias. The epoché process in transcendental phenomenology involves four steps; (1) reflecting on background, beliefs, biases, and presumptions related to the phenomenon, (2) listing presumptions that may affect the data analysis process, (3) consciously putting presumptions aside, and (4) accepting and evaluating any idea that comes into consciousness (Moustaskas, 1994). In this section, the researcher will provide the results from the first two steps in the epoché process.

The first step in the epoché process involves the researcher reflecting on their background. The following excerpt is the researcher’s reflection:

Like many others who have seen the girl on the cover of Time magazine's special Mindfulness edition, I envied the look of calm and content on her face. I wanted to be her. At the time, I was certainly not feeling that way and felt that my job had swallowed me whole. As a person who has always been passionate about her work and sensing the growing frustration and stress that I was feeling, I knew I needed to do something to "fix it," both for myself and my colleagues. I came into this study from a pragmatic, deficit lens. I saw teacher stress and burnout as an issue that I wanted to solve. I have practiced informal mindfulness and have used body scans in my own life to cope with stress and felt that this was the easy answer for reducing stress and burnout for all teachers. However, after learning more about mindfulness through the literature, it came to my attention that mindfulness does not seek answers. Instead, it makes sense of "what is."
I was so biased in favor of mindfulness practices that I felt personally attacked when I read Purser’s book, *McMindfulness* (2019). How could he say such negative things about Mindfulness interventions? How dare he? However, trying to embody the teachings of mindfulness, I sat with these feelings and tried to process them. I learned that Purser was right about one thing; mindfulness interventions have not been marketed correctly. They should not be concerned about ruminating on whatever problem may lead someone to the intervention but on positive changes. Since this revelation, I have shifted my pragmatic lens to a social constructionist lens instead. A duo-ethnography investigating co-constructing appreciative inquiry (Meier et al., 2017) solidified my design change. One statement stood out as a basis to pursue this angle.

“The more exposure to and reflection on positive psychology eventually got the better of me regarding my use of methodology for change interventions. But it was only until I ventured reading on neurosciences that I could finally endorse AI as my methodology of choice” (p.5).

After the researcher engages in the reflective process in transcendental phenomenology, it is essential to make a list of presumptions that may affect the data analysis to put these presumptions aside consciously. These presumptions are explained below.

When I decided to conduct this study, I felt used up and wholly burned out in my job. Talking with other co-workers, I assumed that I was not the only one feeling this way. The students were recognizing their teachers’ grueling work hours and vocalizing their concern about the stress their teachers were carrying. I thought to myself, "how poorly are the adults in the community modeling self-regulation and their own social-emotional wellbeing?" A presumption that I have about my participants is that everyone is feeling as burned out and pessimistic as I
am. It will be important in my data analysis to be aware that the participants may have different perceptions of stress in the workplace.

Another presumption to be aware of is biases in participant responses. Although I am not a school administrator, I hold a mid-level management position as the senior class advisor. This position holds the same weight as a department chair. Since I oversee a group of adults as part of my responsibilities, a conflict of interest could arise, and the participants could feel compelled to answer questions in favor of the theory in this study. Moreover, the participants in this study are also my colleagues, which means an established relationship exists between the researcher and the participants. This could also impact the way the participants respond to survey questions.

The last presumption to focus on is my feelings about mindfulness. Just because I look favorably upon the practice of mindfulness, I cannot assume that my participants will all feel the same way. When synthesizing the qualitative data, I need to be aware of perceptions that are different from my own and represent the participants' thoughts accurately.

**Limitations of Methodology**

Every study design is met with limitations in the methodology. In this study, the three main limitations are (1) the exploratory sequential design, (2) the length of data collection, and (3) data analysis rigor. The first limitation addresses the exploratory sequential design. This study uses an exploratory sequential research design with an embedded convergent design in phase II, but a control group is not included. While the sole intent is employing a case study design and triangulating the quantitative data with the qualitative data in order to understand the experiences of the participants in the intervention, comparing pre and post data from a control group with the experimental group could highlight differences in teachers who participate in the
intervention versus those who do not. This would make the results more generalizable to a larger population.

Additionally, although the design of an exploratory sequential study is to build the phase II quantitative feature from the qualitative data collected during phase I, the quantitative phase must be tentatively specified in advance. It is difficult to specify the procedures of the quantitative phase when applying for IRB approval. Providing some tentative direction in a project plan is the only way the research will be approved.

Second, the researcher conducting a study using this methodology must be skilled and have experience. This design requires expanded skills on the researcher's part because proficiency in qualitative and quantitative and mixed methods research and instrument development is needed. In this study, the researcher took courses in quantitative, qualitative, and mixed-methods data analysis. Moreover, the researcher also served as the mindfulness intervention developer and facilitator. The researcher developed mindfulness skills by enrolling in a college mindfulness course, engaging in an independent study with a well-known mindfulness researcher, and practicing mindful embodiment.

The third limitation of the methodology in this study is the time-series design. This design is labor-intensive because the researcher needs to gather multiple measures. The researcher must plan for extended time to complete the study since it takes a considerable amount of time to implement. In this study, five different measures were used in the time series. A semi-structured interview was used before the intervention, the MBI-ES and FFMQ were used as the intervention pre and post-test measures, and the PANAS and weekly reflective journals were used throughout the eight-week intervention. The data collection and triangulation of
results from the analysis was a rigorous process. To successfully implement each part of the study, a data collection schedule was developed, and it can be seen in Figure 3.6.

**Figure 3.6**

**Data Collection Schedule**

Informed Consent and Protection of Human Subjects

The researcher received approval to complete this study through the Institutional Review Board (IRB) at West Chester University (Appendix A). Before beginning data collection, they promoted the study and asked volunteers through e-mail (Appendix D). Interested parties were given three opportunities to meet with the researcher virtually. In each of these meetings, she discussed the project overview. She addressed the study's purpose, the commitment required to be a participant in this study, how she would protect the participants' privacy, and whom to
contact in case of any research-related concerns. The researcher opened the floor for questions and asked those willing to sign the informed consent form before data collection (Appendix B).

**Summary**

Chapter 3 provided an overview of the main components of this study. Using an exploratory sequential mixed-methods research design, a visual map was provided of each phase of the design and the instrumentation that accompanied each phase. The visual depicted the flow of how qualitative data was collected and used to inform the intervention design. This chapter also reviewed the setting and pool of participants in this study, the various tools used for instrumentation, and mapped out how data will be collected and analyzed using an exploratory sequential design. To conclude this chapter, threats to validity and reliability and the limitations accompanying this study's design were addressed. The next chapter will provide the results from the data collection.
Chapter 4: Results

Introduction

This study utilizes an exploratory sequential mixed methods research design with an embedded convergent component in phase II. An exploratory sequential mixed methods research design involves the collection of qualitative and quantitative data in sequential order (Creswell & Plano-Clark, 2018). Unlike traditional exploratory sequential research studies, this study utilizes a convergent component in phase II in which qualitative data was collected in addition to quantitative data. The previous chapter detailed the process of using this exploratory sequential mixed methods research design in this study. In this chapter, I will provide the results of the phase I qualitative data that led to intervention development and the results of phase II group quantitative data. Additionally, participant profiles are provided and include qualitative data that supports the quantitative results from phase II.

In order to understand the results from the quantitative and qualitative data collected, it is necessary to be aware of the research questions guiding this study. There are two overarching questions that both address the data collected in phase II. The first question is quantitative and asks (1) What is the effect of a virtual eight-week mindfulness-based intervention program on boarding school teachers’ response to stress and burnout? The second question seeks qualitative data and asks (2) How do teachers employ mindfulness techniques in stressful situations in the workplace during a virtual mindfulness-based intervention?

Phase I Findings

The integrative data analysis procedure in an exploratory sequential design consists of analyzing the qualitative data in order to generate or build part of the subsequent quantitative feature (Creswell & Plano-Clark, 2018). In this first phase, a sub-sample of participants (n=4)
from this study engaged in semi-structured interviews. Using the coding software program Dedoose, a constant comparative method (Glaser, 1965) of coding was applied to code the semi-structured interviews (n=4) to define the positive core of the organization and an affirmative action topic. The benefit of using this method is that the research begins with raw data, and through constant comparisons, a substantive theory will emerge (Glaser & Strauss, 1967).

The coding process included first and second cycle coding. Coding began by examining all of the data categorized into the positive core and affirmative action topics. First cycle coding was used to summarize segments of data (Miles et al., 2014). Second cycle coding was then used to group the themes discovered in the first cycle into subthemes. The themes that emerged in the positive core category were community, relationships, academic integrity, and school mission. The themes that emerged in the affirmative action topic category were physical spaces, communication, community engagement, balance, faculty agency, and student worth.

Table 4.1

<table>
<thead>
<tr>
<th>Positive Core</th>
<th>Affirmative Action Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview 1 Community</td>
<td>Physical spaces, communication</td>
</tr>
<tr>
<td>Interview 2 Community, relationships, academic integrity</td>
<td>Community engagement, brotherhood, faculty agency, identity, physical spaces</td>
</tr>
<tr>
<td>Interview 3 Community, relationships</td>
<td>Community engagement, communication, balance</td>
</tr>
<tr>
<td>Interview 4 Relationships, school mission, community</td>
<td>Student worth, value, and celebrate members, physical spaces</td>
</tr>
</tbody>
</table>

There was an overwhelming consensus between the four participants interviewed during the semi-structured interview about the positive core. All four participants identified “community” as the positive core of the organization. One participant mentioned the schoolwide
events as contributing to the community. "I would say any time we have large community gatherings, whether it's the maroon and gray games. Or anything like that." Another participant mentioned the work ethic in the community and the positive emotions that accompany taking a collective break.

I guess because of the strict schedule; the students have to go through when there's something more like, community oriented or something fun, like an event for them to do. Like all that really good energy really comes out. I think it's because, like usually we're all like really busy and like heads in the books or like just doing other things that need to get done. So, any community events.

“I remember George slam dunking the basketball two or three years ago and the crowd going wild…. (it was) inspiring to me and made me feel like this place is a true community and that people could rally around each other here. There are many moments like that that we have many days where we can just come together as a community and just have fun are usually those moments, I feel really like caught up in the community idea.”

What the participants identified as a topic for growth, however, is wanting more intentionality around institutional support for culture and community building. The participants agreed that community happens organically at the school, but the institution should be more intentional about honoring the members of the community and promoting positive school culture. When asked about concrete wishes for the organization, several participants mentioned the physical space and how it symbolizes the worth of the students and faculty. “The campus beautification project, whether it's through, like horticulture or agriculture. Or enhancing like student housing or like building spaces on campus that like kind of breathe life. Whether it's like a mindful garden or, you know, an outdoor amphitheater or something that says, like hey, we
want you (students) to feel loved and honored and empowered here”. Another member mentioned using the physical spaces to actual honor the legacy of community members, “just actual physical pieces that reflect our legacy, whether it's faculty and or students.”

**Phase II General Overview and Findings**

In Phase II of an exploratory sequential design, the intervention development should be tested using rigorous procedures (Creswell & Plano-Clark, 2018). The sample size testing the quantitative feature in this study is small (n=7). Reporting means and standard deviations of group scores with a sample size this small may depict inaccurate effect sizes (Creswell & Gutterman, 2019). Therefore, the researcher employed a case study that embedded a convergent design in this phase. This allowed the researcher to analyze the intervention from a phenomenological perspective as well as a quantitative time-series perspective. After summarizing the pre and posttest group scores from the MBI-ES and FFMQ and overall intervention effectiveness, a profile of each participant will summarize the triangulation of the phenomena, each individual experienced during the intervention.

**Group Generalizations**

Group generalizations will be reported first. The group generalizations address the first research question, which asks what the effect is of a virtual eight-week mindfulness-based intervention program on boarding school teachers’ response to stress and burnout. The data collected to answer the first research question is quantitative. The Maslach Burnout Inventory for Educators (MBI-ES) (Maslach & Jackson, 1986) was used to measure changes in burnout, while the Five Facets of Mindfulness Questionnaire (FFMQ) (Baer et al., 2006) was used to measure changes in mindfulness. Using a series of paired t-tests, the means and standard deviations of pre
and posttest scores will be reported, as well as the statistical significance (p) and effect sizes (g) of each measure. The formula for a paired t-test is:

\[ t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{s^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} \]

The formula for Cohen's \( d_c \), which is based on sample averages, gives a biased estimate of the population effect size (Hedges and Olkin, 1985), especially for small samples (\( n < 20 \)). Therefore, Cohen's \( d_c \) is sometimes referred to as the uncorrected effect size (Cumming, 2012). The corrected effect size, or Hedge's \( g \), which is unbiased, will be used to report the effect sizes in this study since the sample size is (\( n = 7 \)). The formula for Hedge's \( g \) is:

\[ s_p = \sqrt{\frac{(n_e - 1)s_e^2 + (n_c - 1)s_c^2}{n_e + n_c - 2}} \]

**Burnout**

Burnout is defined as a syndrome of emotional exhaustion and cynicism that frequently occurs among individuals who do 'people work' of some kind (Maslach & Jackson, 1981). The purpose of the Maslach Burnout Inventory for Educators (MBI-ES) is to discover how educators view their job and the people with whom they work closely. The survey consists of 22 questions about job-related feelings. Participants are asked to score each question on a scale of 0 (Never) to 6 (Everyday) based on the frequency the participant experiences the feeling in the statement. 5 of the 22 questions measure depersonalization, 9 of the 22 questions measure emotional exhaustion, and the remaining eight questions measure personal accomplishment. (Maslach & Jackson, 1986).

Maslach and his colleagues state that although correlated, the three aspects from the MBI-ES (depersonalization, emotional exhaustion, and personal accomplishment) do not move
in lock-step, and they can move asynchronously (Maslach & Jackson, 1986). Thus, scores from each of the categories from the MBI-ES should not be combined to create one single burnout score (1986). What Maslach and his colleagues do provide, however, is a range of profiles based on the combination of scores. The continuum between work engagement and burnout comprises three distinct aspects or scales: energy, involvement, and efficacy. Each aspect is expressed positively in engagement (vigor, connection, and efficacy) and expressed negatively in burnout (exhaustion, depersonalization, and inefficacy). The combinations create distinct profiles, which are described as engaged, ineffective, overextended, disengaged, and burnout. Table 4.2 shows the results of the participants in this study at pre and posttest. What is interesting to note is that while the participants experienced various changes in all three categories from pre to posttest, the profiles remained the same for each participant.

**Table 4.2**

*Workplace Experiences*

<table>
<thead>
<tr>
<th>Profiles</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaged</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Ineffective</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Overextended</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Disengaged</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Burnout</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

* Please note: the profiles are provided to aid in score interpretation only and are not diagnostic.

**Depersonalization.** Three of the seven participants experienced a negative correlation in depersonalization from pre to posttest. One participant experienced no change, and three participants experienced an increase in depersonalization after the eight-week intervention. The mean group score at the pretest was 4.857 (SD=3.80476) and was 5.1429 (SD=3.38765) at posttest, indicating that the group experienced an increase in depersonalization. However, the p-
value (p=.783) indicates that the increase in depersonalization is not statistically significant within the group. The effect size is g=0.07430114 which is considered to be a small effect size.

**Emotional Exhaustion.** Teachers suffer from Emotional Exhaustion when they feel emotionally overextended and exhausted by the work they do (Maslach & Jackson, 1981). Five of the seven participants experienced a reduction in emotional exhaustion. One participant experienced no change, and one participant experienced an increase in emotional exhaustion after the eight-week intervention. The mean group score at pretest was 25.7143 (SD=9.34013) and was 20.2857 (SD=10.90435) at posttest, indicating a reduction in emotional exhaustion from pre to posttest. However, the p-value (p=.083) indicates that the reduction in emotional exhaustion is not statistically significant within the group. The effect size is g=0.50058000 which is considered to be a moderate effect size.

**Personal Accomplishment.** Many teachers feel disappointed when they feel that they are no longer effective in helping students to learn and grow, which could impact their dedication to teaching (Maslach & Jackson, 1981). Five of the seven participants experienced a reduction in personal accomplishment. Two participants experienced an increase in personal accomplishment after the eight-week intervention. The mean group score at pretest was 36.4286 (SD=6.18755) and was 32 (SD=5.91608) at posttest, indicating a reduction in personal accomplishment from pre to posttest. However, the p-value (p=.059) indicates that the reduction in personal accomplishment is not statistically significant within the group. The effect size is g=0.68489883 which is considered to be a larger effect size.
Table 4.3

Maslach Burnout Inventory (MBI-ES) Pre/Posttest Group Results

<table>
<thead>
<tr>
<th>Facets of Burnout</th>
<th>Pretest</th>
<th>Posttest</th>
<th>t</th>
<th>p</th>
<th>g</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Depersonalization</td>
<td>4.857</td>
<td>3.80476</td>
<td>5.1429</td>
<td>3.38765</td>
<td>-.288</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.783</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.07430114</td>
</tr>
<tr>
<td>Emotional Exhs.</td>
<td>25.7143</td>
<td>9.34013</td>
<td>20.2857</td>
<td>10.90435</td>
<td>2.081</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.083</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.50058000</td>
</tr>
<tr>
<td>Personal Accompl.</td>
<td>36.4286</td>
<td>6.18755</td>
<td>32</td>
<td>5.91608</td>
<td>2.330</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.059</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.68489883</td>
</tr>
</tbody>
</table>

Note. *Statistically significant at p<.05, ***Statistically significant at p<.001

Generally speaking, participants in this study experienced a reduction in Emotional Exhaustion and a slight reduction in depersonalization from before the mindfulness intervention to after. This indicates a reduction in burnout. Adversely, participants experienced a reduction in personal accomplishment from before the intervention to after, which indicates an increase in burnout.

Facets of Mindfulness

Mindfulness is the act of paying attention, on purpose, in a particular way (Kabat-Zinn, 1990). It is important to first observe the participants' development of the five facets of mindfulness to understand how the participants referenced mindfulness in stressful work situations, which was measured with the Five Facets of Mindfulness Questionnaire (FFMQ) (Baer et al., 2006).

Observing. The results from the FFMQ indicate that all seven participants experienced a positive correlation in observation from pre to posttest after completing the eight-week intervention. The mean group score at pretest was 30.4286 (SD=3.55233) and was 33.1429 (SD=3.43650) at posttest, indicating an increase in observing from pre to posttest. The p-value
(p=.006) indicates that the increase in observing is statistically significant within the group. The effect size is $g=0.72707388$ which is considered to be a moderate effect size.

**Describing.** The results from the FFMQ indicate that three of the seven participants experienced a positive correlation in describing. Four of the seven participants experienced a negative correlation. The mean group score at pretest was 28.4286 (SD=2.87849) and was 29.2857 (SD=6.04743) at posttest, indicating an increase in observing from pre to posttest. However, the p-value (p=.644) indicates that the increase in describing is not statistically significant within the group. The effect size was $g=0.16942818$ which is considered a small effect size.

**Acting with Awareness.** Five of the seven participants experienced a positive correlation from pre to posttest on the FFMQ. Two of the seven participants experienced a negative correlation. The mean group score at pretest was 25.7143 (SD=2.13809) and was 29.8571 (SD=5.27347) at posttest, indicating an increase in acting with awareness from pre to posttest. However, the p-value (p=.141) indicates that the increase in acting with awareness is not statistically significant within the group. The effect size was $g=0.96387170$ which is considered to be a large effect size.

**Non-Judgement.** The FFMQ results indicate that four of the seven participants experienced a positive correlation. Three experienced a negative correlation. The mean group score at pretest was 26.4286 (SD=3.69040) and was 28.1429 (SD=6.33584) at posttest, indicating an increase in acting with awareness from pre to posttest. However, the p-value (p=.534) indicates that the increase in non-judgment is not statistically significant within the group. The effect size was $g=0.30954176$ which is considered to be a moderately small effect size.
Non-Reactivity. Three participants experienced a positive correlation in non-reactivity based on the FFMQ results. Four experienced a negative correlation. The mean group score at pretest was 22.8571 (SD=5.87164) and was 22.7143 (SD=4.23140) at posttest, indicating a decrease in non-reactivity from pre to posttest. However, the p-value (p=.939) indicates that the decrease in non-reactivity is not statistically significant within the group. The effect size is \( g=0.0261 \) which is considered to be a very small effect size.

Table 4.4

Five Facets of Mindfulness Questionnaire (FFMQ) Pre/Posttest Group Results

<table>
<thead>
<tr>
<th>Facets of Mindfulness</th>
<th>Pretest M</th>
<th>SD</th>
<th>Posttest M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
<th>g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observe</td>
<td>30.4286</td>
<td>3.55233</td>
<td>33.1429</td>
<td>3.43650</td>
<td>-4.214</td>
<td>.006*</td>
<td>0.72707388</td>
</tr>
<tr>
<td>Describe</td>
<td>28.4286</td>
<td>2.87849</td>
<td>29.2857</td>
<td>6.04743</td>
<td>-.486</td>
<td>.644</td>
<td>0.16942818</td>
</tr>
<tr>
<td>Act w/Aware</td>
<td>25.7143</td>
<td>2.13809</td>
<td>29.8571</td>
<td>5.27347</td>
<td>-1.695</td>
<td>.141</td>
<td>0.96387170</td>
</tr>
<tr>
<td>Non-Judge</td>
<td>26.4286</td>
<td>3.69040</td>
<td>28.1429</td>
<td>6.33584</td>
<td>-.660</td>
<td>.534</td>
<td>0.30954176</td>
</tr>
<tr>
<td>Non-React</td>
<td>22.8571</td>
<td>5.87164</td>
<td>22.7143</td>
<td>4.23140</td>
<td>.079</td>
<td>.939</td>
<td>0.0261</td>
</tr>
</tbody>
</table>

Note. *Statistically significant at \( p<.05 \), ***Statistically significant at \( p < .001 \)

Summary of Group Generalizations

As a group, the sample (n=7) in this study experienced slight changes overall. The intervention was somewhat effective in increasing facets of mindfulness, but the only change that was statistically significant within the group was in observing. Moreover, the intervention was effective in decreasing emotional exhaustion within the group, which is an indication of the reduction of burnout. However, the group also experienced a reduction in positive accomplishment and an increase in depersonalization which indicates a growth in burnout. While
it may appear that the intervention produced adverse results, none of the changes in burnout were statistically significant. In the next section, participant profiles will be provided to answer the second research question; How do teachers employ mindfulness techniques in stressful situations in the workplace during a virtual mindfulness-based intervention?

Participant Profiles

In this study, a case study design was utilized to generate a more detailed and contextualized lens to the data collected than single quantitative generalizations alone. A case study design is the use of a core design (in this study, it is the exploratory sequential design) within the framework of a single or multiple case study (Creswell & Plano-Clark, 2018). Both quantitative and qualitative data were collected in this case study in the Phase II convergent design of testing the intervention to answer the second research question. Triangulation of the data within-participants occurred to produce the end product that generated these seven different cases (2018).

The quantitative data in the participant profiles will be presented using inferential statistics. Inferential statistics allows the researcher to analyze the relation between two or more variables (Creswell & Gutterman, 2019). The basic idea is to look at scores from a small sample and make inferences about a larger population. In this study, the variables are (1) mindfulness, (2) burnout, and (3) personal affect. Whereas the MBI-ES and the FFMQ were administered as pre and posttest measures, The Positive and Negative Affect Survey (PANAS) was distributed to participants at the beginning of each weekly intervention session. Participants were asked 20 questions about their feelings using a Likert Scale ranging from 1 (Very slightly or not at all) to 5 (Extremely). Half of the questions measured positive affect while the other half measured negative affect. Positive affect Mean Scores: 33.3 (SD=7.2) and negative affect mean Score: 17.4
The qualitative data in the phase II convergent design was analyzed using phenomenological reduction. “The purpose of phenomenology is to describe and understand the essence of lived experiences of individuals who have experienced a particular phenomenon” (Lichtman, 2013, p. 83). Reduction in phenomenology is used to facilitate the seeking of an essence. In this study, horizontalization was used to discover the essence of the experiences of the participants in the study. Horizontalization involved using significant statements relating to (1) work-related vs. non-work-related situations, (2) employing facets of mindfulness, and (3) experiencing factors of burnout. These significant statements are embedded within each participant profile, thus converging the quantitative and qualitative results by participant.

**Participant 1**

Participant 1 identifies as a Caucasian male between the ages of 25-34. The highest level of school this participant has completed is his bachelor's degree. The participant's main job role at the school is split between a residential and an academic faculty member. He attended six of the nine sessions. Participant 1 has had a few prior experiences with formal mindfulness, and his perception of the practice is mixed. "To me, mindfulness is the practice of centering yourself in order to reduce stress and increase focus. I like the idea in theory, but in practice, most of my experiences with mindfulness have been too "mushy" for my taste. The majority of these have revolved around some sort of (guided) meditation.”

The pre and posttest results from the MBI-ES show that Participant 1 experienced mixed results regarding the factors of burnout. He indicated a negative correlation in depersonalization (pre=2.2, post=1.8) and emotional exhaustion (pre=4.78, post=3.89) on the MBI-ES. The negative correlation between depersonalization and emotional exhaustion indicates a reduction in burnout from pre to posttest. Adversely, Participant 1 also experienced a negative correlation in
personal accomplishment (pre=5.375, post=4.125) which indicates an increase in burnout from pre to posttest. During the pretest, the combination of scores from the MBI-ES indicated that Participant 1 aligned with the overextended profile. For those with an overextended profile, the workload is the biggest stressor. For example, teachers who are dedicated to work and feel a strong sense of professional efficacy may yet become emotionally exhausted through overwork or inadequate rest. Although he did experience a reduction from pre to posttest, Participant 1 indicated the highest scores out of all of the participants in emotional exhaustion at both timepoints (pre=4.78, post=3.89).

**Figure 4.1**

*Participant 1 MBI-ES Pre/Posttest*

The pre and posttest results from the FFMQ show that Participant 1 experienced growth in mindfulness. He indicated a positive correlation in observing (pre=28, post=31), describing (pre=31, post=34), and acting with awareness (pre=22, post=35). These scores indicate growth in mindfulness. Adversely, Participant 1 experienced a negative correlation in non-judgement (pre=33, post=30) and non-reactivity (pre=31, post=24). These scores indicate a reduction in mindfulness. However, while Participant 1 exhibited a decline in non-reactivity on the FFMQ from pretest to posttest, his Week 7 journal entry specifically expressed non-reactivity. He wrote
about a stressful situation of the week by stating, “(d)ealing with administrators is constantly stressful, and honestly I just dealt with it by ignoring it and moving on.”

**Figure 4.2**

*Participant 1 FFMQ Pre/Posttest*

Participant 1 experienced a rise and fall in positive affect over the course of the eight-week intervention. He also experienced a rise and fall in negative affect over the course of the eight-week intervention. Weeks when positive affect was higher, negative affect was lower, and vice versa. For positive affect, Participant 1 had a mean score of 36.1667 (SD=7.73089). For negative affect, he had a mean score of 17.1667 (SD=6.55490). These scores indicate that Participant 1 experienced a higher-than-average positive affect and a slightly lower than average negative affect throughout the intervention.

**Figure 4.3**

*Participant 1 PANAS*
**Participant Summary.** Participant 1 experienced a reduction in two of the three facets of burnout and experienced an increase in three of the five facets of mindfulness. While he agrees that formal mindfulness practices can be helpful for others, it does not resonate with him. “I learned that, for some, mindfulness is a very effective tool that helps (people) to stay grounded and process the world around them. I still don’t feel as though it is a helpful way for me personally to view the world.” Even though he did not connect with the formal mindfulness practices, he did find ways to cope with stressful situations. Specifically, processing situations by talking through them with friends and colleagues was his main coping mechanism. On one occasion, he wrote, "learning that our school was potentially exposed to the coronavirus was very stressful for me. I handled it by talking about it with friends and trying to process it together". During another week, he expressed once again that he handled a stressful situation by discussing it afterward. "I was in a meeting where I was getting very frustrated with the amount of negativity being shared, just poking holes in every solution. I handled it just by sharing these frustrations after the meeting with a few friends.” While he did not employ formal mindfulness practices in these situations, his way of coping aligns with his growth in describing. “I was hoping that I might grow my appreciation for mindfulness a bit, though I think it just clarified my feelings that mindfulness isn’t really my ‘cup of tea.’ I’m happy some people find it to be very powerful, and that it helps them; I’m just not one of those people.” Participant 1 does not plan on continuing mindfulness practices in the future.

**Participant 2**

Participant 2 identifies as a Caucasian female between the ages of 55-64. The highest level of school this participant has completed is her master’s degree. The participant’s main job role at the school is a staff member. Participant 2 attended eight of the nine sessions. She has had
prior experience in formal mindfulness and has a positive perception of mindfulness. “I took the MBSR course offered by Penn, at least ten years ago. I do not consider myself to have a formal meditation practice at this time. However, I have continued certain activities, such as stopping regularly to breathe and be mindful of sensations and doing a body scan as a tool for relaxation. I am interested in continuing to develop my skills”.

The pre and posttest results from the MBI-ES show that Participant 2 experienced neutral results regarding the factors of burnout. She indicated a negative correlation in emotional exhaustion (pre=3, post=2.44) on the MBI-ES. The negative correlation in emotional exhaustion indicates a reduction in burnout from pre to posttest. Adversely, Participant 2 experienced a slight positive correlation in depersonalization (pre=1, post =1.2) and a negative correlation in personal accomplishment (pre=3.875, post=3.375) which indicates an increase in burnout from pre to posttest.

During the pretest, the combination of scores from the MBI-ES indicated that Participant 2 aligned with the ineffective profile during both pretest and posttest. This profile does not indicate that Participant 2 is “ineffective” in carrying out her professional duties. Instead, it suggests that while she has no experience of exhaustion or depersonalization, she is not experiencing strong feelings of personal accomplishment either. That may lead her to lose confidence in their capabilities, feeling ineffective over time. The ineffective profile suggests an experience of work-life that falls short of self-actualization. There are three specific journal entries that Participant 2 wrote that align with the feeling of being ineffective. "Getting in the middle of a difference of opinion between my boss and a colleague. Not very well. I wish I had thought more and asked more questions about what we were hoping to achieve, and what it would take to accomplish it”. Another journal entry stated,
I was in (a meeting) ... this morning. (Yes, it was stressful!) It felt like people were not listening to each other, just re-stating their own positions more firmly. During a pause, I tried to re-direct the conversation, proposing that we focus on how the communication to others would occur. This was my way of not getting caught up in the conflict, but trying to move us forward. (Not successful, unfortunately...).

Finally, a third journal entry Participant 2 shared aligned with feeling "ineffective."

Finding out about a colleague's sudden departure. I sat with it for several hours, feeling like I should have a conversation with this person. I have been somewhat of a go-to person for them, and have had frank conversations about issues. I ultimately did decide to reach out, and share my concerns, and we had a good conversation. While I doubt that it changes anything, I did speak my mind in a thoughtful (and I hope caring) way.

**Figure 4.4**

*Participant 2 MBI-ES Pre/Posttest*

![Graph showing pre and posttest results for Participant 2's MBI-ES scores for PA, EE, and DP.](image)

The pre and posttest results from the FFMQ show that Participant 2 experienced mixed results in mindfulness. She indicated a positive correlation in observing (pre=28, post=33), a slight positive correlation in acting with awareness (pre=27, post=29), and a slight positive correlation in non-reactivity (pre=25, post=26). These results indicate a growth in mindfulness. Adversely, Participant 2 experienced a negative correlation in describing (pre=28, post=25), and
a slight negative correlation in non-judgement (pre=28, post=27). These scores indicate a reduction in mindfulness.

**Figure 4.5**

*Participant 2 FFMQ Pre/Posttest*

Participant 2 experienced a steady trend in positive and negative affect over the course of the eight-week intervention. While positive affect remained relatively consistent, negative affect declined slightly during the last week of the intervention. For positive affect, Participant 2 had a mean score of 36.4286 (SD= 2.50713). For negative affect, she had a mean score of 16.2857 (SD= 2.75162). These scores indicate that Participant 2 experienced a slightly higher than average positive affect and a slightly lower than average negative affect throughout the intervention.

**Figure 4.6**

*Participant 2 PANAS*
**Participant Summary.** Participant 2 indicated a reduction in emotional exhaustion and an increase in observing, acting with awareness, and non-reactivity. Adversely, she experienced an increase in depersonalization and a reduction in personal accomplishment. She also experienced a reduction in describing and non-judgment.

Although Participant 2’s survey data indicated mixed results, her perception of the intervention was positive. “Experiencing a variety of mindfulness exercises/techniques, both during and those offered between sessions, was very helpful.”

**Participant 3**

Participant 3 identifies as a Caucasian female between the ages of 45-54. The highest level of school this participant has completed is her bachelor’s degree. The participant’s main job role at the school is a staff member. Participant 3 expressed that her prior mindfulness experience included “… a meditation practice off and on for a few years and (that she) had most success with guided meditation”. She attended eight of the nine sessions.

The pre and posttest results from the MBI-ES show that Participant 3 experienced positive results regarding the factors of burnout. She indicated a negative correlation in depersonalization (pre=1.6, post=1.2) and emotional exhaustion (pre=2.44, post=1.556) on the MBI-ES. The negative correlation between depersonalization and emotional exhaustion indicates a reduction in burnout from pre to posttest. Participant 1 experienced a positive correlation in personal accomplishment (pre=3.5, post=3.75) which also indicates a reduction in burnout from pre to posttest.

Although Participant 3 did experience a reduction in all three factors of burnout, her scores aligned with the ineffective profile during both pretest and posttest according to the MBI-ES. This profile does not indicate that Participant 3 is "ineffective" in carrying out her
professional duties. Instead, it suggests that while she has no experience of exhaustion or depersonalization, she is not experiencing strong feelings of personal accomplishment either. That may lead her to lose confidence in their capabilities, feeling ineffective over time. The ineffective profile suggests an experience of work-life that falls short of self-actualization.

A major theme emerged from Participant 3’s journal entries that provided some insight into her personal experiences with stress during the intervention. Supporting the notion of disengagement in the workplace, it appeared that most of Participant 3’s stress was stemming from non-work-related situations, specifically her concern for others. During Week 2, she wrote, “Someone I care about was showing obvious signs of being in pain/distress. It really shook me up.” During Week 8, she also indicated that her stressful situation of the week was about the health of a friend. “A friend of mine tested positive for COVID, during a particularly difficult time in his life.”

Moreover, her mom's health was mentioned a few times, indicating that this stressor remains a constant in her life. Towards the beginning of the intervention, she wrote, "My mom is in assisted living and struggles with various physical ailments, not the least of which is Parkinson's disease. This week she had some very challenging mental acuity issues, which are probably indicative of the inevitable direction in which we're heading. It is difficult to watch this strong, independent force of nature become weak and scattered and so very dependent.” Another situation happened with her mother in the latter weeks of the intervention. "Mom fell again. Needed stitches this time. Even though she's in quarantine, I felt the need to see her…. it's so frustrating to watch her decline and am trying to remain empathetic to how difficult it must be to accept her OWN decline.”
Figure 4.7

Participant 3 MBI-ES Pre/Posttest

The pre and posttest results from the FFMQ show that Participant 3 experienced growth in mindfulness. She indicated a slight positive correlation in observing (pre=27, post=28), a positive correlation in non-judgement (pre=26, post=29), and a positive correlation in non-reactivity (pre=16, post=19). These results indicate a growth in mindfulness. Participant 3 specifically expressed practicing non-reactivity in her Week 4 journal. “I got really upset about a perceived rude behavior by my roommate. I tried to talk myself out of it, but had a little trouble. Was upset for about 10 minutes (which is not like me). BUT I DID talk myself out of it, and managed to enjoy the rest of the evening.” Non-reactivity was the mindfulness topic covered the week prior during the intervention group session. Adversely, Participant 3 experienced a negative correlation in describing (pre=30, post=27) and a negative correlation in acting with awareness (pre=26, post=20). These scores indicate a reduction in mindfulness.
Participant 3 experienced a rise and fall in positive affect over the course of the eight-week intervention. Her experience with negative affect remained relatively consistent over the course of the eight-week intervention. Weeks when positive affect was higher, negative affect was lower, and vice versa. For positive affect, Participant 3 had a mean score of 33.0 (SD=7.50999). For negative affect, she had a mean score of 15.6667 (SD=1.86190). These scores indicate that Participant 3 experienced a slightly lower-than-average positive affect and a lower-than-average negative affect throughout the intervention.

Participant Summary. While it seems that much of the stress Participant 3 is experiencing is from non-professional situations, she did experience positive results overall.
during the intervention. “I really do prefer guided meditation. This is a beneficial practice that I need to continue. And it will always be just that: PRACTICE (never perfection)!” She also indicated feeling positive about the experiences with mindfulness and plans on continuing the practice through “journaling, guided meditation, gratitude focus, body scans, breath awareness. Lots!”

**Participant 4**

Participant 4 identifies as a Black/African American female between the ages of 35-44. The highest level of school this participant has completed is an advanced degree. The participant’s main job role at the school is an academic faculty member. She attended eight of the nine sessions. Participant 4 expressed her prior knowledge of mindfulness prior to the intervention. “Mindfulness is the practice of being present and focusing your energy a greater awareness to the things that are happening around you and within you. I have attended a few conferences on mindfulness in schools and have conducted my own research on mindfulness and mindful leadership.”

The pre and posttest results from the MBI-ES show that Participant 4 experienced positive results regarding the factors of burnout. She indicated a negative correlation with depersonalization (pre=0.4, post=0), and a significant negative correlation in emotional exhaustion (pre=2.22, post=0.33) on the MBI-ES. The negative correlation between depersonalization and emotional exhaustion indicates a reduction in burnout from pre to posttest. Similarly, Participant 4 experienced a slight positive correlation in personal accomplishment (pre=5, post =5.25) which also indicates a reduction in burnout from pre to posttest.
Both the pretest and posttest indicated that Participant 4 aligned with the engaged profile according to the MBI-ES (Maslach et al., 2018). Her pre and posttest scores indicated that all scale scores are good. Engagement shows energy and effort dedicated to work and persistence in the face of difficulties. Individuals who are engaged are very enthusiastic and absorbed at work, primarily because they enjoy and take pride in their role.

The pre and posttest results from the FFMQ show that Participant 4 experienced growth in mindfulness. She indicated a positive correlation in observing (pre=34, post=38), and a significant positive correlation in describing (pre=30, post=40), acting with awareness (pre=26, post=36), non-judgement (pre=26, post=40), and non-reactivity (pre=19, post=27). These results indicate a growth in mindfulness. She articulated her experience with her growth in mindfulness during a stressful work situation. “Managing the school’s virtual open house for the first time virtually (was stressful). Instead of feeling anxious and all out of sorts, I approached it mindfully and gave myself some time to forgive and let go without getting hung up on not doing everything perfectly.” Participant 4 did not experience any reductions in facets of mindfulness.
Participant 4 experienced a rise in positive affect over the course of the eight-week intervention. She experienced a rise and fall in negative affect. Weeks when positive affect was higher, negative affect was lower, and vice versa. For positive affect, Participant 4 had a mean score of 40.1429 (SD=7.708116). For negative affect, she had a mean score of 17.2857 (SD=8.45999). These scores indicate that Participant 4 experienced a higher-than-average positive affect and a slightly lower-than-average negative affect throughout the intervention.

**Participant Summary.** Overall, Participant 4 felt that the intervention was effective. When asked what she gained from the program, she responded, “EVERYTHING! I have gained a lot from this program especially how to be more accepting of what I am feeling/experiencing in
the moment and being grateful for it no matter what it is”. Her acceptance was expressed in her journal entry about a stressful situation that occurred. “I spilled coffee all over my desk, keyboard, and desk chair (and floor). It normally would have created a lot of anxiety and stress but I cleaned it up calmly and just said oh well. I was much more aware of acknowledging it and letting it go.”

The results of her pre and posttest data align with her perceptions. Participant 4 experienced a reduction in all facets of burnout and an increase in all facets of mindfulness. She articulated her commitment to continuing the practice. “I am really going to work to incorporate yoga into my weekly routine and continue to commit time to daily meditations/scans. This form of being present has been really helpful with my abilities to navigate stressful situations.”

Participant 5

Participant 5 identifies as a Hispanic/LatinX male between the ages of 18-24. The highest level of school this participant has completed is his bachelor’s degree. The participant’s main job role at the school is a residential faculty member. He attended five of the nine sessions. Participant 5 had some experience with mindfulness practices prior to the intervention. “In the past I have done weekly meditation for a couple of years. As well as one half day meditation retreat. I have since not done sit down meditation intentionally but do resettle myself to be mindful of what is going on around me.”

The pre and posttest results from the MBI-ES show that Participant 5 experienced adverse results regarding the factors of burnout. He indicated a positive correlation in depersonalization (pre=1.2, post=1.6) and a negative correlation in personal accomplishment (pre=5.25, post=4) on the MBI-ES. The positive correlation in depersonalization and negative correlation in personal accomplishment indicates an increase in burnout from pre to posttest.
Participant 5 experienced no change in emotional exhaustion from pre to posttest (pre= 3.556, post=3.556). His results from the pre and posttest MBI-ES measures aligned with the overextended profile. For those with an overextended profile, the workload is the biggest issue. For example, teachers who are dedicated to their works and feel a sense of professional efficacy may yet become emotionally exhausted through overwork or inadequate rest. This participant is young and newer to the field of teaching. Trying to acclimate to teaching and lesson planning in addition to being a residential faculty member increased his ERT. Like Participant 1, there were stretches of time where Participant 5 was working twenty-four hours a day, seven days a week. He expressed his exhaustion in his weekly reflection log. “Trying to balance everything from cottage life, personal life, to teaching related things. But I continued to work on them at pace and one at a time and I was ultimately able to feel like nothing was wrong. I just need to get better, more consistent, sleep throughout the week.”

Figure 4.13

Participant 5 MBI-ES Pre/Posttest

The pre and posttest results from the FFMQ show that Participant 5 experienced a reduction in mindfulness. He indicated a slight positive correlation in observing (pre=36, post=37). These scores indicate growth in mindfulness. Adversely, Participant 5 experienced a
negative correlation in describing (pre=24, post=22), non-judgement (pre=27, post=19), non-reactivity (pre=30, post=27), and a slight negative correlation in acting with awareness (pre=29, post=28). These scores indicate a reduction in mindfulness.

**Figure 4.14**

*Participant 5 FFMQ Pre/Posttest*

Participant 5 experienced a slight rise in positive affect and a slight decline in negative affect over the course of the eight-week intervention. For positive affect, Participant 5 had a mean score of 24.6000 (SD=5.85662). For negative affect, he had a mean score of 13.2000 (SD=3.34664). These scores indicate that Participant 5 experienced a lower-than-average positive affect and a lower-than-average negative affect throughout the intervention. Participant 5, however, did experience a downward trend in negative affect.
Participant Summary. On the surface, it may seem that the intervention produced adverse results for Participant 5. His MBI-ES scores suggest an increase in burnout, and his FFMQ scores suggest a decrease in mindfulness. His perception of the course, however, suggests that the intervention was effective. "I made no sacrifices, but rather aided myself in implementing these new tactics to my daily life. What I learned about myself is that I can do many things. There are many things that I have already done and accomplished. And moving forward I can continue to accomplish more by taking more time to myself to bring back my focus to what matters, all with an intentional attitude.” A potential reason that Participant 5 may have felt that the intervention was effective but did not produce scores of improvement is his lack of time to engage in these mindfulness activities. “I learned that I had taken too long of a break from intentionally taking time to myself and being mindful. Although I practice it on (a) daily basis while on the move. It had been too long since I had paused everything around me to do it solely on its own.” Participant 5 plans to continue mindfulness practices by “…think(ing) back to what we did as a group and look to implement those strategies into my daily life, more often.”

Participant 6
Participant 6 identifies as a Caucasian male between the ages of 35-44. The highest level of school this participant has completed is his master’s degree. The participant’s main job role at the school is an academic faculty member. He attended eight of the nine sessions. Participant 6 had no formal mindfulness experience prior to the intervention. “Being mindful of yourself helps bring balance to your life, and therefore helps others around you. I have not been mindful... in the past, and things will fester and eventually have negative outcomes. Because of these instances, I have tried to be more conscious of where I am emotionally and physically, so I can be the best person for my wife, kids, students and friends.”

The pre and posttest results from the MBI-ES show that Participant 6 experienced adverse results regarding the factors of burnout. He indicated a positive correlation in depersonalization (pre=0.2, post=1.2) and a positive correlation in emotional exhaustion (pre=1.667, post=2.22) on the MBI-ES. He indicated a negative correlation in personal accomplishment (pre=3.875, post=3). The positive correlation between depersonalization and emotional exhaustion and the negative correlation in personal accomplishment indicates an increase in burnout from pre to posttest. His MBI-ES pre and posttest scores aligned with the ineffective profile. This profile does not indicate that Participant 6 is "ineffective" in carrying out his professional duties. Instead, it suggests that while he has little experience of exhaustion or depersonalization, he is not experiencing strong feelings of personal accomplishment either. This may lead him to lose confidence in his capabilities, feeling ineffective over time. The ineffective profile suggests an experience of work-life that falls short of self-actualization.
The pre and posttest results from the FFMQ show that Participant 6 experienced slight growth in mindfulness. He indicated a positive correlation in observing (pre=28, post=32), a positive correlation in acting with awareness (pre=25, post=31), and a positive correlation in non-judgement (pre=21, post=25). These results indicate a growth in mindfulness. Adversely, Participant 6 experienced a slight negative correlation in describing (pre=31, post=30), and a slight negative correlation in non-reactivity (pre=20, post=18). These results indicate a reduction in mindfulness.
“Still dealing with the workload of papers coming in from students and trying to take advantage of short periods of time I can get to grade them. This helps not only with the workload, but also my stress.”

Participant 6 experienced a rise and fall in positive affect over the course of the eight-week intervention. He also experienced a rise and fall in negative affect. At the beginning of the intervention, positive and negative affect ran parallel. However, in the second half of the intervention, weeks with higher positive affect scores paired with lower negative scores, and vice versa. For positive affect, Participant 6 had a mean score of 32.5000 (SD=2.4899). For negative affect, he had a mean score of 23.000 (SD=2.82843). These scores indicate that Participant 6 experienced a slightly lower-than-average positive affect and a higher-than-average negative affect throughout the intervention.

Figure 4.18

Participant 6 PANAS

**Participant Summary.** Participant 6 indicated results that align with an increase in burnout from pre to posttest. He did, however, indicate a slight growth in mindfulness. Similar to Participant 5, he expressed his positive outlook of the intervention. “I wanted to bring a little more peace to my life, and learn how to center/ground myself. I expected to understand how to take a moment and understand what can help me gain more peace.” When asked if sacrifices
were made, he openly admitted that the sacrifice of time was detrimental, although he felt that the efficacy of the course outweighed the sacrifices. "It cost me grading/lesson planning time on Friday mornings, and was an issue, but the long terms effects are great. I am much more happy, relaxed, and less stressed than I usually am at this time of the year. This reflects a bunch about the program because this school year has been the most stressful in the 11 years that I have taught”.

His positive perception of the intervention can be supplemented by his indication of growth in mindful observing and acting with awareness. Participant 6 aligned with the "ineffective" profile from the MBI-ES scores. His journal entries mentioned being stressed by the workload of assignments that he needed to grade, but his later journal entries acknowledged that he was taking time to take care of himself in the form of exercise. His observance of feeling stressed, and his action to take care of himself was helpful in combatting stress from the amount of grading he needed to do. “I still try to stretch every night, but I have also been running on the treadmill the past two weeks more and it has combatted much of the stress I have about finishing grading paper and writing my end of the marking period comments.” Participant 6 indicated a desire to continue mindfulness practices and taking time for himself. “I will continue to take time to stretch/meditate/work out and take time that will help me in the long run.”

**Participant 7**

Participant 7 identifies as a Caucasian female between the ages of 45-54. The highest level of school this participant has completed is an advanced degree. The participant’s main job role at the school is an academic faculty member. Participant 7 had experience with mindfulness prior to the intervention through yoga and the practices of Quakerism. She attended all nine sessions of the intervention.
The pre and posttest results from the MBI-ES show that Participant 7 experienced mixed results regarding the factors of burnout. She indicated no change in depersonalization (pre=0.2, post=0.2) and experienced a negative correlation in emotional exhaustion (pre=2.33, post=1.778) on the MBI-ES. The negative correlation in emotional exhaustion indicates a reduction in burnout from pre to posttest. Adversely, Participant 7 also experienced a negative correlation in personal accomplishment (pre=5, post=4.5) which indicates an increase in burnout from pre to posttest.

Figure 4.19

*Participant 7 MBI-ES Pre/Posttest*

Both the pretest and posttest indicated that Participant 7 aligned with the engaged profile according to the MBI-ES (Maslach et al., 2018). An engaged profile emerges when all scale scores are good. Engagement shows energy and effort dedicated to work and persistence in the face of difficulties. Individuals who are engaged are very enthusiastic and absorbed at work, primarily because they enjoy and take pride in their role. Her week four journal entry supports these findings. "An administrator asked me to do a project and I embraced it instead of pushing the challenge away. embracing instead of resisting helped the situation flow much better. It was even joyful for a few moments.”
The pre and posttest results from the FFMQ show that Participant 7 experienced growth in mindfulness. She indicated a slight positive correlation in observing (pre=32, post=33), a slight positive correlation in describing (pre=25, post=27), a positive correlation in acting with awareness (pre=25, post=30), and a positive correlation in non-judgement (pre=24, post=27). These scores indicate growth in mindfulness. Adversely, Participant 7 experienced a slight negative correlation in non-reactivity (pre=19, post=18). This score indicates a reduction in mindfulness.

**Figure 4.20**

*Participant 7 FFMQ Pre/Posttest*

Participant 7 articulated her awareness of the benefits of mindfulness and her desire to incorporate mindfulness practices into work in her journal. During Week 7 of the intervention, she wrote, "Did you know that Quaker schools start every faculty meeting with a moment of silence before they begin. It helps refocus the mind before the work begins. I really miss that punctuation of time. Wish we could have that moment of silence here...”

Participant 7 experienced a slight downward trend in positive affect over the course of the eight-week intervention. She experienced mixed results with negative affect over the course of the eight-week intervention. For positive affect, Participant 7 had a mean score of 26.4444 (SD=3.24465). For negative affect, she had a mean score of 17.1111 (SD=4.56740). These
scores indicate that Participant 7 experienced a lower-than-average positive affect and a slightly lower-than-average negative affect throughout the intervention.

**Figure 4.21**

*Participant 7 PANAS*

Week 6 was the only time Participant 7 expressed a higher negative affect score than positive. That week she wrote, “I am becoming aware that Friday mornings have been difficult for the last few weeks. I am not sure if it is because the times we are living (and life in general) is wack right now or if I am more aware of my feelings because we take time to be introspective on Friday mornings.”

**Participant Summary.** Although her positive affect declined slightly throughout the course, the aggregate data suggest that Participant 7 still experienced a reduction in burnout and a growth in mindfulness. Her hopes for the course were to “learn more about mindfulness and what it is all about. I learned that it is something that I do and have done but not as formally”. Her perception of the course was positive, albeit not as helpful in her own practices as for others. “I enjoyed learning about the variety of mindfulness practices, not all of them resonated with me but it was interesting anyway. I learned to recognize when I am practicing mindfulness and be more mindful of mindfulness ;)” Participant 7 plans to continue her mindfulness practices after the intervention ends. “I will continue to recognize my feelings and notice things around me. My
gratitude and mindfulness usually take the form of visualization or noticing something visually. Also, I will continue with my yoga practice which is intertwined with this work.”

Summary

Chapter 4 provided a detailed analysis of the quantitative and qualitative data from this study. Moreover, the results were grouped by group generalizations to answer research question one as well as participant profiles to answer research question two. The group generalizations showed overall results within the group, whereas the participant profiles focused on the phenomenological perspectives of the survey results of each individual. In Chapter 5, the results will be discussed in a manner that addresses each research question. Additionally, study limitations, implications for educators and administrators, and implications for future research will be provided.
Chapter 5: Discussion

Introduction

This study investigated the efficacy of an eight-week strengths-based mindfulness intervention on boarding school teacher burnout. The researcher implemented an exploratory sequential mixed-methods research design to inform the strengths-based portion of the intervention design. To understand the phenomenon from a more holistic approach, the researcher implemented an embedded convergent design in phase II to develop case study participant profiles. The profiles included pre and post-test self-reported quantitative data using the Maslach Burnout Inventory for Educators (MBI-ES) and the Five Facets of Mindfulness Questionnaire (FFMQ). During the weekly sessions, self-report survey data on wellbeing using the Positive and Negative Affect Schedule (PANAS) was collected and included in the participant profiles. Participants completed weekly qualitative journal entries, which asked participants to describe one stressful situation for the week and how they handled it. At the end of the intervention, the participants reflected on their experiences in the program.

Although the data sources on group scores revealed that the intervention effectively reduced emotional exhaustion and increased observing, describing, acting with awareness, and non-judgment, the only statistically significant change from pre to post-test within the group was in observing. While the group outcomes' data fell short of showing statistically significant changes, participant profiles revealed more promising results.

This study revealed that practicing mindfulness can enhance teachers’ ability to reduce burnout and effectively handle stressful situations. The remainder of this chapter will (a) describe the application of the study's theoretical framework, (b) discuss the results of the study, (c)
acknowledge limitations, (d) provide implications for educators and administrators, and (e) propose implications for future research.

**Summary of Study**

This study aimed to assess the efficacy of an eight-week mindfulness intervention on boarding school teacher burnout. Moreover, the design study observed the changes in burnout and mindfulness over time and understand how the participants employed mindfulness in stressful situations and how a strengths-based approach to group discussion impacted overall wellbeing. The logic model was used to design both the intervention and the methodology in this study. A logic model is an overview of how an effort or initiative is supposed to work (Alter & Murty, 1997). Developing the model brings together stakeholders to articulate the program's goals and the values that support it and identify strategies and desired outcomes. To develop the model in this study, the researcher used both forward and reverse logic. The design began by working backward with the desired outcome and then identified the concept and resources used to address the outcome. Backward logic was then combined with forward logic, choosing specific steps to produce the desired effects.

The study began using a reverse logic model to identify teacher burnout as a desired outcome change. The design then transitioned to a forward logic model to develop the intervention. The intervention design consisted of combining mindfulness and a strengths-based approach through positive psychology (PERMA) as the intervention curriculum's two main activities. Using relevant literature, the researcher collected data on the efficacy of the potential development of outputs (facets of mindfulness and strengths-based group work) on potential behavioral outcomes (self-regulation of attention, orientation to experience, and a positive focus on individual and environmental strengths). The data informed the design of specific activities
and frame group discussions in a way that related to the implementation of using the development of outputs to combat teacher burnout.

The intervention lasted for eight weeks, with one sixty-minute session occurring each week. A half-day retreat was held on Sunday between Weeks five and six for two and a half hours. The weekly sessions consisted of formal meditation practices, didactic activities, and group discussions. Participants were asked to do between ten and thirty minutes of homework every day. The homework consisted of guided meditations, informal mindfulness practices, and appreciative inquiry practices. All weekly sessions occurred on Friday mornings at 8 am over the video conferencing platform Zoom.

**Application of Conceptual Framework to Findings**

In chapter II, a theoretical framework for this study consisted of three major theories. The logic model served as the overarching organizational theory used to merge the theories of mindfulness and wellbeing (PERMA). The logic model integrated planning, implementation, and evaluation. It helped to set priorities for allocating resources. The model revealed data needs and provided a framework for interpreting results. The adapted logic model enhanced the understanding of the participants' phenomenon by integrating research findings and practice wisdom. This adapted logic model defined a shared language and shared vision for community change.

**Summary and Discussion of Results**

In looking at the Logic Model of Intervention Results (Figure 5.1), it is clear that the researcher developed a curriculum that focused on mindfulness and strengths-based group discussions. The outputs of mindfulness activities were the participants' growth in four of the five facets (observing, describing, acting with awareness, and non-judging of inner experience),
and the outputs of the strengths-based discussions were reflecting, reframing, envisioning, and co-constructing of the Appreciative Inquiry 5-D cycle (Cooperrider & Whitney, 2005). The outcomes of the outputs were the self-regulation of attention and orientation to experience, which allowed the participants to focus positively on individual and environmental strengths. The impact that the intervention had on the participants was a negative correlation in emotional exhaustion, which indicates a reduction in burnout. However, there was also a negative correlation in personal accomplishment and a positive correlation in depersonalization, indicating an increase in burnout. The research questions that accompany this logic model and research design are answered and discussed in the next section.

Figure 5.1

Logic Model of Intervention Results

Research Question 1

The first research question in this study sought to answer, “what is the effect of a virtual eight-week mindfulness-based intervention program on boarding school teachers’ response to stress and burnout?” In addition to measuring changes in burnout, the researcher sought to
measure growth in mindfulness to understand how the intervention helped the participants develop mindfulness skills, if at all. Mindfulness was measured using the Five Facets of Mindfulness Questionnaire (FFMQ) (Baer et al., 2006). The data from the FFMQ was compared to the results from the Maslach Burnout Inventory for Educators (MBI-ES) (Maslach & Jackson, 1986), which measured the participants’ levels of burnout. The researcher wanted to see if there was a correlation between growth in mindfulness skills and reductions in burnout. The following section details the results of mindful growth followed by the results of changes in burnout.

**Mindfulness**

Mindfulness is defined as "paying attention in a particular way; on purpose, in the present moment, and nonjudgmentally" (Kabat-Zinn, 1994, p.4). There are formal and informal mindfulness practices. This study utilized both. This section will conclude the efficacy of mindfulness intervention in this study on the five facets of mindfulness. It is possible that due to the small sample size in this study (n=7), only one of the facets of mindfulness was considered statistically significant. Therefore, provided are reflections of both group and individual scores.

All seven participants experienced growth in observing. The mean at pretest was 30.4286 (SD=3.55233) and 33.1429 (SD=3.43650) at posttest. Observing was the only facet of mindfulness that showed a statistically significant change (p=.006) from pretest to posttest. Three of the seven participants experienced growth in describing, and the group mean at post-test was slightly higher than at pretest. The group scores went from a pretest mean of 28.426 (SD=2.87849) to a posttest mean of 29.2857 (SD=6.04743), suggesting that the intervention was effective at increasing describing. However, the statistical analysis suggests that this was not a statistically significant change (p=.644). Five of the seven participants experienced growth in acting with awareness from pre to posttest. The group scores went from a pretest mean of
25.7143 (SD=2.13809) to a posttest mean of 29.8571 (SD=5.27347), suggesting that the intervention was effective at increasing acting with awareness. However, the statistical analysis suggests that this was not a statistically significant change (p=.141). Four of the seven participants experienced growth in the area of non-judgment. The group mean score of 26.4286 (SD=3.69040) at pretest and 28.1429 (SD=6.33584) at posttest suggests that there was growth in non-judgment. However, the numbers suggest that this is a statistically insignificant change (p=.534). Only three of the participants experienced growth in non-reactivity. The group pretest score of 22.8571 (SD=5.87164) declined slightly at posttest to 22.7143 (SD=4.23140), suggesting that participants experienced a slight decrease in non-reactivity.

**Burnout**

Burnout is defined as "a syndrome of emotional exhaustion and cynicism that frequently occurs among individuals who do 'people work' of some kind" (Maslach & Jackson, 1981). The three dimensions of emotional exhaustion, depersonalization, and personal accomplishment do not always move in tandem, which means that they are not highly correlated with constituting a single, one-dimensional burnout score. Therefore, when examining the factors of burnout, Maslach states that “in general, each respondent’s MBI-ES scale scores should be calculated and interpreted separately. Note that responses to MBI-ES items should not be combined to form a single ‘burnout’ score” (2018, p.35).

Educators who have developed negative feelings about their students suffer from depersonalization. Teachers can display negative attitudes by using derogatory labels, becoming cold or distant, physically distancing themselves, and tuning students out through psychological withdrawal (1981). Group scores showed a slight increase in depersonalization over eight weeks.
Three of seven participants experienced a negative correlation in depersonalization from pre to post-test. One experienced no change, and three experienced an increase.

A potential reason for a slight increase in depersonalization in the group is that group scores at pretest and posttest remained under the national average (n=4,163) threshold of 11.00 (SD=6.19) (Maslach et al., 2018). The mean for the study participants at pretest was 4.857 (SD=3.80476) and was at 5.1429 (SD=3.38765) at posttest. The change from pre to posttest was not statistically significant (p=.783). Although participants in this study experienced a slight increase in depersonalization, they experienced less overall than the average. Boarding school teachers often articulate feeling a calling to the profession, which could be why depersonalization within the sample in this study is lower than the average score.

Teachers suffer from emotional exhaustion (EE) when they feel emotionally overextended and exhausted by their work. The symptoms of EE are feeling tired and fatigued. These feelings can become chronic over time and impact productivity (1981). Group scores showed a significant decrease in emotional exhaustion from pretest to posttest. At pretest, the group score mean was 25.7143 (SD=9.34013). At posttest the mean was 20.2857 (SD=10.90435). According to Maslach (2018), the mean of the national average of the emotional exhaustion score is 21.25 (SD=11.01). Participants in this study experienced a higher-than-average emotional exhaustion level during the pretest but experienced a slightly lower than average emotional exhaustion level during the posttest. The aforementioned suggests that the intervention was effective at reducing emotional exhaustion. However, statistical analysis suggests that this change was not statistically significant (p=.083).

Group scores showed a significant decrease in personal accomplishment. Group scores at pretest had a mean of 36.4286 (SD=6.18755) and a mean of 32 (SD=5.91608) at posttest.
According to Maslach (2018), the national average score for personal accomplishment is 33.54 (SD=6.89). These scores indicate that the study participants felt a stronger sense of personal accomplishment at the pretest and a slightly lower than average sense of personal accomplishment after the eight-week intervention. This change, however, was not statistically significant (p=.059).

**Job Role and Burnout Profiles.** Maslach and his colleagues were cautious to note that the three aspects of the MBI-ES (depersonalization, emotional exhaustion, and personal accomplishment) do not move in lock-step and move asynchronously (1986). Instead of combining the results of these three aspects to create one single burnout score, they should be reported separately (1986). However, a range of profiles based on the combination of scores from the three aspects of burnout can provide insight into how the aspects correlate with one another. The combinations create distinct profiles described as engaged, ineffective, overextended, disengaged, and burnout. Of the seven participants in this study, only two participants aligned with the "engaged" work profile based on their MBI-ES scores. Three of the participants aligned with the "ineffective" work profile, and two aligned with the "overextended profile." It is important to note that there are some similarities between job roles and the profiles.

The "triple threat" boarding school model encourages faculty members to work in all school life facets, including residential, academic, and athletic settings (Millbrook School, 2021). Due to the global pandemic and a shift to virtual learning this year, the three participants identified as "academic faculty members" as their primary job role has not participated in the "triple threat" model they would typically work in other years. "Academic faculty members" experienced a reduction in work hours due to safety reasons and quarantining from campus students. Therefore, this group of employees had more time outside the school day to pursue
their interests. Participant 4 and Participant 7 both aligned with the "engaged" profile from the MBI-ES. These two participants were active in activities and organizations outside of the school aligned with their passions and interests. Feeling personal fulfillment outside of the workplace could be why these two participants felt "engaged" in the workplace.

The two participants aligned with the overextended profile work as "residential faculty members" and teach in the classroom. Participant 5 specifically wrote about the stress of being overextended during his week three journal entry. His stress was "trying to balance everything from cottage life, personal life, to teaching-related things. But, I continued to work on them at pace and one at a time, and I was ultimately able to feel like nothing was wrong. I just need to get better, more consistent, sleep throughout the week."

**Research Question 2**

In this study, the second research question sought to answer, "how do teachers employ mindfulness techniques in stressful situations in the workplace during a virtual mindfulness-based intervention?" The purpose of this research question was not only to learn if the intervention was effective but how. In the field of mindfulness-based intervention (MBI) studies, the research has typically fallen short of providing this qualitative analysis (Emerson et al., 2017). Therefore, qualitative data was collected in the form of weekly reflective journals with the prompt, "what is one stressful situation you encountered this week, and how did you handle it?"

Using horizontalization, a phenomenological reduction method (Moustakas, 1994), significant statements identified from the journal entries expressed how the participants experienced stressful situations at work and what they did in response to these situations. Synthesis of these statements allowed the researcher to organize the statements into groups of
meaning. Three main groups emerged from the significant statements (1) workload and presence, (2) adult relationships, (3) mindfulness.

The first group of meaning that emerged was "workload and presence." A few of the participants mentioned the amount of work as a source of stress. One participant specifically mentioned the amount of grading he needed to finish, “still dealing with the workload of papers coming in from students (was stressful) ...” while another participant struggled to find balance, “trying to balance everything from cottage life, personal life, to teaching-related things...". However, both of these participants acknowledged being in the present moment to cope with the stress of the workload. In response to the first statement, the participant dealt with the stress by "trying to take advantage of short periods of time I can get to grade them. This helps not only with the workload but also my stress”. The coping response to the second statement echoed the idea of presence in the first example “...I continued to work on them at pace and one at a time and I was ultimately able to feel like nothing was wrong.”

The second group of meaning that emerged from horizontalization was "relationships." Specifically, a participant who aligned with the "ineffective" profile seemed invested in improving relationships in the workplace between others and finding it an unsuccessful endeavor. "Getting in the middle of a difference of opinion between my boss and a colleague. Not very well. I wish I had thought more and asked more questions about what we were hoping to achieve and what it would take to accomplish it.”

The same participant mentioned two other events in which she tried to mitigate a relationship problem and felt unsuccessful. The constant feeling of being unsuccessful in similar situations could be contributing to this participant feeling “ineffective” in the workplace. “I was in... (a) meeting... this morning. (Yes, it was stressful!) It felt like people were not listening to
each other, just re-stating their own positions more firmly. During a pause, I tried to re-direct the conversation, proposing that we focus on how the communication to others would occur. This was my way of not getting caught up in the conflict but trying to move us forward. (Not successful, unfortunately...).”

Finding out about a colleague's sudden departure. I sat with it for several hours, feeling like I should have a conversation with this person. I have been somewhat of a go-to person for them and have had frank conversations about issues. I ultimately did decide to reach out and share my concerns, and we had a good conversation. While I doubt that it changes anything, I did speak my mind in a thoughtful (and I hope caring) way.

The third and final group of meaning that emerged from horizontalization was mindfulness. Not surprisingly, the two participants aligned with the "engaged" profile based on the scores from the MBI-ES were the most mindfully responsive to stressful situations. One of the participants demonstrated mindful acting with awareness, non-judgment, and non-reactivity in one stressful situation. "Managing the school's virtual open house for the first time virtually (was stressful). Instead of feeling anxious and all out of sorts, I approached it mindfully and gave myself some time to forgive and let go without getting hung up on not doing everything perfectly”. The same participant demonstrated the same mindful skills in another stressful situation. “I spilled coffee all over my desk, keyboard, and desk chair (and floor). It normally would have created a lot of anxiety and stress, but I cleaned it up calmly and just said, oh well. I was much more aware of acknowledging it and letting it go.”

The other participant who aligned with being “engaged” demonstrated her growth in mindfulness in other ways. This participant used her mindful acting with awareness and non-reactivity, coupled with relying on her individual strengths recognized from the AI 5-D cycle to
take on a challenge at work. “An administrator asked me to do a project, and I embraced it instead of pushing the challenge away. Embracing instead of resisting helped the situation flow much better. It was even joyful for a few moments.”

Positive Psychology and a Strengths Based-Approach

In an exploratory sequential design, a quantitative feature is developed based on the data of an initial qualitative phase (Creswell & Plano-Clark, 2018). In this study, the PI/facilitator infused Appreciative Inquiry into a mindfulness intervention as a positive psychology strengths-based approach to organizational change. During the qualitative phase, the researcher interviewed a smaller sample of participants (n=4) using the Appreciative Interview Protocol (Hammond, 2013, p.77). The PI sought to understand what the participants perceived to be the "positive core" of the organization and define an "affirmative action topic" or something the participants would like to improve in the workplace. After collecting the data, "community" emerged as the positive core, and "intention in school culture" emerged as the affirmative action topic. The positive core and affirmative action topic were the topics that led participants through the Appreciative Inquiry (AI) 5-D protocol each week.

There are seven stewardship skills or actions encompassed in an effective mindfulness instructor to help create a deeper structure of a co-created group in a mindfulness intervention. Confluence occurs when group participants mutually define reality in the moment through the unfolding of a class activity. This is the co-creation of mindfulness in the group (McCown et al., 2016). The facilitator led participants in this study through mindfulness exercises and allowed time to debrief the experiences during each session. After orienting themselves to the group and creating confluence through mindfulness practices each week, the group addressed the affirmative action topic defined in the qualitative phase and worked through the Appreciative
Inquiry 5-D cycle (Cooperrider & Whitney, 2005) to create goals for positive organizational change. The Appreciative Inquiry 5-D allows a group of people to approach organizational issues from a positive psychology lens while still allowing them to articulate their organizational change desire.

The group meetings' final product in this study was developing an "Intentional Community Framework" (See Figure 5.2). This framework was co-created by all of the participants. The center circle expresses the mission statement of the framework. The middle circle provides examples of ways to achieve the inner circle, and the outside circle expresses the resources and support needed to accomplish all of these things.

**Figure 5.2**

A Framework for Positive Organizational Change

There are "Six Freedoms" of Appreciative Inquiry. They include (1) freedom to be known in a relationship, (2) freedom to be heard, (3) freedom to dream in the community, (4)
freedom to choose to contribute, (5) freedom to act with support, and (6) freedom to be positive (Cooperrider & Whitney, 2005). The group in this study experienced the six freedoms through the 5-D cycle, but implementing the institution's framework was not obtained due to time constraints. Administrators and middle-level leadership that plan professional development for teachers can use Appreciative Inquiry or another strengths-based protocol to address shortfalls in the workplace. Not only does a protocol like this allow teachers to be heard (potentially contributing to a reduction in depersonalization), it allows teachers to develop a concrete plan of action to address these issues (potentially contributing to a greater sense of personal accomplishment).

**Participants Perceptions**

Overall, the participants felt that they had positive experiences from the MBI in this study. Regardless of burnout scores and profiles, 6 of the 7 participants felt that the intervention helped them somehow. One of the participants aligned with the "ineffective" profile stated, "experiencing a variety of mindfulness exercises/techniques, both during and those offered between sessions, was very helpful." Another participant that fell into the "ineffective" category and also scored relatively low on the FFMQ stated, "… the long terms effects are great. I am much more happy, relaxed, and less stressed than I usually am at this time of the year. This reflects a bunch about the program because this school year has been the most stressful in the 11 years that I have taught." The participant who scored the lowest on both the FFMQ and the MBI-ES fell into the "overextended" category. Even though the quantitative data may appear that this participant experienced adverse results, the participant articulated a different perception. "I learned that I had taken too long of a break from intentionally taking time to myself and being mindful. However, I practice it on a daily basis while on the move. It had been too long since I
had paused everything around me to do it solely on its own”. Finally, the two members who aligned with the “engaged” profile articulated positive outcomes as well. One of the “engaged” participants wrote, “I have gained a lot from this program especially how to be more accepting of what I am feeling/experiencing in the moment and being grateful for it no matter what it is.” The other “engaged” participant articulated her wish for mindful moments in the day. “Did you know that Quaker schools start every faculty meeting with a moment of silence before they begin? It helps refocus the mind before the work begins. I really miss that punctuation of time. I wish we could have that moment of silence here...”. Only one participant in the study did not feel that the intervention was personally effective. “I learned that, for some, mindfulness is a very effective tool that helps to stay grounded and process the world around them. I still don't feel as though it is a helpful way for me personally to view the world.... It’s just not my cup of tea”.

Summary of Findings

It may appear that the intervention in this study has not been effective due to a lack of statistically significant changes from pretest to post-test, but the data shows that all participants experienced growth to some extent. Moreover, participant perceptions were overwhelmingly positive about mindfulness practices and how practicing helped them cope with stress. It is worth considering that the ontological perspective of mindfulness does not promise to be a fix-all. Instead, it promotes the awareness of feelings and ways to process stressful situations.

Research modeled on (or aspiring to) the so-called gold standard of the randomized control trial (RCT) is still widely perceived to endow scientific legitimacy. However, its approach to outcomes is positivist, reductionist, and individualist (Micozzi & Cassidy, 2015). It attempts to set up some property of mindfulness in analogy to a pharmaceutical compound, making it an external object to be placed “inside” to change the individual
patient. While this kind of research approach has elaborated a powerfully persuasive
evidence base that has encouraged the adoption of mindfulness for a wide range of
clinical applications, much potential understanding has been lost. The discourse of this
kind of MBI research does not match the concerns of pedagogical study and teacher
training. In fact, the research discourse all but ignores the relational dimensions of
mindfulness. (McCown et al., 2016, p. 12)

Participant perceptions of mindfulness can be an indication of growth. For example, the
FFMQ scores and the MBI-ES scores for Participant 5 suggest increased burnout and decreased
mindfulness skills (adverse to the desired outcomes). However, it is worth considering that his
growth in observation made him more aware of his emotions, thus providing more accurate post-
test FFMQ and MBI-ES results than at pretest. In his closing journal reflection, he stated, "I
made no sacrifices (to participate in the intervention), but rather aided myself in implementing
these new tactics to my daily life. What I learned about myself is that I can do many things.
There are many things that I have already done and accomplished. And moving forward, I can
continue to accomplish more by taking more time to myself to bring back my focus to what
matters, all with an intentional attitude."

A similar phenomenon occurred with Participant 7. Participant 7 experienced positive
outcomes from the intervention. Acting with awareness was the facet of mindfulness that she
experienced the most growth according to the FFMQ and her MBI-ES scores indicated a
reduction in emotional exhaustion. Additionally, she aligned with the "engaged" profile both
before and at the end of the intervention. Interestingly, however, Participant 7 experienced an
outlier week. During Week 6, her negative affect was higher than her positive affect. During this
week, she wrote, "I am becoming aware that Friday mornings have been difficult for the last few
weeks. I am not sure if it is because the times we are living (and life in general) is wack right now or if I am more aware of my feelings because we take time to be introspective on Friday mornings”. Although the quantitative data may have indicated a "negative" outcome that week, the qualitative data she provided suggested growth in mindful awareness.

Even participants who consider themselves "mindfulness skeptics" experienced growth throughout the intervention. Participant 1 clearly expressed his personal skepticism for mindfulness yet still indicated a reduction in depersonalization and emotional exhaustion and growth in observing, describing, and acting with awareness. "I was hoping that I might grow my appreciation for mindfulness a bit, though I think it just clarified my feelings that mindfulness isn't really my 'cup of tea.' I'm happy some people find it to be very powerful, and that it helps them; I'm just not one of those people."

Moreover, there was a positive correlation between attendance and growth in mindfulness in this study. For example, the two participants aligned with the "engaged" burnout profile attended more sessions than the other participants and had a positive mindset about mindfulness from the intervention's onset. The findings of this study align with existing literature. Teachers who exhibit higher mindfulness skills, who feel more comfortable with mindfulness content, and are committed to the practice of mindfulness are less likely to feel burnout or stress, feel relatively good about efficacy, and feel better about school culture (Brackett et al., 2012, Collie et al., 2012, Collie et al., 2015).

**Limitations of the Study**

Every research study has limitations, and this study is no different. It is essential to address the study's limitations so the reader can be aware of the researcher's challenges. In the
following section, three overarching limitations will be addressed. These limitations focus on (a) methodology, (b) analysis, and (c) generalizability.

**Limitations in Methodology**

The methodology used in this study was an exploratory sequential mixed-methods design with an embedded convergent phase II. First, the researcher collected qualitative data from a smaller sample of participants (n=4) to inform part of the intervention design implemented in phase II. The intervention was tested using pre and post-test quantitative survey data and longitudinal time series qualitative reflective journals in phase II. Although the researcher used data-driven best practices when designing the intervention and designing the methodology, some limitations restricted the design from coming to fruition. The following methodological limitations are discussed; (a) virtual environment, (b) boarding school schedule, (c) instructional hours, (d) researcher as the facilitator and (e) the absence of a control group.

**Virtual Environment.** Mindfulness philosophers believe in the constructionist principle, believing that we create co-create our reality. It is crucial in these philosophers' eyes that sharing the physical space is vital to this co-creation. During the time of this study, the impact of Covid-19 forced schools to shut their doors. While some students in this study's setting were living on campus during this time, no more than four people were allowed to meet in person. The students, while on campus, continued to learn virtually while the faculty continued to meet in the same manner. The mindfulness intervention that occurred in this study also occurred in the virtual environment.

**Boarding School Schedule.** Boarding school faculty members work around a 24-hour, seven-day-a-week schedule. Some faculty members' primary responsibilities occur in the academic setting and mimic a typical teacher workday. Others primarily work in the residential
setting, which occurs on nights and weekends. Some of the participants in this study work in both settings, meaning that the possibility to work 24/7 is there. It was very challenging to determine a shared time for all participants to attend live, virtual sessions. Ultimately, the participants settled on Friday mornings at 8 am. The original design of the intervention was to meet for 90-minute sessions. However, the first class of the day begins at 9 am, which meant that we had to limit our sessions to 60-minutes. The residential faculty members were responsible for taking their residents' temperatures every morning due to Covid-19 protocols, so they were often late or had to walk away from the sessions for a few minutes. "Being online at 8:00 am took effort". Other faculty members were met with traffic and often logged on a few minutes after 8 am. "I validated yet again that early morning is NOT a good time for me. Also, like so many of our students: self-motivation is my biggest hurdle and can be my best friend!" Additionally, faculty members who taught at 9 am needed a few moments before class to prepare. “It cost me grading/lesson planning time on Friday mornings, and was an issue…” Even though we schedule 60-minute sessions, they were often cut short and felt rushed. “Getting myself into work in order to log on by 8am. How do I make things for myself a priority, as opposed to what I am doing for others?”

**Instructional Hours.** Due to the limitation of boarding school teachers’ schedules, this study utilized a reduction in the average amount of time spent in a mindfulness intervention. Whereas programs like MBSR host eight weekly sessions at two and a half hours each and a full day retreat (Kabat-Zinn, 1984), this study implored a schedule of eight weekly sessions lasting one hour, as well as a two-and-a-half-hour retreat. A similar program to the one in this study, Stress Prevention and Management (SPAM) was designed in response to teachers' specific needs. There were only six weekly sessions in SPAM lasting for one hour each. SPAM
participants reported slightly higher job satisfaction levels and motivation to practice the
techniques learned throughout the sessions, but none of the outcomes were statistically
significant (Reiser et al., 2016).

Although the SPAM developers took into account teachers' busy schedule, the
intervention seemed to be too short of providing any substantial outcomes. Similarly, this study's
overall results show potential efficacy in reducing burnout and the increase in mindfulness, albeit
not significantly. The number of instructional hours in the mindfulness intervention in this study
may need to be increased to support more substantial pre- to post-test outcomes.

**Researcher as Facilitator.** In the original study design, the intention was to bring in an
outside facilitator to conduct the weekly intervention with participants so the researcher could
take on the principal investigator's sole role. It became challenging and ultimately impossible as
the unique boarding school schedule became a barrier to finding a facilitator with the same
availability as the participants. To address this limitation, the researcher analyzed the qualitative
data from a transcendental phenomenological reductionist perspective and engaged in the
process of epoché (Moustaskas, 1994). While this process did not altogether remove any biases,
it did make the researcher aware of them when interpreting data. Moreover, when facilitating the
intervention, the researcher asked participants to be truthful in all answers and put personal
feelings about the facilitator aside.

**Absence of a control group.** Due to time constraints and low participant availability, this
study did not include a control group. Providing a control group would have highlighted
conditions for the general population of boarding school teachers at this specific school and
results from each group could have been compared. The researcher utilized a case study design
instead to gain a depth of knowledge as opposed to a breadth of knowledge for this study.
Limitations in Analysis

The researcher used an exploratory sequential research design with an embedded convergent phase II. This study design is useful when studying the efficacy of an intervention because it helps the researcher to embed a component of the intervention that is specific to the participants’ setting. Quantitative and qualitative data provided an in-depth analysis into the experiences of the participants. While this method of analysis was appropriate for this study, there were still limitations. The limitations will be described below.

Longitudinal Data Collection. Due to time constraints, the MBI-ES and FFMQ post-test occurred at the end of the last session. The analysis allowed the researcher to see the immediate correlation between the intervention and teacher burnout but failed to address the intervention's long-term effects. If the researcher was able to provide another timepoint analysis a few months after the intervention, the scores in depersonalization and personal accomplish scores may have improved if the participants were able to implement the Framework for Positive Organizational Change they designed during the intervention. A longitudinal data collection would also provide insight as to whether mindfulness interventions have long-lasting effects.

Attendance (PANAS and journal entry inconsistency). Boarding schools operate on a 24 hour a day time clock, seven days a week. Therefore, it was extremely challenging to find a shared time that all seven participants could attend synchronous virtual sessions. The only shared time that was available for all participants was Friday mornings at 8 am. Participants completed the PANAS and journal entries at the beginning of each session. When a participant was absent from a session, they did not complete the survey measures for that week. Therefore, there is an inconsistency in the number of times each participant completed the PANAS survey data and weekly journal entries.
Limitations in Generalizability

This study focused on boarding school teachers at an all-boys suburban boarding school in the Mid-Atlantic region. Not only are boarding school teachers a niche population, the school serves mostly underprivileged students. While teachers serving underprivileged students are not a niche population, underprivileged students are not typically part of the boarding school student population, making the teachers in this study an extremely unique group. Therefore, this study had many limitations in generalizability.

Small Sample Size. This study used convenience and purposeful sampling. Due to the institution's small size and the challenging schedule to work around, the number of participants in the study (n=7) was negligible. Therefore, the researcher used a case study design to hone in on the participants' lived experiences in the study. The small sample size, coupled with the study's phenomenological perspective, makes the findings hard to generalize to a larger population of teachers.

Unique Population. This sample in this study draws from a very particular group of people, boarding school teachers. To my knowledge, no studies have been conducted on this population. Moreover, while there are some similarities between day school and boarding school teacher jobs, they are too dissimilar to compare. Even if the job roles were nearly identical, the teachers in this sample work at a mission-driven school. This school serves underrepresented and underprivileged students. This is not the average population of students seen in boarding schools. Therefore, it is impossible to generalize the results from this population to other groups.

Implications for Educators and Administrators

Educational research should have three objectives: (1) to explore issues and find answers to questions, (2) to share policy, and (3) to improve practice (López-Alvarado, 2017). The
researcher in this study sought to provide answers and improve practice through a mindfulness intervention. Based on the results of this study, this section will provide implications for educators and researchers to improve practice.

**Embodiment.** The research shows that implementing mindfulness and social-emotional learning (SEL) curricula with pre-service and current teachers is beneficial for the student and community well-being (Brown et al., 2007; Dresser, 2013; Poulou, 2017; Stillman et al., 2018). The issue, however, is that most of the teachers responsible for implementing mindfulness and SEL curriculum with students have had little to no training in mindfulness or social-emotional learning themselves. To successfully implement this curriculum with students, teachers need ongoing training and practice in their own lives so they can embody the work they do with students (Dresser, 2013). An example of a program specifically aimed at teachers is the Cultivating Awareness and Resilience in Education (CARE) for Teachers program. CARE is a mindfulness-based curriculum designed to reduce stress and improve teachers' performance and classroom learning environments. "CARE combines emotion skills instruction, mindful awareness practices, and compassion building activities to provide teachers with skills to reduce their emotional stress and to improve the social and emotional skills required to build supportive relationships with their students, manage challenging student behaviors, and provide modeling and direct instruction for effective social and emotional learning" (Jennings et al., 2013, p. 377). Administrators and curriculum developers should use the reverse logic model to determine these programs' desired outcomes and then subsequently select or develop training that will prepare teachers to implement this work with students.

**Job-Role Schedule Revision.** As previously stated, the scores from the MBI-ES three of burnout should not be combined to create one total score (Maslach et al., 1981). However, they
can be combined to create a "profile" of the participant's experience in the workplace. "The continuum between work engagement and burnout comprises three distinct aspects or scales: energy, involvement, and efficacy. Each aspect is expressed positively in Engagement (vigor, connection, and efficacy) and expressed negatively in Burnout (exhaustion, depersonalization, and inefficacy)” (Maslach et al., 2021).

In this study, three of the seven participants aligned with the ineffective profile. Participants who align with the ineffective profile are not necessarily ineffective at their job but may feel that everything is so-so. Educators with no exhaustion or depersonalization experience may lose confidence in their capabilities, feeling ineffective over time. The participant may experience a work-life that falls short of self-actualization (Maslach et al., 2018).

Two of the seven participants aligned with the overextended profile. For those with an overextended profile, the workload is a big issue. These teachers are typically dedicated to work from which they derive a strong sense of professional efficacy but may become emotionally exhausted through overwork or inadequate rest (Maslach et al., 2018).

Although the participants in this study experienced a reduction in emotional exhaustion, none of the participants experienced a change in profile from pre to post-test, meaning that the "ineffective" teachers were still "ineffective" and the "overextended" teachers were still "overextended." Adversely, group scores suggest that participants actually experienced an increase in burnout (particularly in depersonalization and a lower level of personal accomplishment) by the end of the study. This study suggests that even a workload-oriented intervention (such as the mindfulness intervention in this study) cannot be effective when working too many hours.
To improve burnout levels that correlate with the ineffective and overextended profiles, administrators should consider the impact extra role time (ERT) has on teachers at boarding schools. “We can really learn a lot of stuff about how to balance work and life and just make it a little bit (healthier) for our faculty and our kids too.” Moreover, administrators should continuously monitor their colleagues' burnout levels and be responsive by investing in resources that provide stress coping and resilience training and find ways to lessen the burden of such a heavy workload.

**Intervention Intentionality.** Building intentional space into the schedule for colleagues to participate in mindfulness interventions should be prioritized by the institution. In settings like the one in this study, it was nearly impossible to find a common time that all participants could meet. Even when the time was designated, a reduction in curriculum hours occurred in order for participants to fit the intervention into their schedule. Prioritizing intentional space in the schedule for programs like this demonstrates the institution's commitment to faculty wellbeing.

**Train and hire internal members to facilitate.** The unique situation of boarding school schedules makes it challenging to find a facilitator with the same availability. Moreover, a facilitator with prior knowledge of the school setting's experiences can develop didactic activities and conversations around the ongoing situations at the school causing stress, making the programming more effective for that particular environment.

**Implications of Future Educational Research**

Researchers should aim to add to the current literature on their topic and search to fill gaps in the literature. Moreover, research that can be replicated helps to build the literature and reinforce the data (Nosek & Errington, 2020). Although this study is hard to generalize in its current form, this study could and should be easily replicated among other populations.
Longitudinal study on posttest results. There is an abundance of literature on the efficacy of mindfulness interventions on teacher burnout using survey measures such as the Maslach Burnout Inventory (MBI-ES) (Brackett et al., 2012; Collie et al., 2012; Collie et al., 2015; Shen et al., 2015) and the Five Facets of Mindfulness Questionnaire (FFMQ) (Baer et al., 2006). Many of these studies use pre and posttest measures at the beginning of the intervention and the end of the intervention. While this study design shows the immediate correlation between the intervention and teacher burnout, it does not address long-term effects. In future studies, researchers should aim to do a repeated time-series design in which the researcher administers these surveys at pretest, posttest, and at an extended period after the intervention has ended. This design will shed some insight into the long-term effects of these interventions' efficacy and will help inform the researcher.

Replication in a physical setting. Due to a global pandemic, the researcher was forced to pivot from the original intervention design of an in-person mindfulness intervention to an online mindfulness intervention. The literature shows that group mindfulness interventions are more effective than self-directed interventions (Ma et al., 2018). The intervention in this study employed the use of video conferencing to hold live sessions. The participants and facilitator tried to create an environment where they were inhabiting one another's space as authentically as possible (with cameras and microphones on the entire time). However, it would be beneficial to replicate this study with a physical, in-person intervention using the same MBI curriculum.

Replicate the research at other boarding schools. This was the first study, to my knowledge, that assessed the efficacy of a mindfulness intervention on boarding school teacher burnout. The boarding school teacher population may seem small compared to other groups of teachers (i.e., typical day school teachers) but serve a powerful and impactful purpose in their
students' lives. Moreover, although small in comparison, boarding school teachers exist in more significant numbers overseas. The participants from the school in this study work with students that primarily identify with underserved populations. This student population is unique, as many boarding schools charge steep tuition and educate families with affluence.

**Replicate the research at day schools and compare.** To better understand and generalize the efficacy of the specific intervention designed in this study, it would be beneficial to replicate this study with day school teachers in various settings. It is essential to replicate this study in public and private day schools, as teachers in these settings experience different challenges and stressors. Teachers in day schools may report more significant changes in burnout than teachers at boarding schools because boarding school teachers are already pressed for time in a different way than day school teachers are.

**Provide a clear pathway to institutional change.** This study utilized a strengths-based approach to positive organizational change as part of the intervention design through Appreciative Inquiry (AI) (Cooperrider & Whitney, 2005). However, AI was used solely as a component of the intervention and was not part of the study design or research questions. Future studies should aim to understand where there would be a clear pathway to institutional change and include AI design implementation within the institution as part of the study because it could impact the data on burnout, specifically with depersonalization and personal accomplishment.

**Conclusion**

Burnout is a workplace issue. Mindfulness can be used as a mitigation factor in the workplace's eyes, but it can also be a way to push for positive organizational change for the participants involved. Thinking back to Purser's *McMindfulness* and the argument that the current way mindfulness interventions are packaged and promoted is problematic and promotes
the acceptance of complacency of neoliberal philosophy is worth considering. Purser admits that there are worthy dimensions to mindfulness practice, but the way it has been packaged and promoted is problematic and promotes the acceptance and complacency of neoliberal philosophy. He claims that "mindfulness, like positive psychology and the broader happiness industry, has depoliticized and privatized stress" (p. 16), and in turn, has become a coping mechanism when mitigating tensions in a capitalist society.

Dr. Amod Lele, a critic of McMindfulness, admits that MBIs are not revolutionary, but they are not supposed to be. In true Buddhist fashion, mindfulness interventions should solely be a way for people to cope with stress. Nothing more. Using the logic model in reverse, the researcher in this study intentionally built out a mindfulness curriculum that addressed Purser's concern. Incorporating positive psychology and a strengths-based approach to the intervention, using the Appreciative Inquiry (AI) protocol allowed the participants to create positive organizational change through the group's confluence. When successful, AI works by generating six essential conditions, or six freedoms, that unleash personal and organizational potential. When the voices of an organization are liberated, members can feel the freedom to be known in the relationship, freedom to be heard, freedom to dream in the community, freedom to choose to contribute, freedom to act with support, and freedom to be positive (Cooperrider & Whitney, 2005). The participants still learned how to employ mindfulness practices during stressful situations at work, but they did not ruminate on negative thoughts through the AI lens. Instead, they reflected on what they love about the job and created a plan that could make it even better.

In conclusion, burnout is defined as a syndrome of emotional exhaustion and cynicism that frequently occurs among individuals who do 'people work' of some kind (Maslach & Jackson, 1981). There are many reasons why teachers experience burnout, but Extra Role Time
(ERT) compounds with other stressors for boarding school teachers (Brown et al., 2011). ERT can lead to burnout and decreased commitment to teaching and accommodative coping, the downgrading of goals, and reframing of outcomes (2011). Mindfulness is a practice that allows us to "pay attention in a particular way; on purpose, in the present moment, and nonjudgmentally" (Kabat-Zinn, 1994, p.4). Mindfulness-Based Interventions (MBI)s are associated with reduced teacher burnout (Crain et al., 2017; Reiser et al., 2016; Roeser et al., 2013). This study supports the literature that an eight-week strengths-based mindfulness intervention is associated with reducing boarding school teacher burnout.
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Appendix A: IRB Approval Form

Office of Research and Sponsored Programs | West Chester University | Wayne Hall West Chester, PA 19383 | 610-436-3557 | www.wcupa.edu

TO: Nicole Campbell

FROM: Nicole M. Cattano, Ph.D.
Co-Chair, WCU Institutional Review Board (IRB)

DATE: 9/23/2020

Project Title: An Exploratory Sequential Mixed Methods Study on the Efficacy of a Mindfulness-Based Intervention on Teacher Stress and Burnout

Date of Approval: 9/23/2020

☑ Expedited Approval

This protocol has been approved under the new updated 45 CFR 46 common rule that went into effect January 21, 2019. As a result, this project will not require continuing review. Any revisions to this protocol that are needed will require approval by the WCU IRB. Upon completion of the project, you are expected to submit appropriate closure documentation. Please see www.wcupa.edu/research/irb.aspx for more information.

Any adverse reaction by a research subject is to be reported immediately through the Office of Research and Sponsored Programs via email at irb@wcupa.edu.

Signature:

Co-Chair of WCU IRB

WCU Institutional Review Board (IRB)
IORG#: IORG0004242
IRB#: IRB00005030
FWA#: FWA00014155
Appendix B: Informed Consent

Informed Consent Form

Project Title: An Exploratory Sequential Mixed Methods Study on the Efficacy of a Mindfulness-Based Intervention on Teacher Stress and Burnout

Investigator(s): Nicole Campbell; David Backer

Project Overview:

Participation in this research project is voluntary and is being done by Nicole Campbell as part of her Doctoral Dissertation to assess the efficacy of an eight-week mindfulness-based intervention (MBI) on stress and teacher burnout. Your participation will take about nine weeks and include semi-structured interviews, taking questionnaires, participating in an eight-week mindfulness-based intervention, and completing weekly reflection journals. There is a minimal risk involved with a mindfulness-based intervention. Participants who suffer from anxiety and post-traumatic stress disorder may be triggered during meditative exercises. To address these risks, the intervention facilitator will preface any potentially triggering exercises with awareness and the option to opt out of the activity. In addition to minimal emotional and mental risks, the amount of time involved with the intervention may hinder participants’ ability to complete the course. To address this risk, participants will be asked for schedule preferences and the facilitators will attempt to cater to the participants’ scheduling needs.

Potential benefits reported from teachers participating in similar programs are a significant improvement in adaptive emotion regulation and mindfulness and lower levels of psychological distress and time urgency. Classroom climate, increased emotional sensitivity and support, and an improvement on classroom organization and productivity were also reported (Jennings et. al, 2013; Jennings et. al, 2017). Teachers also report a reduction of sleep disturbances and emotional exhaustion (Jennings et. al, 2017), an awareness of their struggle to practice self-care and how important it is to do so, their speed and manner with which they responded to others, and their own emotions in response to conflict (Schussler et. al, 2016). Teachers also reported slightly higher levels in job satisfaction and motivation to practice the techniques learned throughout the sessions (Reiser et al, 2016). Research will help the reduction of teacher stress and burnout and will lead to better experiences in all facets of education. If teachers are more content in their careers, the profession could see a lower percentage of absenteeism which could potentially save millions of dollars in educational funding each year.

The research project is being done by Nicole Campbell as part of her Doctoral Dissertation to assess the efficacy of an eight-week mindfulness-based intervention (MBI) on stress and teacher burnout. If you would like to take part, West Chester University requires that you agree and sign this consent form.

You may ask Nicole Campbell any questions to help you understand this study. If you don’t want to be a part of this study, it won’t affect any services from West Chester University. If you
choose to be a part of this study, you have the right to change your mind and stop being a part of the study at any time.

1. **What is the purpose of this study?**
   - assess the efficacy of an eight-week mindfulness-based intervention (MBI) on stress and teacher burnout.

2. **If you decide to be a part of this study, you will be asked to do the following:**
   - Participate in a semi-structured interview
   - take various questionnaires
   - participate in an eight-week mindfulness-based intervention
   - complete a weekly reflection journal
   - This study will take nine weeks of your time.

3. **Are there any experimental medical treatments?**
   - No

4. **Is there any risk to me?**
   - Possible risks or sources of discomfort include: Participants who suffer from anxiety and post-traumatic stress disorder may be triggered during meditative exercises. In addition to minimal emotional and mental risks, the amount of time involved with the intervention may hinder participants’ ability to complete the course. Mixed methods may provide conflicting data which could cause ethical issues.
   - If you become upset and wish to speak with someone, you may speak with Principal Investigator
   - If you experience discomfort, you have the right to withdraw at any time.

5. **Is there any benefit to me?**
   - Benefits to you may include: improvements in adaptive emotion regulation and mindfulness and lower levels of psychological distress and time urgency, increased emotional sensitivity and support, an improvement on classroom organization and productivity (Jennings et. al, 2013; Jennings et. al, 2017), a reduction of sleep disturbances and emotional exhaustion (Jennings et. al, 2017), an awareness of the struggle to practice self-care and how important it is to do so, and responding to others and self (Schussler et. al, 2016).
   - Other benefits may include: The reduction of teacher stress and burnout which can lead to better experiences in all facets of education. If teachers are more content in their careers, the profession could see a lower percentage of absenteeism which could potentially save millions of dollars in educational funding each year.

6. **How will you protect my privacy?**
   - Audio only will be recorded in the semi-structured interview. Each participant will be de-identified by a code and names will not be recorded in the notes from the interview. Audio will be stored on a password-protected computer and stored in the researcher’s home.
   - The intervention sessions will not be recorded.
   - Your records will be private. Only Nicole Campbell, David Backer, and the IRB will have access to your name and responses.
Your name will not be used in any reports. If qualitative data is used in the write up of the study, pseudonyms will be used.

Records will be stored:
- Audio and Notes- Password Protected File/Computer in the researcher’s home
- Journals and Surveys- Data-encrypted server Qualtrics
- Consent Form- Data-encrypted server Qualtrics

Records will be destroyed Three Years After Study Completion

7. **Do I get paid to take part in this study?**
   - No

8. **Who do I contact in case of research related injury?**
   - For any questions with this study, contact:
     - **Primary Investigator:** Nicole Campbell at 484-947-6815 or nc625417@wcupa.edu
     - **Faculty Sponsor:** David Backer at 203-917-7416 or dbacker@wcupa.edu

9. **What will you do with my Identifiable Information/Biospecimens?**
   - Not applicable.

For any questions about your rights in this research study, contact the ORSP at 610-436-3557.

I, _________________________________ (your name), have read this form and I understand the statements in this form. I know that if I am uncomfortable with this study, I can stop at any time. I know that it is not possible to know all possible risks in a study, and I think that reasonable safety measures have been taken to decrease any risk.

_________________________________
Subject/Participant Signature    Date:____________________
Appendix C: Appreciative Interview Protocol

Pre-Intervention Semi-Structured Interview Questions and Protocol

Interviewer Guidelines

1. Listen slowly and deeply, encourage your participant to tell his or her story.
2. Avoid interruptions.
3. Invite elaboration and clarification
4. Remember that you are an explorer whose objective is to learn all you can about the participant’s story.
5. Take the opportunity to ask questions that you are truly curious about.
6. Resist the temptation to interpret the story, or agree or disagree with the participant.
7. Avoid sharing similar experiences.
8. Use reflective questions and empathy when appropriate.

From *The Thin Book of Appreciative Inquiry* (Hammond, 2013, p.77)

· Describe a time in your school that you consider a highpoint experience, a time when you were most engaged and felt alive and vibrant.

· Without being humble, tell me what it is that you most value about yourself, your work, and your school.

· What are the core factors that give life to your school when it is at its best?

· Describe your three concrete wishes for the future of this organization?

Some clarifying questions:

· What makes that important/positive?
· How did you feel?
· How did that impact you?
· Tell me more about that.
Appendix D: Recruitment E-mail

Dear Participant:

I am inviting you to participate in a study about the impact of mindfulness practices on teacher burnout. Your Assistant Head of School has provided authorization for you to participate in this study.

Participants will be asked to participate in an eight-week online mindfulness intervention. All classes will be synchronous and take place in a virtual group setting. The intervention consists of eight weekly 90 minute session and a half-day retreat. Your participation will include semi-structured interviews, taking questionnaires, participating in the intervention, and completing weekly reflection journals. Participation in this study is voluntary and you may withdraw your consent at any time by contacting the student researcher. Data will be reported in aggregate form. Information identifying participants will not be reported in the results.

A summary of the study results will be available upon request. If you have any questions regarding the nature of the study or research procedures, please contact Nicole Campbell, Researcher, nc625417@wcupa.edu, 484-947-6815.

Please respond no later than September 16th if you are interested in participating in this study.

Thank you for your time and consideration,

Nicole Campbell
Director of Instrumental Music, 12th Grade Level Chair
Doctoral Candidate, West Chester University
NCampbell@gocfs.net
484-947-6815
Appendix E: MBI-ES

Appendix 3: Review Copy: MBI for Educators Survey

MBI for Educators Survey

Christina Maslach, Susan E. Jackson & Richard L. Schwab

The purpose of this survey is to discover how educators view their job and the people with whom they work closely.

Instructions: On the following pages are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write the number "0" (zero) in the space before the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

<table>
<thead>
<tr>
<th>How often:</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>A few times a year or less</td>
<td>Once a month or less</td>
<td>A few times a month</td>
<td>Once a week</td>
<td>A few times a week</td>
<td>Every day</td>
</tr>
</tbody>
</table>

Example:

<table>
<thead>
<tr>
<th>How often</th>
<th>Statement:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-6</td>
<td>1. I feel depressed at work.</td>
</tr>
</tbody>
</table>

If you never feel depressed at work, you would write the number "0" (zero) under the heading "How often." If you rarely feel depressed at work (a few times a year or less), you would write the number "1." If your feelings of depression are fairly frequent (a few times a week but not daily), you would write the number "5."
### Review Copy: MBI for Educators Survey

<table>
<thead>
<tr>
<th>How often:</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A few times a year or less</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once a month or less</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A few times a month</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once a week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A few times a week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### How often 0-6

**Statements:**

1. _______ I feel emotionally drained from my work.
2. _______ I feel used up at the end of the workday.
3. _______ I feel fatigued when I get up in the morning and have to face another day on the job.
4. _______ I can easily understand how my students feel about things.
5. _______ I feel I treat some students as if they were impersonal objects.
6. _______ Working with people all day is really a strain for me.
7. _______ I deal very effectively with the problems of my students.
8. _______ I feel burned out from my work.
9. _______ I feel I'm positively influencing other people's lives through my work.
10. _______ I've become more callous toward people since I took this job.
11. _______ I worry that this job is hardening me emotionally.
12. _______ I feel very energetic.
13. _______ I feel frustrated by my job.
14. _______ I feel I'm working too hard on my job.
15. _______ I don't really care what happens to some students.
16. _______ Working with people directly puts too much stress on me.
17. _______ I can easily create a relaxed atmosphere with my students.
18. _______ I feel exhilarated after working closely with my students.
19. _______ I have accomplished many worthwhile things in this job.
20. _______ I feel like I'm at the end of my rope.
21. _______ In my work, I deal with emotional problems very calmly.
22. _______ I feel students blame me for some of their problems.

(Administrative use only)

EE Total score: _______  
DP Total score: _______  
PA Total score: _______

EE Average score: _______  
DP Average score: _______  
PA Average score: _______  

MBI-Educators Survey – MBI-ES: Copyright © 1986 Christina Maslach, Susan E. Jackson & Richard L. Schwab. All rights reserved in all media. Published by Mind Garden, Inc. www.mindgarden.com.
Appendix F: FFMQ

Five Facet Mindfulness Questionnaire

Description: This instrument is based on a factor analytic study of five independently developed mindfulness questionnaires. The analysis yielded five factors that appear to represent elements of mindfulness as it is currently conceptualized. The five facets are observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience. More information is available in:

Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

<table>
<thead>
<tr>
<th></th>
<th>1: never or very rarely true</th>
<th>2: rarely true</th>
<th>3: sometimes true</th>
<th>4: often true</th>
<th>5: very often or always true</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>When I’m walking, I deliberately notice the sensations of my body moving.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I’m good at finding words to describe my feelings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I criticize myself for having irrational or inappropriate emotions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I perceive my feelings and emotions without having to react to them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>When I do things, my mind wanders off and I’m easily distracted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>When I take a shower or bath, I stay alert to the sensations of water on my body.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I can easily put my beliefs, opinions, and expectations into words.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I don’t pay attention to what I’m doing because I’m daydreaming, worrying, or otherwise distracted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I watch my feelings without getting lost in them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>I tell myself I shouldn’t be feeling the way I’m feeling.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>It’s hard for me to find the words to describe what I’m thinking.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>I am easily distracted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14. I believe some of my thoughts are abnormal or bad and I shouldn’t think that way.
15. I pay attention to sensations, such as the wind in my hair or sun on my face.
16. I have trouble thinking of the right words to express how I feel about things.
17. I make judgments about whether my thoughts are good or bad.
18. I find it difficult to stay focused on what’s happening in the present.
19. When I have distressing thoughts or images, I “step back” and am aware of the thought or image without getting taken over by it.
20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
21. In difficult situations, I can pause without immediately reacting.
22. When I have a sensation in my body, it’s difficult for me to describe it because I can’t find the right words.
23. It seems I am “running on automatic” without much awareness of what I’m doing.
24. When I have distressing thoughts or images, I feel calm soon after.
25. I tell myself that I shouldn’t be thinking the way I’m thinking.
26. I notice the smells and aromas of things.
27. Even when I’m feeling terribly upset, I can find a way to put it into words.
28. I rush through activities without being really attentive to them.
29. When I have distressing thoughts or images I am able just to notice them without reacting.
30. I think some of my emotions are bad or inappropriate and I shouldn’t feel them.
31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.
32. My natural tendency is to put my experiences into words.
33. When I have distressing thoughts or images, I just notice them and let them go.

34. I do jobs or tasks automatically without being aware of what I’m doing.

35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.

36. I pay attention to how my emotions affect my thoughts and behavior.

37. I can usually describe how I feel at the moment in considerable detail.

38. I find myself doing things without paying attention.

39. I disapprove of myself when I have irrational ideas.
Appendix G: PANAS

The PANAS

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent [INSERT APPROPRIATE TIME INSTRUCTIONS HERE]. Use the following scale to record your answers.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>very slightly</td>
<td>a little</td>
<td>moderately</td>
<td>quite a bit</td>
<td>extremely</td>
</tr>
<tr>
<td>or not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

____ interested
____ distressed
____ excited
____ upset
____ strong
____ guilty
____ scared
____ hostile
____ enthusiastic
____ proud
____ irritable
____ alert
____ ashamed
____ inspired
____ nervous
____ determined
____ attentive
____ jittery
____ active
____ afraid

We have used PANAS with the following time instructions:

Moment  (you feel this way right now, that is, at the present moment)
Today (you have felt this way today)
Past few days (you have felt this way during the past few days)
Week (you have felt this way during the past week)
Past few weeks (you have felt this way during the past few weeks)
Year (you have felt this way during the past year)
General (you generally feel this way, that is, how you feel on the average)
## Appendix H: PANAS Permission

**Letter of Permission to Utilize PANAS**

### REQUEST FOR EXISTING TRANSLATIONS

<table>
<thead>
<tr>
<th><strong>1. Date of the request:</strong></th>
<th>10/5/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. References:</strong></td>
<td>MRT’s reference: 306708</td>
</tr>
<tr>
<td></td>
<td>User’s study reference/ protocol number (if any): REF</td>
</tr>
<tr>
<td><strong>3. User:</strong></td>
<td>User Name (hereinafter referred to as &quot;User&quot;): Nicole Campbell</td>
</tr>
<tr>
<td></td>
<td>Legal form: Individual or company’s legal form</td>
</tr>
<tr>
<td></td>
<td>Address: 127 Locust Ln. Exton, PA 19341</td>
</tr>
<tr>
<td></td>
<td>Country: United States of America</td>
</tr>
<tr>
<td></td>
<td>Name of the contact in charge of this request: Nicole Campbell</td>
</tr>
<tr>
<td></td>
<td>Telephone number: 484-947-6815 Fax number:</td>
</tr>
<tr>
<td></td>
<td>Email address: <a href="mailto:nc625417@wcupa.edu">nc625417@wcupa.edu</a></td>
</tr>
<tr>
<td></td>
<td>Billing address: 127 Locust Ln. Exton, PA 19341</td>
</tr>
<tr>
<td></td>
<td>VAT number (if applicable):</td>
</tr>
<tr>
<td></td>
<td>Addressee:</td>
</tr>
<tr>
<td></td>
<td>PO number or internal reference (if applicable):</td>
</tr>
<tr>
<td><strong>4. Provider:</strong></td>
<td>Mapi Research Trust (hereinafter referred to as &quot;MRT&quot;)</td>
</tr>
<tr>
<td></td>
<td>PROVIDE™ 27 rue de la Vilette 69003 Lyon France</td>
</tr>
<tr>
<td></td>
<td>Telephone: +33 (0)4 72 13 66 66</td>
</tr>
<tr>
<td><strong>5. Questionnaire needed:</strong></td>
<td>PANAS - Positive and Negative Affect Schedule (hereinafter referred to as &quot;the Questionnaire&quot; or &quot;the PANAS&quot;)</td>
</tr>
<tr>
<td><strong>7. Service:</strong></td>
<td>Delivery of translations</td>
</tr>
<tr>
<td><strong>8. Language version(s) of the Questionnaire needed:</strong></td>
<td>French</td>
</tr>
<tr>
<td></td>
<td>German</td>
</tr>
<tr>
<td></td>
<td>Swedish</td>
</tr>
</tbody>
</table>

Translations of the Questionnaire may not have undergone the full linguistic validation process and may require further linguistic validation steps (hereinafter, "Further Linguistic Validation Steps") to be suitable for use in a study. The status of each translation should be verified by
<table>
<thead>
<tr>
<th>9. Copyright ownership and conditions of use of the Questionnaire:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Copyright ownership:</td>
</tr>
<tr>
<td>The copyright on the Questionnaire and all its derivatives,</td>
</tr>
<tr>
<td>including but not limited to translations of the Questionnaire,</td>
</tr>
<tr>
<td>is held by the American Psychological Association.</td>
</tr>
<tr>
<td>b. Conditions of use:</td>
</tr>
<tr>
<td>MRT is authorized by the American Psychological Association</td>
</tr>
<tr>
<td>to provide User with existing translations of the Questionnaire</td>
</tr>
<tr>
<td>previously produced by Mapi SAS Language Services (hereinafter,</td>
</tr>
<tr>
<td>&quot;Mapi LS&quot;), the Mapi Group business unit performing linguistic</td>
</tr>
<tr>
<td>validation of Clinical Outcome Assessment questionnaires and</td>
</tr>
<tr>
<td>providing certification of these translations.</td>
</tr>
<tr>
<td>The Questionnaire and/or its translations can be used without</td>
</tr>
<tr>
<td>specific permission from the American Psychological Association</td>
</tr>
<tr>
<td>in case of publication, User shall acknowledge the source</td>
</tr>
<tr>
<td>bibliographic reference and the American Psychological</td>
</tr>
<tr>
<td>Association's copyright notice.</td>
</tr>
<tr>
<td>User is not allowed to sell or modify the translation(s) of</td>
</tr>
<tr>
<td>the Questionnaire provided by MRT or its (their) upgraded</td>
</tr>
<tr>
<td>version(s), in full or in part.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. Disclaimer:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Translations produced by Mapi LS are provided in good faith</td>
</tr>
<tr>
<td>by MRT and are correct to the best of our knowledge. MRT</td>
</tr>
<tr>
<td>may not be held liable for the content of the Questionnaire</td>
</tr>
<tr>
<td>and its translations and makes no warranties or</td>
</tr>
<tr>
<td>representations regarding the accuracy or completeness of</td>
</tr>
<tr>
<td>the translations. MRT disclaims any and all warranties,</td>
</tr>
<tr>
<td>whether expressed or implied, including (without limitation)</td>
</tr>
<tr>
<td>any implied warranties of merchantability or fitness of the</td>
</tr>
<tr>
<td>translations for a particular purpose. In no event shall</td>
</tr>
<tr>
<td>MRT be liable for any indirect, special, incidental, or</td>
</tr>
<tr>
<td>consequential damages arising out of any use of any</td>
</tr>
<tr>
<td>translations obtained from MRT. It is the User's responsibility to inspect and to check the material provided by MRT in order to satisfy him/her self as to the suitability of the material to the particular purpose.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. Mapi Research Trust's Distribution fees:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution fees are administrative fees requested to</td>
</tr>
<tr>
<td>cover the time spent by our team to provide the translations.</td>
</tr>
<tr>
<td>These are not royalty or copyright fees.</td>
</tr>
<tr>
<td>Please select appropriate category:</td>
</tr>
<tr>
<td>☐ Commercial users (Industry, CRO, any for-profit companies):</td>
</tr>
<tr>
<td>750 Euros excluding VAT per available translation</td>
</tr>
<tr>
<td>☐ Funded Academic users (Projects receiving funding from</td>
</tr>
<tr>
<td>commerce, government, EU or registered charity):</td>
</tr>
<tr>
<td>150 Euros excluding VAT per available translation</td>
</tr>
<tr>
<td>☒ Non-Profit Research Users (Projects not explicitly funded,</td>
</tr>
<tr>
<td>but funding comes from overall departmental funds or from</td>
</tr>
<tr>
<td>the University or individual funds):</td>
</tr>
<tr>
<td>free</td>
</tr>
<tr>
<td>Total amount: [Free] Euros</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12. Payment Schedule and Terms of Payment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The User may pay the price by bank transfer, cheque or</td>
</tr>
<tr>
<td>bank card. The User undertakes to pay the amounts due within</td>
</tr>
<tr>
<td>a period of thirty (30) days from the date of the invoice.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>13. Timeline:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Questionnaire and/or the translations along with</td>
</tr>
<tr>
<td>certificates will be provided upon receipt of the payment</td>
</tr>
<tr>
<td>by MRT.</td>
</tr>
</tbody>
</table>

Agreed and accepted at the date of execution hereof by:

**User:** Nicole Campbell
**Name:** Nicole Campbell
**Date:** 10/5/2020

CONFIDENTIAL
Appendix I: Letter of Permission to Utilize MBI-ES

For use by Nicole Campbell only. Received from Mind Garden, Inc. on September 24, 2020

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:


The three sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument form may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Citation of the instrument must include the applicable copyright statement listed below. Sample Items:

**MBI - Human Services Survey - MBI-HSS:**
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don’t really care what happens to some recipients.

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**MBI - Human Services Survey for Medical Personnel - MBI-HSS (MP):**
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don’t really care what happens to some patients.

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**MBI - Educators Survey - MBI-ES:**
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don’t really care what happens to some students.

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Cont’d on next page
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MBI - General Survey - MBI-GS:
I feel emotionally drained from my work.
In my opinion, I am good at my job.
I doubt the significance of my work.

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MBI - General Survey for Students - MBI-GS (S):
I feel emotionally drained by my studies.
In my opinion, I am a good student.
I doubt the significance of my studies.

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Sincerely,

[Signature]

Robert Most
Mind Garden, Inc.
www.mindgarden.com
Appendix J: Letter of Permission to Utilize FFMQ

2/17/2021

Mail - Campbell, Nicole L - Outlook

Re: Permission to use FFMQ

Baer, Ruth A. <rbaer@email.uky.edu>
Fri 9/25/2020 4:11 AM
To: Campbell, Nicole L <NC625417@wcupa.edu>
Hello Nicole,

You're welcome to use the FFMQ. Best of luck with your project.

Ruth Baer

On Sep 18, 2020, at 3:20 PM, Campbell, Nicole L <NC625417@wcupa.edu> wrote:

CAUTION: External Sender

Hi Dr. Baer,

I tried to contact you via your website but it kept reporting a captcha error message. I would like to use the FFMQ in my EdD dissertation and I just wanted to know if I needed any certain permissions to use it in my study.

Thank you so much for your time,

Nicole Campbell
West Chester University of Pennsylvania- Ed.D Candidate
c625417@wcupa.edu