A MOVE TOWARD MINDFULNESS: A STUDY OF MINDFULNESS PRACTICES IN REGULAR EDUCATION CLASSROOMS K-12

Michelle W. Kramer

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A MOVE TOWARD MINDFULNESS: A STUDY OF MINDFULNESS PRACTICES IN
REGULAR EDUCATION CLASSROOMS K-12

A DISSERTATION SUBMITTED TO THE FACULTY OF THE SCHOOL OF EDUCATION
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Michelle Williams Kramer

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A Move Toward Mindfulness: A Study of Mindfulness Practices in
Regular Education Classrooms K-12

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March 13, 2020

Final Approval Date
ABSTRACT

Spirituality practices like meditation, mindfulness, and movement (i.e., yoga) have become widely used and researched in the last 20 years among adults in both clinical and nonclinical settings (Bohlmeijer, Prenger, Taal, & Cuijpers, 2010; Burke, 2010; Ludwig & Kabat-Zinn, 2008). More recently practitioners have used them increasingly with young people in clinical settings (Biegel, Brown, Shapiro, & Schuber, 2009; Burke, 2010; Roberts, Roberts, & Chan, 2008; Thompson & Gauntlett-Gilbert, 2008). But at this time, few studies demonstrate how teachers incorporate these practices in K-12 schools, particularly within the regular education classroom (Goldstein, 2010).

The purpose of this grounded theory case study was to identify and analyze how teachers and school staff in Minnesota schools implement mindfulness programs with K-12 students in traditional classroom settings and the impact these practices have on students’ behavior, mental health, and performance as described by study participants. This study utilized qualitative data collection under a constructivist-interpretivist paradigm and investigated six schools. The study consisted of 13 interviews with administrators, teachers, and support staff in K-12 settings in addition to classroom observations and a review of mindfulness curriculum. Primary findings reflected three phases of implementation: initiation, the implementation process, and the impact felt by students and schools. Specific findings included the influence of administration and teacher leaders, obstacles faced by stakeholders, the influence of gateway programs, and the motivation for and impact of implementation of mindfulness practices. This study led to the development of a mindfulness implementation model for K-12 students stemming from Fowler and Dell’s (2006) stages of faith development. The phases of the mindfulness implementation model include establishing a safe environment, play, calm and control, and quiet. Results of the
study indicate a need to educate the public in the nature of spirituality versus religion and continued K-12 studies that explore long-term levels of impact.

*Keywords:* mindfulness, spirituality, yoga, self-regulation, holistic education, contemplative practice
For those I love most, those who have walked this journey with me.
ACKNOWLEDGEMENTS

I humbly acknowledge the lonely path that sometimes comes with writing but recognize the silent cheerleaders that brought me to this point. I am blessed to have many.

Mom, you have always been an amazing support and one of my biggest fans—from the newspaper clippings to the jars of applesauce. You showed me you were proud of me and that you’d do anything for me. May I grow to have a heart as generous as yours. Dad, you were a wise and faith-filled man and you live on in this story. Thank you for inspiring me to consider the deeper parts of who we are in this writing.

It’s hard for me to ask for help, but Karen, you made it easy—always covering my back, helping with the kids, and often providing a meal. No one deserves two moms, but somehow God knew that I needed two, and we are fortunate to have you.

To the staff of the School of St. Philip, thank you for reminding me that we are a team and you could help me as often as I help you. You ran the race behind the scenes and stepped in when needed. Thank you for being my guinea pigs in the leadership journey.

To my dear sisters, sisters-in-law, nieces—my friends … you traveled the path in spirit, seemingly never tired of listening to me whine or celebrating the milestones. You cared for the kids, brought meals, and reminded me that my load was shared. Know how much I have appreciated your willing ears and hearts.

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CHAPTER ONE: INTRODUCTION

“You have made us for yourself, O Lord, and our heart is restless until it rests in you.”

-Saint Augustine of Hippo

Anxiety. Lack of focus. Obsession with technology. Stress. Trauma. The list of problems young people face today seems limitless (Collishaw, Maughan, Goodman, & Pickles, 2004; Kieling et al., 2011; Patel, Flisher, Hetrick, & McGorry, 2007; Pine, Cohen, Gurley, Brook, & Ma, 1998; Salvi, 2017). Mindful Schools (2019) pointed to four key problem areas faced by children and young people today. These included anxiety, trauma, distraction, and isolation. Kabat-Zinn (2003) suggested that we live in a “society that persists in devaluing the present moment in favor of perpetual distraction, self-absorption, and addiction to a feeling of ‘progress’” (p. 148). He, among others, studied mindfulness from a psychological standpoint. These studies demonstrated the value in mindfulness strategies in terms of developing self-compassion, improved sleep, and improved self-regulation (Barnert, Himelstein, Herbert, Garcia-Romeu, & Chamberlain, 2014; Muris, Meesters, Pierik, & Kock, 2016; Himelstein, Saul, Garcia-Romeu, & Pinedo, 2014). With these benefits evident in other settings, I decided to look specifically at the benefits of mindfulness practice in educational settings. My study reflected the ways that several Minnesota schools chose to use mindfulness strategies to cope with the stressors young people face today.

Saint Augustine of Hippo once wrote, “You have made us for yourself, O Lord, and our heart is restless until it rests in you” (Augustine, S., 2002). Coming from a place of spirituality, I considered the role spirituality (not religion) might play in providing coping mechanisms for young people who demonstrate this idea of restlessness for any number of reasons. I began the study with the intention of examining spirituality but ultimately revised my topic to mindfulness
as schools preferred this terminology. My goal involved exploring what effect mindfulness might have on the lives of students in regular education classrooms. I wanted to uncover the spiritual practices like mindfulness that teachers opted to use, the reasons for doing so, and the impact that they observed. I hoped to uncover possible methods for helping students and teachers deal with life’s hills and valleys and develop grounded theory for mindfulness implementation in educational settings.

As a Catholic school teacher and administrator, religion and spirituality have been my life’s work. Because of its personal impact on my life and on the students in my school, I felt challenged to explore its impact on the wider community. I believed a link existed between spirituality and children’s social and emotional health. I hoped to uncover a theory of mindfulness development and practice with the potential to improve the social and emotional health and well-being of children in K-12 secular educational settings. I hoped to provide teachers with tools to assist them in meeting the deeper needs of their students, even those in secular settings.

Thus, an important distinction must be made between spirituality and religion. Contrary to popular opinion, spirituality is not synonymous with religion. Rather, Schneider (2003) described spirituality as an experience of conscious involvement that is holistic and integrated into one’s entire life with a goal toward self-transcendence. On the other hand, she described religion as a “fundamental life stance” (p. 168) that involves some form of institution (Schneider, 2003). Tolle (2008) described the new form of spirituality as a transformation of consciousness. He said “how ‘spiritual’ you are has nothing to do with what you believe but everything to do with your state of consciousness. This, in turn, determines how you act in the world and interact
with others” (pp. 18-19). Thus, while religion focuses largely on the beliefs, rituals, and community aspects, spirituality lacks these confines.

The transformation of consciousness described by Tolle (2008) reflects spirituality as a deeply personal experience or transformation. In understanding oneself, spirituality suggests a deeper connection exists within the wider world that may be fostered and developed. I believe in any area of society, particularly in education, individuals need to develop personally, while understanding the role they play in the larger unit. Holistic education theory acknowledges this deeper element of the human person and suggests a need for further development of holistic programing for children. A study of mindfulness presented one avenue for exploration of the spiritual nature of children and the ways that the spiritual needs might be addressed. I aimed to assess the level of efficacy of the programs currently in use and their ability to help students cope with their many social-emotional needs. Others in the field of education share my interest in spiritual and mindfulness practices. In the next section I describe the impact of mindfulness practices they found in previous studies.

**Significance of the Research**

There is growing evidence that spirituality is an essential human dynamic that needs to be honored and fostered. In their work in *How God Changes Your Brain*, Newberg and Waldman (2010) claimed “Every human brain, from early childhood on, contemplates the possibility that spiritual realms exist” (p. 5). United States (US) public institutions have long believed in separation of Church and State and removed all religious practices from schools. But in my years in education I posed the question, “Is there a place for spirituality—not religion—in schools today?” Newberg and Waldman (2010) found spiritual practices led to enhanced neural functioning and improved health. They found that contemplative practice, because it
strengthened a specific neurological circuit, grew feelings of peacefulness, social awareness, and compassion.

These feelings of calm and self-awareness appear to be a growing need among young people today (Saluja et al., 2004). Saluja et al. (2004) studied nearly 10,000 students in grades 6, 8, and 10 and found that 18% of youth reported symptoms of depression with even higher percentages for females (25%), American Indian youth (29%), and Hispanic youth (22%). They also explored the connection between bullying and substance abuse and found much higher rates of depressive symptoms in these cases than with other youth. Other studies found similar alarming statistics of the state of adolescent mental health in recent years (Collishaw et al., 2004; Kieling et al., 2011; Patel et al., 2007; Pine et al., 1998; Salvi, 2017). One attempt to cope with these concerns about adolescent mental health has been the use of spirituality practices which includes different forms of mindfulness like meditation or yoga.

Kottler and Carlson (2007) went so far as to say that “the single most pervasive psychological trouble of our time . . . is spiritual distress” (p. 2). They identified anxiety and depression as just some of the observable implications of this distress. Kabat-Zinn (1994) paved the way for creating secular practices through his work with mindfulness and development of mindfulness-based stress reduction (MBSR). In clinical studies, Kabat-Zinn explored the gamut of treatment forms, from chronic pain (Kabat-Zinn, Lipworth, Burney, & Sellers, 1986), to anxiety (Kabat-Zinn et al., 1992), to skin conditions (Kabat-Zinn et al., 1998) through use of mindfulness techniques. These, and other spirituality practices, gradually have become secularized and used in mainstream school settings with some success (Bluth & Blanton, 2014; Harpin, Rossi, Kim, & Swanson, 2016; Lawlor, 2014; Nidich et al., 2011; Semple, Droutman, & Reid, 2017).
Problem Statement

I began this study with the contention that a connection existed between the spiritual distress of young people today and their growing mental health needs. I saw the ways that students today struggled with stress and anxiety and I wanted to understand if mindfulness would provide a coping strategy. Mindfulness had been used in clinical settings but had been studied only minimally in the regular education setting, and this study attempted to fill that knowledge gap. The study explored the types of mindfulness practices and strategies schools chose to implement, their reasons for doing so, and then analyzed which practices demonstrated the greatest positive effect on students’ social and emotional health and ability to learn. Studies of children with mental health needs present a growing body, and as an educator, I sought to better understand the issues young people face and explore the strategies some teachers and schools chose to use to help students cope. This research then allowed me to inform and assist other teachers in establishing mindfulness practices in their school settings through grounded theory development.

Purpose of the Study

Using grounded theory and case study methodologies, I explored teachers, school social workers, and other educational professionals in the public sector who used mindfulness practices in their work. These practices took a variety of forms, some formal and some informal, some in a single classrooms and some in school-wide efforts, some using established curricula and some using YouTube. I sought a deeper understanding of what practices were possible and worthwhile. I wanted to capture the body of techniques that have proven to be effective for helping students, both those with mental health needs and those who simply faced the normal stressors of life. I hoped to look for patterns of development and implementation which could
ultimately lead to the development of a theory of effective mindfulness practice in K-12 settings. Furthermore, I hoped to assist schools interested in developing a school-wide mindfulness practice by making recommendations on how mindfulness might be implemented at different developmental levels.

**Reflexive Statement**

I have always felt connected to the spiritual. I was born number nine in a family of twelve, raised in a traditional Catholic home, and enrolled in Catholic schools in first grade through twelfth grade. I attended a Catholic college founded by Benedictine sisters for my undergraduate work and then began teaching in a Catholic middle school. After one year of teaching, I began my graduate work at another Lasallian Catholic college. During my studies I moved to a fifth-grade classroom at the same mid-sized Catholic school. After five years of teaching, I married and moved to another Catholic elementary school in central Minnesota where I taught for three years. My husband and I had five children over the next six years, and I took a hiatus from the classroom. When our children reached kindergarten age, we enrolled them in the nearest Catholic school, and after a few years, the principal there retired, and I accepted the administrative position where I currently serve. Now as a doctoral student with the University of St. Thomas, I continue formation with still another Catholic institution. With this kind of background, how does a researcher avoid bias?

First, we must distinguish between religion and spirituality. Szerszynski, as noted in Uhlik’s (2009) work, clarified the differences between religion and spirituality stating, “Spirituality is experienced individually while religion is expressed collectively; spirituality is individualized and customized while religion is structured and formalized; spirituality is discovered while religion is taught; spirituality is transcendent while religion is mediated” (as
Table one outlines these differences. This exploration of the forms of spirituality practiced in secular education requires a careful distinction between religion and spirituality. I found that in public schools the term “spirituality” was too often confused with religion, though the people who used mindfulness recognized the unique differences. Use of secular terminology became a significant element in my learning. Schools used varied terminology to identify forms of spirituality in secular settings, but the practices appeared similar. The practices called for adults and students alike to experience silence and clear the mind.

Table 1

*Spirituality vs. Religion*

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<tr>
<td>experienced individually</td>
<td>expressed collectively</td>
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<tr>
<td>individualized and customized</td>
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*Note.* Based on Szerszynski (see Uhlik, 2009), this table distinguishes the fundamentals differences between spirituality and religion.

Although my experience fell in the category of religion, this study examined spirituality. It consisted of an examination of the spirituality practices in the secular world and aimed not to prove something relating to religion, but rather to determine theory of efficacy based on the observed techniques in use in secular education settings today. Schools have begun incorporating
spiritual practices like meditation, mindfulness, and even just periods of quiet or centering. I aim to study why this was the case—what schools chose to incorporate, why and how they did so, and what they found to be the impact on their students, staff, and school culture.

I included the study of psychology and social and emotional health as important aspects of this study in the ways students demonstrated a need for mindfulness and the link to health school personnel described. In my own personal experience, I have found that incorporating spiritual practices provided a hopeful foundation in the face of challenges, a peace with the here and now, and a method of coping with whatever comes my way. This personal experience led me to wonder, is there a psychological reason that use of spirituality practices manages these effects?

I recognized at the outset that my background and beliefs about the impact of spirituality could potentially affect the way I interpret findings in this study. Therefore, I took measures to ensure that I separated personal assumptions from professional dialogue. My study and background required me to step out of the private, Catholic sector and instead observe in a straightforward way the strategies that teachers and school personnel of public schools incorporated into their school day. With the help of my study chair, I examined qualitative data and looked for correlations. According to Charmaz (2006), grounded theorists begin by studying contributors to the phenomenon, collect data surrounding the phenomenon, and analyze it to develop a theory. Following the procedure of studying secular environments allowed me to separate my own background from this research study. Furthermore, I use terminology that reflected the secular environment and looked at the social and emotional educational opportunities that schools incorporated.
**Research Questions**

The focus of my research study included two primary questions:

1. How do K-12 teachers and professional staff implement mindfulness techniques to facilitate learning and promote social-emotional health and wellness in their students?

2. What, if any, impact does this implementation have on school climate, students, and staff as identified by school personnel?

I studied the practices that were used, the rationale behind implementation, and the efficacy and recommendations demonstrated by school-based assessments and documentation.
Definition of Terms

I adopted the following terms in this study:

Cognitive Anxiety: “anxiety in the form of negative cognitions, such as fear of losing of control and fear that the worst will happen, rather than physical symptoms…” (Jennings & Jennings, 2013, p. 24).

Group Anxiety: anxiety that has to do with being in groups which may be measured with the Interpersonal Anxiousness Scale (Jennings & Jennings 2013).

Intentional attention: “the self-regulation of attention” (Burke 2010, p. 9).

Kundalini energy: “the part of divine that is within each individual” (Agarwal, & Dixit, 2017, p. 60).

Metastrategic knowledge: knowing about how to know and understanding the choice of coping skills available (Broderick & Frank, 2014).

Mindfulness: an awareness that comes from purposefully paying attention without judgment (Kabat-Zinn, 1994).

Radical acceptance: empowering people to allow all thoughts, dysfunctional or otherwise, to be present in the moment without judgment (Jennings & Apsche 2014). The goal is acceptance of one’s self and personal situation along with past actions and experiences, including abuse.

Religion: a formal expression of spiritual beliefs that is practiced within a group (Uhlik, 2009).

Rumination: an involuntary response to stress where people internalize problems which is linked to depression and anxiety (Mendelson et al., 2010).

Self-compassion: a component of Learning to BREATHE (L2B) mindfulness training where students are encouraged to “just be” amid the fast-paced world in which they live
(Broderick & Frank, 2014). It challenges them to accept where they are without needing to change or fix the situation.

Spirituality: a transformation of consciousness which influences the way one interacts with the world (Tolle, 2008).

Spirituality practices: use of mindfulness, meditation, or movement processes to reach a higher form of consciousness.

Yoga: a mindfulness approach that uses a series of poses and stretches to help focus on the breath (Mendelson et al., 2010). This program combines physical activity with mindfulness.

**Conclusion**

This grounded theory case study sought to address the growing social-emotional needs of young people today. Teachers and school districts have begun implementing mindfulness programs aimed to help meet these growing needs. This study sought to explore the types of programs schools use and their reasons for doing so. Today there exists little research of the application of mindfulness strategies in the K-12 regular education setting, so this study aimed to add to the body of knowledge for the field of education.

In the chapters that follow, I detail my research journey. Chapter two details current research in the area of spirituality practices including mindfulness, meditation, and movement. I examine the movement of mindfulness practices from clinical to educational settings and consider how that transition relates to this study. In chapter three, I describe in detail my research process. I enlisted grounded theory and case study methodologies with a constructivist-interpretivist paradigm to better understand the K-12 mindfulness programs currently in use. Chapter four outlines the findings of this study and details the key areas of initiation,
implementation, and impact that participants addressed and demonstrated during observations.

Finally, chapter five applies holistic learning theory, leader member exchange theory, and spiritual and faith development theory to the findings in this study. I now move to chapter two with the review of current literature.
CHAPTER TWO: REVIEW OF LITERATURE

Introduction/Background

Based on the growing mental health concerns for students in schools and my own personal fascination with spirituality, I felt very interested in my review of research studies involving the use of mindfulness practices with school-aged children. This study explored the spirituality practices implemented in K-12 schools in Minnesota. The preliminary review of literature indicated that the predominant forms of spirituality implemented in public schools today include mindfulness (Britton et al., 2010; Broderick & Frank, 2014; Goldstein, 2010; Titone, Feldman, & DeRosato, 2017), meditation (Agarwal & Dixit, 2017; Meppelink, de Bruin, & Bogels, 2016), and different forms of movement including yoga and Tai chi (Bergen-Cico, Razza, & Timmins, 2015; Hagan & Nayar, 2014; Khalsa, Hickey-Schultz, Cohen, Steiner, & Cope, 2012). These practices are all secular (not associated with formal religion) in nature and have been applied in clinical and educational settings with numerous populations and age groups.

Initially using the term “spirituality,” the varied practices associated with the term made for a broad search. I adopted the following search terms: spirituality practices, meditation, mindfulness, and adolescents. After reading 30 articles, I sought out more information using yoga, tai chi, and mindful movement as search terms. I later expanded the search to include studies more specifically focused on K-12 schools and mindfulness programming. Using these terms, I selected literature from the Academic Search Premier, ERIC, and Education Full Text databases and reviewed 60 articles. I found scholarly studies focused on the “stressors” and “demands” experienced by students today and/or the types of spiritual practices used in educational or clinical settings. I organized my findings into three primary categories, including (1) common spirituality practices; (2) spirituality practices aimed to improve health and wellness
of specific populations, particularly adolescents; and (3) the efficacy of spiritual practices and educational and programmatic goals.

I organized the review by starting with a history and discussion of some of the most common spiritual practices used, including mindfulness, with a special focus on the work of Jon Kabat-Zinn (Kabat-Zinn, 1994; Kabat-Zinn, 2001; Barnert et al., 2014; Tatalie & Mhaske, 2017), meditation methods (Agarwal & Dixit, 2017; Shapiro & Walsh, 2003), and movement practices like yoga (Bergen-Cico et al., 2015; Khalsa et al., 2012). Then I described specific populations involved with spiritual practices. These included incarcerated substance abusers (Barnert et al., 2014), youth facing homelessness (Viafora, Mathiesen, & Unsworth, 2015), academically at-risk youth (Nidich et al., 2011), and young people diagnosed with attention problems (Meppelink et al., 2016; Van Vliet et al., 2017). Finally, I included examples of program efficacy, such as increased self-compassion (Muris et al., 2016), improved sleep (Britton et al., 2010, Himelstein et al., 2014; Wisner & Starzec, 2016), and greater self-regulation (Barnert et al., 2014). I begin with an examination of the most common spirituality practices used with young people today.

**Common Spirituality Practices**

**Mindfulness**

What triggers your heart to race, your blood pressure and stress levels to rise, and your emotions to take over? What strategies help you cope with these situations and feelings? Spirituality practices have been used for centuries in formal religions, both Christian and non-Christians (Williams, 2018). Mindfulness is one such religious practice now gaining popularity as a secular form of awareness and self-acceptance (Saunders, 2015). Originally derived from Buddhist contemplative practice, mindfulness is now taught in a secular format through
mindfulness-based stress reduction (MBSR; Kabat-Zinn, 2001), and other similar programs (Talathe & Mhaske, 2017; Barnert et al., 2014). Kabat-Zinn (1994) distinguished mindfulness as a religious and spiritual practice and described the benefits:

[Mindfulness] has nothing to do with Buddhism per se or with becoming a Buddhist, but it has everything to do with waking up and living in harmony with oneself and with the world. It has to do with examining who we are, with questioning our view of the world and our place in it, and with cultivating some appreciation for the fullness of each moment we are alive. Most of all, it has to do with being in touch. (p. 3)

While a religious connotation exists around the practice of mindfulness, Kabat-Zinn intended his programming otherwise. Kabat-Zinn (1994), perhaps the most notable explorer of our generation in mindfulness study and practice, removed the religiosity of mindfulness practice and defined it as “paying attention on purpose, in the present moment, and nonjudgmentally” (p. 4).

Others followed in Kabat-Zinn’s footsteps. Víafora et al. (2015) defined mindfulness as simply paying attention to one’s feelings both inside and outside of oneself. Bluth and Blanton (2014) said mindfulness was “paying attention in the moment in an intentional and purposeful way” (p. 1298). Whatever the specific definition, mindfulness entails a calm, quiet moment for a group or an individual to focus on the present moment amidst an often-chaotic world. In over three decades of work, Kabat-Zinn explored mindfulness widely and found the techniques to be beneficial in coping with a variety of concerns, including coping with chronic pain (Kabat-Zinn et al., 1986) and anxiety (Kabat-Zinn et al., 1992). While Kabat-Zinn largely explored mindfulness practices with adults, in recent years they have also been adopted for young people (Goldstein, 2010).
According to Broderick and Frank (2014), mindfulness may have the capacity to help young people deal with a far-reaching number of life experiences. Looking at adolescents specifically, they suggested that adolescents learn to draw their attention to all experiences, both positive and negative. Thus, providing young people with “metastrategic” knowledge, defined as understanding the process of knowing or coming to know something, may help youth develop and use coping skills to make choices (Broderick & Frank, 2014). Broderick and Frank used the term metastrategic knowledge to suggest that mindfulness gives youth a way of looking at their lives from a third-person vantage point. This allows a person to see themselves “as if a stranger” and use this capacity to analyze their experiences (Broderick & Frank, 2014). They maintain the capacity to see that life has its ups and downs and thus avoid becoming overly rattled by either of those times.

In the literature, mindfulness as a practice took many forms ranging from those as sophisticated as a thoroughly developed and researched curriculum like MBSR (Kabat-Zinn, 2001) or as simple as the process of taking deep breaths. Common practices appeared across the spectrum of curricula including mindful breathing, walking meditations, guided imagery, and visual concentration (Jennings & Apsche 2014, Jennings & Jennings, 2013). Various studies suggested the merit of mindfulness practice implementation to support mental health.

The positive effects of mindfulness practice included self-regulation and acceptance (Broderick & Frank, 2014; Viafora et al., 2015), improved academic performance, (Broderick & Frank, 2014; Mendelson et al., 2010), and self-compassion (Bluth & Blanton, 2014; Broderick & Frank 2014; Edwards, Adams, Waldo, Hadfield, & Biegel, 2014; Muris et al., 2016; Titone et al., 2017). I next discuss the ways researchers described meditation as a technique for mindful practices.
Meditation

Mindfulness can be described as either a state of being or a process that leads to a state of being (Bluth & Blanton, 2014). Meditation provides one way for a person to achieve a state of mindfulness. As Puff (2013) reported in his overview of meditation, all major religions practice some form of meditation. Some religious rituals have been discovered in wall art dating back to approximately 5,000 to 3,500 B.C. (Puff, 2013). What, then, is meditation and how is it distinguished from mindfulness?

Meditation and mindfulness frequently overlapped in clinical studies (Barnert et al., 2014; Jennings & Jennings, 2013; Meppelink et al., 2016), but they are distinguished in this study because of the unique philosophies and methods of meditation. While mindfulness practices sometimes crept into meditation studies, meditation practices did not always connote mindfulness, as previously described by Kabat-Zinn (1994). Mindfulness was viewed as an overarching framework with meditation serving as a unique method.

According to Shapiro and Walsh (2003), meditation has been practiced for many centuries by various cultures. They found that it had been practiced for at least 3,000 years and represented a foundation for each of the world’s great religions. Like mindfulness, meditation was most often associated with Indian traditions such as yoga and Buddhism but had also been central to Chinese Taoist and Neo-Confucian traditions. Meditation was also a central part of Judaism, Christianity, and Islamic religions, but remained most closely associated with Indian tradition (Shapiro & Walsh, 2003).

Shapiro and Walsh (2003) defined meditation as “a family of practices that train attention and awareness, usually with the aim of fostering psychological and spiritual well-being and maturity” (p. 88). It involved training a person to direct their mental processes in a concerted,
beneficial way. For example, Britton et al. (2010) trained students to focus on three areas: (1) breath awareness, (2) awareness of thoughts, feelings, and sensations, (3) and body sweeps. Students in this pilot study of sixth grade students were asked to practice paying attention in each of these meditative practices which lengthened over time (Britton et al., 2010). In these and other meditative processes, researchers aimed to foster greater concentration, calm, and control over positive emotions such as love and joy (Britton et al., 2010; Shapiro & Walsh, 2003).

Meditation is based on perennial philosophy, which Shapiro and Walsh (2003) defined as “the common core of wisdom and worldview that lies at the heart of each of the great religions,” and is grounded in three assumptions: (1) our usual psychological state is suboptimal and immature, (2) higher states are available, and (3) psychological and spiritual practices may catalyze psychological development to transpersonal states and stages. Meditation is thought by many to be a way of achieving these higher states of being (Shapiro & Walsh, 2003). We can distinguish meditation from mindfulness then because, while mindfulness prompts a focus on the present, meditation moves a person to a higher level of being.

Researchers addressed two primary types of meditation practices: concentration and awareness practices (Shapiro & Walsh, 2003). Concentration practices allowed for focused attention on the breath or a mantra (repetitive sound). Awareness practices allowed one to move their awareness to a variety of objects for exploration. These different strategies had been used by researchers largely to explore self-regulation and stress management. According to Shapiro and Walsh (2003), meditation was originally used as a tool to enhance qualities like compassion, understanding, and wisdom, but these had only been studied minimally.

In recent times, meditation practices have become secularized and a popular part of mainstream society (Ross, 2016). Today, the religious roots of meditation do not preclude
participation for people who consider themselves to be spiritual but not religious. These practices remain open for all, regardless of religiosity or lack thereof. What used to be a religious tradition is now, according to Ross (2016) more “stylish than spiritual” (p. 1).

Shapiro and Walsh (2003) described the impact of meditation conducted through various studies that included improved cognition, attention, and decreased symptoms of anxiety and depression. They found that meditation enhanced physiological, psychological, and transpersonal well-being. I present specific studies exploring meditation practices in the sections that follow. Closely linked with both meditation and mindfulness, is the study of movement. This includes practices such as yoga or tai chi (Khalsa et al., 2012; Telles, 1997).

Movement

Different forms of movement have also been used to impact the social and emotional health of young people. The research presented examples of practices of yoga, Tai Chi, Qigong, and other related models (Bao & Jin, 2015; Bergen-Cico et al., 2015; Fishbein et al., 2016; Hagan & Nayar, 2014; Terjestam, Jouper, & Johansson, 2010). Yoga was by far the most widely used method evidenced in the research pool. Many of the practices described previously in the mindfulness and meditation sections tapped into forms of movement as well, but for the purposes of this study, I deemed a detailed description of the specific movement practices beneficial to the reader. The next section includes a description of yoga practices, the most detailed form of movement practices being used with young people.

Khalsa et al. (2012) described yoga as “a holistic system of multiple mind body practices for mental and physical health that include physical postures and exercises, breathing techniques, deep relaxation practices, cultivation of awareness/mindfulness, and meditation” (p. 81). While yoga has grown in popularity in recent years, it is not a new concept. Telles (1997) called it “an
ancient Indian science and way of life” (p. 67). We have seen a gradual progression of normalizing yoga practices which mirrors that of other spirituality practices such as mindfulness or meditation previously described. While used primarily with adults for many years (Hagan & Nayar, 2014), a growing pool of researchers desired transference of these practices, and the accompanying benefits, to children as well.

Telles (1997), considered a pioneer in the field of yoga practices with young people, served as joint director of research at the Vivekananda Yoga Research Foundation in Bangalore. She reported the results of several studies related to rehabilitation conducted with the research foundation, some of which specifically addressed children. Telles (1997) found improvements in IQ and social adaptations in a school setting and improvements in perceptual ability in a community home for girls. In other studies, yoga demonstrated a positive impact in terms of fatigue and inertia (Khalsa et al., 2012), for coping with substance use (Fishbein et al., 2016), and in developing self-regulation skills (Mendelson et al., 2010). Closely related to mindfulness practices, Hagan and Naya (2014) suggested using yoga training to help children focus inward on their bodies, feelings, and ideas.

Different forms of mindfulness, meditation, and movement have been used to address the specific needs of a given population. In the next section I discuss studies that applied these different spiritual practices as interventions to meet the needs of young people facing exceptional challenges.

**Specific Populations Using Spirituality Practices**

Over time, spirituality practice application spread from use with adult populations to use with adolescents and children (Bluth & Blanton, 2014; Harpin et al. 2016; Himelstein et al., 2014; Mendelson et al., 2010). Several empirical studies were conducted with students labeled
“at-risk” (Barnert et al. 2014; Himelstein et al., 2014; Nidich et al., 2011). I have chosen to include incarcerated youth, academically struggling students (Broderick & Frank, 2014; Harpin et al., 2016), homeless youth (Viafora et al., 2015), and adolescents with attention disorders (Meppelink et al., 2016; Kiani, Hadianfard, & Mitchell, 2017) in this look at-risk populations.

**Incarcerated Youth**

Studies of the use of spirituality practices have been conducted primarily with incarcerated adults (Bowen et al., 2006; Bowen, Witkiewitz, Dillworth, & Marlatt, 2007), but studies conducted with incarcerated youth are becoming more common (Himelstein et al., 2014; Barnert et al., 2014). Himelstein et al. (2014) conducted a study of incarcerated youth to develop a conceptual model of mindfulness instruction for incarcerated young people and to understand the effects of such a program. This pilot grounded theory study used mindfulness training as an intervention for 10 adolescent substance abusers living in a California detention setting. Participants were taught six mindfulness-based exercises over a 10 to 15-week span, using methods including counting the breath, mindfulness of the breath, the body scan, deep breathing, and STIC (stop, take a breath, imagine the consequences, and choose; Himelstein et al., 2014).

Himelstein et al. (2014) put several parameters in place to facilitate mindfulness growth. They encouraged participants to adopt these mindfulness practices on their own in addition to the group training. Two very experienced facilitators led the weekly mindfulness sessions. They conducted mindfulness programming along with other interventions including multidimensional family therapy (MDFT) and multisystemic therapy (MST). Following the intervention with the ten incarcerated youth, researchers conducted interviews with the participants for qualitative data collection (Himelstein et al., 2014).
Himelstein et al. (2014) developed a few important insights in their study of incarcerated youth. First, researchers determined the importance of terminology choices. The term meditation came with many misconceptions and the participants noted that had they understood the terminology better, they would have participated with a more open mind. Meditation initially held a negative connotation for these youth. The second finding concerned the length of meditation practice sessions. Nearly the entire ten people in the study indicated the length of training (five minutes), was enough for them to gain a sense of calm without making them sleepy (Himelstein et al., 2014).

Although not an intent of the intervention, Himelstein et al. (2014) further noted the potential, based on interview data, for reduced recidivism and substance use due to the use of the STIC program. They noted that all participants reported that in some way they felt mindfulness practices could be beneficial to reducing substance use and future recidivism. The STIC process brought more focus to decision-making. Although this involved a small sample size ($n = 10$), the insights gleaned from the adolescent participants suggested the need for further study of this population, particularly because this training provided a low-cost, preventative means of coping with their personal issues (Himelstein et al., 2014).

Barnert et al. (2014) explored a larger sample ($n = 29$) using a mixed methods study including meditation training along with a one-day meditation retreat. The study included 29 incarcerated adolescent males, ages 14-18 years-old, with the goal of assessing whether mindfulness practices might reduce the number of negative behaviors exhibited in a youth detention facility. The program offered a synthesis of mindfulness concepts, including formal and informal meditation activities, emotional growth activities, and team building. Youth volunteers attended a one-day retreat and agreed to take part in a 10-week course. The course
involved a weekly practice of 30 minutes of meditation, followed by 60 minutes of discussion regarding meditation-related concepts introduced to youth (Barnert et al., 2014).

Barnert et al.’s (2014) study demonstrated a minimal level of efficacy in the use of meditative practices with incarcerated youth. Data collected from a review of youth files with behavioral data found no reduction in negative behaviors exhibited by incarcerated youth (Barnert et al., 2014). Results from post-assessment surveys found the only area with statistical significance involved positive effects on self-regulation \( (p = .012) \), although other areas demonstrated psychological enhancement (Barnert et al., 2014). As in the Himelstein et al. (2014) study previously described, researchers developed themes using interview transcripts and focus group discussions. Both studies established enhanced well-being and future mindfulness practice as key themes (Barnert et al., 2014; Himelstein et al., 2014). Barnert et al. (2014) suggested further studies continue, and “that meditation interventions for incarcerated youth are feasible, not harmful, and may provide benefit” (p. 72). I next examine the research surrounding the use of meditation practices to assist students labeled academically at-risk.

**Students Academically At-Risk**

Academics provided another area of concern for some caregivers. Nidich et al. (2011) examined students who were academically at-risk. They conducted a study of 189 middle school students who were below proficiency in English and math according to the California Standards Test (CST). The school intended to implement a transcendental meditation program during which the students practiced meditation in a quiet time program twice each day for three months. The test group was composed of sixth and seventh graders who took part in the transcendental meditation program while non-meditating eighth-grade students represented the control group (Nidich et al., 2011).
Students in the intervention group took part in transcendental meditation which included several steps: (1) Introductory lecture, (2) Preparatory lecture, (3) Short personal interview with the teacher, (4) Personal instruction session with the teacher, and (5) three group meetings to verify correct practice was in place (Nidich et al., 2011). Nidich et al. (2011) explained that “transcendental meditation practice is characterized by decreased activation or arousal of the autonomic nervous system, is reflected in decreased breath rate and lower sympathetic nervous system activity” (p. 558). The meditation practices took place at the start and at the end of each school day and lasted 12 minutes. In addition to the in-school activity, the researchers encouraged, but did not require, students to practice at home (Nidich et al., 2011).

The results of this study provided a hopeful outlook for the inclusion of meditation practices in school settings (Nidich et al, 2011). Using the CAT tests as the assessment measure, the results following the intervention indicated improvement in composite scores in both math and English for the students who participated in the transcendental meditation practice. They found a gain of at least one performance level in math and English. Indeed, 42% of the students in the meditation practice group improved their math score by at least one level while less than half that number (18%) of the students in the control group improved their scores (Nidich et al., 2011). The English scores were slightly less distinct where 26% of the students in the meditating group raised their scores by at least one level while 14% of the non-meditating students raised their scores by one level. Interestingly, the eighth-grade non-meditating students showed a decrease in their scores on the composite scale (Nidich et al., 2011).

Other studies examined the potential benefits of spirituality practices in terms of academic goals (Broderick and Frank, 2014; Harpin et al., 2016). Harpin et al. (2016) studied fourth grade classrooms in a diverse urban school during a 10-week mindfulness program
intervention. Data collection came with notable limitations. Although largely based on teacher perception, teachers reported academic achievement improvements (mean change = -1.33, \( p = 0.00 \)) for the intervention group while the comparison group remained non-significant (Harpin et al., 2016). An important finding indirectly related to academic improvement was the teacher-reported improvements in calmness and more focused behaviors post-training (Harpin et al., 2016).

These studies further suggest the need to explore the effect of spirituality practices on students’ academic lives in greater depth along with collecting more concrete data than that previously collected in the Harpin et al. (2016) study. This study further identified the impact of incorporation of mindfulness techniques outside of school in addition to school-based practice. Students indicated use of anger management techniques outside of the classroom routine through open-ended qualitative data collection methods (Harpin et al., 2016), an area worthy of further study.

**Youth Facing Homelessness**

Homeless youth provide another “at risk” group explored in the literature. According to Viafora et al. (2015), students in this category faced an even greater number of risk factors than their counterparts living in stable homes. In addition to the normal struggles of adolescent development, they also confronted low self-esteem, aggressive behaviors, trouble sleeping, and short attention spans. Grabbe, Nguy, and Higgins (2012) conducted a feasibility study with homeless youth in a shelter. The researchers conducted an eight-week intervention with 71 youth. The study concluded that mindfulness studies provided a feasible option for this population, but they desired a controlled trial design to better examine the long-term impact of this kind of training in the future (Grabbe et al., 2012).
Viafora et al. (2015) studied middle school students facing homelessness in the first school study of its kind using a quasi-experimental design. They sought to evaluate the utility of incorporating an eight-week mindfulness course in a traditional middle school specifically addressing homelessness. Rather than an attempt to prevent homelessness, the researchers suggested using mindfulness as a protective factor due to its hypothesized capacity to alleviate emotional stress associated with anxiety, depression, or anger (Viafora et al., 2015).

Viafora et al. (2015) enlisted the participation of 64 students in two treatment groups in traditional classrooms and one non-equivalent comparison group. Students took part in 45-minute mindfulness training sessions each week with a specific topic providing the focus of the week. These topics included mindful listening, eating, test-taking, and managing challenging emotions.

The results of this intervention were favorable on several accounts (Viafora et al., 2015). The intervention groups reported application of the skills to their daily lives, and the students in the traditional classroom setting reported changes from the pre- and post-assessments particularly in the areas of mindful awareness and acceptance. Furthermore, students in the intervention group recommended the program to their friends (Viafora et al., 2015). These findings suggested that mindfulness programming may help students facing homelessness feel a greater sense of control over themselves given their troubling situation.

**Youth with Attention Disorders**

Students who cope with attention disorders provided a final group of at-risk youth that appeared in the research (Burke, 2010; Kiani et al., 2017; Meppelink et al., 2016; Singh & Singh, 2014). They presented a special category of at-risk youth because of their additional debilitating factors. Those coping with attention deficit disorder (ADD) often faced academic challenges due
to attention problems and at times appeared to be socially inept or anxious (Singh & Singh, 2014). Those with attention deficit hyperactivity disorder (ADHD) had impulsivity and disorganization issues in addition to inattention.

Singh and Singh (2014) studied 33 adolescents manifesting ADD symptoms over a six-month period. Mindfulness teaching sessions included psycho education, mindful breathing and eating, mindfulness of body and movement, etc. with the goal to investigate efficacy of mindfulness practice to enhance attention-concentration. The results of the study held promise. Singh et al. (2014) indicated a 28.52% improvement in attention when comparing final data to baseline assessments (p. 1170). They also noted the neurological process that occurred:

This regular practice of mindful exercises and mindful awareness in daily routine activities strengthen the neural circuit of brain regions involved in regulating attention, concentration, focus and reduces distractibility & restlessness (sic). As hypothesized the adolescents with ADD exposed to mindfulness therapy have significant improvement as compared to baseline measures. Thus, the findings suggest the efficacy of mindfulness therapy in enhancing attentional skills (Singh & Singh, p. 1170).

Singh and Singh’s study thus identified some of the physiological occurrences during mindfulness that added to others who explored students’ attention concerns.

Kiani et al. (2017) explored similar symptoms in their comparative study of executive functions (EF) with a group (n = 30) of adolescent females with ADHD symptoms. Students in the intervention group demonstrated higher inhibition and planning tasks than their counterparts in the post-intervention assessments. This study also found improved emotion dysregulation in these adolescent females (Kiani et al., 2017).
Because a primary focus of mindfulness lies in attention (Kabat-Zinn, 1994), the benefits for students with attention struggles seem obvious. With some parents and families rejecting the idea of medication as a treatment method, it appeared from this study that mindfulness exercises could provide an appealing and effective alternative according to this study. Another study currently in-process is being conducted by Meppelink et al. (2016) and entails a comparison of medication versus meditation. The results of this study with its plans for post-treatment analyses will add greater depth to the body of research.

At-risk youth provide a unique body of needs that may benefit greatly from practicing spirituality exercises such as mindfulness training. These young people face the standard stressors of typical adolescents but with additional stressors due to the nature of their at-risk status. Minimal data has been collected in classrooms thus far and the typical practice uses self-reported measures of efficacy. Continued exploration and quantitative data collection may serve us well to understand the benefits of implementing such practices. In the next section I provide examples of primary areas of efficacy uncovered thus far in the research.

**Indications of Efficacy of Spirituality Practice Training**

In addition to the benefits described in the previous studies, the literature uncovered several key areas of efficacy. For purposes of brevity, the focus here remains on some of the most prevalent benefits including self-compassion (Broderick & Frank, 2014; Meppelink et al. 2016), improved sleep (Britton et al., 2010; Himelstein et al., 2014), and improved self-regulation (Barnert et al., 2014; Broderick & Frank, 2014).

**Self-Compassion**

Broderick and Frank (2014) conducted research on a mindfulness program called Learning to BREATHE (L2B). In several studies, they identified self-compassion as a key
finding. They described self-compassion as a component of mindfulness where instructors encourage students to “just be” amid the fast-paced world in which they live. It challenged them to accept their current circumstances without feeling a desire to change or fix the situation. The L2B program taught five major principles, one of which was a specific study of self-compassion. One study conducted by Broderick and Frank (2014) took place with a group of twelfth grade students who found that when practicing mindfulness in this way, students demonstrated a reduction in negative moods and a greater feeling of calmness and self-acceptance when compared to a control group. They also noted enhanced self-regulation skills.

Edwards et al. (2017) explored mindfulness practices with a group of Latino adolescents. The researchers in this study sought to teach mindfulness skills to Latino youth to determine if these skills would improve mindfulness and self-compassion. They enlisted a quasi-experimental model that included eight weekly 50-minute meetings. They used several mindfulness procedures following Kabat-Zinn’s (1994) model. Students self-reported increased levels of self-compassion (Edwards et al., 2017). This suggested that mindfulness enabled these students to view their challenges with “a more compassionate, balanced perspective, without imposing negative self-criticism” (Edwards et al., 2017, p. 158).

Muris et al. (2016) also explored self-compassion and labeled its three elements: self-kindness, common humanity, and mindfulness. Their study surveyed 132 youth in the Netherlands to determine the connection between self-compassion and symptoms of anxiety and depression in non-clinical settings. This survey model of data collection yielded an indication of higher levels of self-compassion with a lowering of negative symptoms. The self-reported data, while valuable in many respects, also suggested the need for more empirical studies that explore the impact of mindfulness on self-compassion. While further measurements of self-compassion
appear necessary, the preliminary data suggested that the impact indicated merits further study (Muris et al., 2016).

Given the concern about adolescent mental health (Saluja et al., 2004), it appears feasible to give students strategies for taking care of themselves as discussed in this section regarding self-compassion. The studies provided indicate the interventions provided some level of benefit for students. The next section explores the ways that spirituality practices improve sleep and its link to improved mental health.

**Improved Sleep**

Spirituality practices like mindfulness and meditation are now being used to positively impact people with trouble sleeping or those with identified sleep disorders. This review of literature uncovered very few studies where sleep disorders provided the primary focus of the study, but some studies found that the impact of meditation and other such practices on people with preexisting conditions such as attention deficit hyperactivity disorder (ADHD) had a collateral effect on the participants in the improvement of their sleep patterns (Himelstein et al., 2014; Wisner & Starzec, 2016). Although not an intentional part of general studies, the relationship between meditation and improved sleep appeared to exist and warrants further study.

Several studies found correlations between sleep disorders and mental health conditions (Britton et al., 2010; Himelstein et al., 2014; Wisner & Starzec, 2016). Britton et al. (2010) explored the connection between sleep and substance abuse while using mindfulness strategies as a treatment option on an outpatient basis. They developed a six-session program for adolescents who had been through substance abuse treatment yet still struggled with insomnia. Britton and her colleagues combined cognitive-behavioral therapy with mindfulness-based stress reduction (MBSR) and conducted an open clinical trial that began with 55 participants but fell to 23
“completers.” The completers took part in six sessions, kept a sleep diary, and completed follow-up questionnaires at 8 weeks, 20 weeks, and 60 weeks (2010).

According to Britton et al. (2010), sleep represented an important consideration in improving mental health, because sleep deprivation could exacerbate mental health conditions and increased the possibility of relapse for substance abusers. Britton et al. (2010) affirmed the use of mindfulness meditation as a strategy for coping with the issues that stemmed from sleep deprivation:

Mindfulness meditation is particularly relevant to sleep-related disorders because it serves the dual functions of reducing hyperarousal . . . and decreasing negative emotional states such as anxiety, depression, worry, and rumination . . . that are commonly reported problems among insomniacs . . . (p. 87).

At first glance, the researchers found the results of this study surprising. Britton and her colleagues found no difference between those identified as meditators and non-meditators who had completed the program. Both maintained high levels of sleep disturbance along with mental distress. They found that substance abuse increased across the board for all participants and the severity of use did not result in a significant difference (Britton et al., 2010).

The authors suggested that the lack of sustained independent practice indicated a possible explanation for this occurrence (Britton et al., 2010). The mindfulness meditation (MM) portion of the study asked participants to do ten minutes of meditation at home six times per week throughout the program. On average, though, participants practiced just five to ten minutes per day for just a day or two during the week, totaling only about 25% of what the researchers recommended. Forty-four percent of the participants practiced less than once per week or not at all, and 28% reported meditating more than three times per week. The authors concluded that
intensity of MM practice may be a major factor in the efficacy of improving sleep patterns and the lack of sustained practice resulted in insignificant change in substance abuse-related behavior (Britton et al., 2010).

Additional findings suggested a greater impact on those who meditated with some regularity. Britton et al. (2010) found that “[S]elf-reported sleep duration increased by more than an hour for adolescents who meditated regularly and decreased for those who did not” (p. 94). Their findings indicated that even low doses of MM could have positive physiological effects (i.e., sleep).

Wisner and Starzec (2016) explored mindfulness practices at an alternative school with 10th grade students (sample size \( n = 19 \)). The intervention took place two days per week over 18 weeks. The researchers gathered data through questionnaires and student journals. Among other benefits, participants reported improvements in their sleep behavior. Several students indicated that they used the meditation techniques to fall asleep at night when they struggled to fall asleep. (Wisner and Starzec, 2016).

These studies indicated the transferability that spirituality practices like meditation and mindfulness provide for some students in improving sleep behaviors. One can expect then that improved sleep would relieve some of the additional stressors young people face. In addition to improvements in sleep patterns, the research literature indicated the impact of these practices on self-regulation.

**Improved Self-Regulation**

Self-regulation indicates the ability to maintain control over one’s emotions and responses (Barnert et al, 2014). Evidence of the positive effects of mindfulness on self-regulation appeared in several studies in the literature, both in traditional classrooms as well as with at-risk
populations (Barnert et al., 2014; Broderick & Frank, 2014; Mendelson et al., 2010). Mendelson et al. (2010) conducted a study of 97 fourth and fifth grade students from four public schools in Baltimore. They worked with Holistic Life Foundation to create a program that would be beneficial to inner-city youth. Their goals were to create a mindfulness and yoga program, test the impact of such a program on inner-city youth, and then refine the program based on research findings. The students took part in a 12-week program 4 days per week, with each session lasting 45 minutes. Mendelson et al. sought to meet various elements of self-regulation stating, “The movement, breathing, and mindfulness components of the class were each designed to enhance the youths’ capacities for sustained attention, promoting greater awareness of cognitive, physiologic, and bodily states and how to regulate those states” (p. 989).

Mendelson et al. (2010) used several questionnaire measures in addition to focus groups to gather findings. They found that students in the intervention group developed self-regulatory capacities and reduced worry. They indicated that this program was beneficial and other such programs would be feasible for serving stressed and disadvantaged young people (Mendelsen et al., 2010).

Broderick and Frank (2014) conducted several studies of the Learning to BREATHE (L2B) mindfulness program with similar goals and outcomes. One of their studies compared Pennsylvania high school students who participated in the L2B program. They found that the students using the mindfulness intervention “showed gains in several emotion regulation skills including emotional awareness, access to regulation strategies, emotional clarity, and general emotion regulation” (Broderick & Frank, 2014, p. 35).

Barnert et al. (2014) conducted a study of incarcerated youth which attempted to assess whether mindfulness practices might reduce the number of negative behaviors exhibited in a
youth detention facility. The program offered a synthesis of mindfulness concepts, including formal meditation activities, informal meditation activities, emotional growth activities, and team building. Youth volunteers attended a one-day retreat and agreed to take part in a 10-week follow-up course. The course involved a weekly practice of 30 minutes of meditation, followed by 60 minutes of discussion regarding the meditation-related concepts introduced to youth. When the researchers collected the data during a review of youth files, they found no reduction in negative behaviors exhibited by the incarcerated youth. However, post-assessment surveys did find positive effects on self-regulation ($p = .012$; Barnet et al., 2014).

**Summary, Gaps, and Tensions in the Literature**

Adult practice and research began about 30 years ago with Jon Kabat-Zinn (1994) and the development of mindfulness-based stress reduction, but many new options have been introduced and adapted for young people such as mindfulness-based stress reduction-teens adapted by Biegel (Goldstein, 2010). In my review of literature, I chose to categorize the studies into the three key areas of mindfulness, meditation, and movement because of the variety of practices.

Yet, while the variety of programming appears extensive, the research supporting such practice is not. The studies included in this search centered largely on specific populations such as the incarcerated (Himelstein et al., 2014), homeless (Viafora et al., 2015), or otherwise at-risk youth (Nidich, 2011). Some studies focused on children with special needs (Meppelink et al., 2016; Singh et al., 2017) and students coping with cultural stressors (Edwards et al., 2017). Very few of the studies looked at traditional classroom settings with a specific focus on the benefits for students in regular education programs.

While the spread of programming has become popular perhaps due to celebrity influences and claims of efficacy, there remains a great need for validation studies (Ross, 2016). Saunders
(2015) cautioned, “enthusiasm for mindfulness programs may outpace evidence” (p. 437). Similar concerns developed throughout the review of literature process. I asked challenging questions including: Why should educators implement these studies without proof that they work?; What evidence exists to prove these programs exert a positive effect on the health and well-being of students?; and What specific practices did educators adopt and with what success? In my study of K-12 teachers, I hoped to answer these questions.

Furthermore, the review of literature sparked curiosity about the role of the teacher/instructor in the implementation of spirituality practices. Some studies detailed the specific training measures put in place for training the teachers who would instruct adolescents in mindfulness, meditation, or movement practices (Meppelink et al., 2016; Semple et al., 2017; Titone et al., 2017). Other studies put less emphasis on this training and instead emphasized the low-cost option provided by these programs because of the ease of implementation (Barnert et al., 2014; Himelstein et al., 2014; Meppelink et al., 2016). These studies prompted questions about what type of training proves most effective for teachers/instructors in spirituality practices.

Closely related to training of teacher instructors, the literature discussed the value of trainer/instructor independent practice. For Kabat-Zinn (1994), teacher practice indicated an essential quality, and therefore his mindfulness training program began with extensive instructor preparation and hours of independent practice. Again, this elicited questions about what impact teachers’ personal lives have on their capacity to be effective instructors of spirituality practices. This study of spirituality practices in schools addresses these questions.

I investigated the various forms of data collection schools opted to employ. Data collection largely consisted of self-reported measures and surveys in the past with newer technologies like skin conductance (Fishbein et al., 2016) or electrical rhythms in the brain
(Martinez & Zhao, 2018) just beginning to be implemented with young people. Current research indicated a clear limitation due to self-reporting measures. I therefore aimed to explore the techniques used in schools for data collection, particularly considering how these emerging technologies could provide a clearer method of data collection and assessment of the efficacy of the instructors’ efforts.

**Analytical Theory**

While several theories connected to this study of spirituality practices and their impact on the social and emotional health and wellness of K-12 students, I initially chose holistic education theory (Miller, Karsten, Denton, Orr, & Kates, 2005) and faith development theory (Roehlkepartain, Benson, King, & Wagener, 2006) to interpret my review findings. I later enlisted leader-member exchange theory (LMX; Northouse, 2007) to explain the role of administrators in implementation of mindfulness practices as well. Holistic education theory formed the basis of my reasoning. This theory suggested that education needed to encompass the entire person, including the spiritual dimension which has arguably been overlooked (Miller et al. 2005). Faith development examined the timing for teaching spiritual practices as it related to the spiritual development of human beings (Roehlkepartain et al., 2006). LMX theory discussed the theoretical underpinnings under consideration when implementing new initiatives. Together, the theories made a case for the inclusion of spirituality practices in educational settings for elementary, middle, and high school students and the strategic process one might engage in for successful implementation. I begin with a discussion of holistic learning theory.

**Holistic Learning Theory**

Holistic learning theory (Miller et al., 2005) suggested that the way our society has historically focused primarily on cognitive learning means we have neglected an important facet
of the human person. The research uncovered alarming statistics about the state of mental health of young people today (Mental Health America, 2018), suggesting a missing link in the lives of young people today. According to Miller et al. (2005), holistic education is an attempt to nurture the whole person which includes physical, intellectual, aesthetic, social, emotional, and spiritual dimensions. In education today, the final dimension of spirituality has been largely overlooked or avoided. Advocates for holistic learning suggest that drawing spirituality into the curriculum will foster a deeper connection to the universe (Miller et al., 2005).

Miller et al. (2005) identified three basic principles of holistic education: connectedness, inclusion, and balance. Connectedness seeks to provide a curriculum grounded in forming connections at all learning levels. Inclusion refers to the desire to include all types of students and the necessary learning strategies to reach each of those types. Finally, balance relates to the concepts of yin and yang, the belief in complementary forces in the universe, and the need to recognize and nurture them. Miller et al. (2005) argued that traditional education has focused on yin energies like rationality and individual competition while ignoring the yang elements of intuition and cooperation in the learning process.

Thomas Moore (2005), one of several contributors to holistic learning theory, described holistic learning as a process of educating the soul. While we naturally focus on facts and science, he argued that the soul is an overlooked dimension and should be brought into the mainstream (Moore, 2005). Much of his theory rests on eros as “the dynamic of the soul” (p. 10) which “is not just a quality of soul but the very energy that sustains it and causes it to increase” (p. 10). The soul grows through opportunities to exist in the moment and pay attention to one’s surroundings.
Teachers who orient themselves toward the soul, Moore (2005) said, “need wisdom rather than information and a strong imagination” (p. 16). They attune to images, to beauty, to ritual. They address the soul alongside the practical concerns of the day. He described soul-centered teachers as existing consciously in a sort of dream world, avoiding busyness and focusing on the soul.

Lemko (2005) got to the heart of what it is to be human, as she argued that a human remains more than the sum of biological and material make-up. As humans, we are more than biochemical, yet often, in education and elsewhere, society reduces us to such an image. Lemko went on to challenge one to form the highest faculties in each individual, those elements of intuition, aesthetics, unity, and spirituality. Perhaps in education today we have lowered the bar in not allowing our young people to explore these higher faculties and focusing instead wholeheartedly on only things concrete and measurable.

What place then does holistic education have in our schools? The correlation between mental health and high stress levels due to our evolving world appear hard to miss. According to Mental Health America (2018), one in five adults has a mental health condition, and the mental health of young people today grows worse each year. In 2012, 5.9% of youth suffered from depression. The rate rose to 8.2% in 2015 (Mental Health America, 2018). These statistics suggest that our educational process today lacks something.

Holistic education challenges a person to stop and focus, a concept perhaps foreign to young people today. Between computers and tablets in classrooms, video games and television at home, and cell phones everywhere, young people rarely have opportunities to disconnect from technological devices and connect to themselves in silence. A focus on spirituality and holistic
learning offers this opportunity, an opportunity to connect with the universe on a higher level by simply being present.

The spirituality practices of mindfulness, meditation, and movement described in the literature closely relate to the concepts described by holistic education theory. Mindfulness (Kabat-Zinn, 1994), in a particular way, calls a person to pause and focus on a given activity (i.e., mindful eating or walking). Forms of meditation allow one to move into a higher state of being and become attuned with oneself. Movement practices often work in combination with mindfulness and meditation allowing for a more dynamic experience for the student.

I speculate that a holistic theory of education may play a role in meeting the needs of our young people today when used alongside faith development theory (Fowler & Dell, 2006). Faith development theory examines the natural maturation of human beings and explores the ways people develop physically, emotionally, and spiritually beginning in the womb. This theory explains the potential benefits of spiritual practices in relation to developmental timelines. As children mature, implementation of spiritual practices may have a greater capacity to effect positive change in their life experiences. Faith development theory serves as an overarching theoretical framework that suggests important timelines for implementation of spirituality practices. In the next section, I explore this theory and explain how it applies to holistic education, the research contained in the literature review, and this research study.

**Faith Development Theory**

*The Handbook of Spiritual Development in Children and Adolescents* (Roehlkepartain et al., 2006) provides the history and a description of the ways that spirituality has largely been marginalized from the study of social sciences over the years. The editors indicated that various reasons exist for bias toward religion and spirituality. First, the view exists that religion is
 discretionary much like art or music and not a necessary part of life. Rejection of religion by social scientists and the insistence on science to describe phenomena provides a second reason. Finally, a reductionist perspective simplifies the value of religion and skeptically insists that if something appears divine, sacred, or transcendent, then class, race, gender, etc. exemplify the actual focus (Roehlkepartain et al., 2006).

Roehlkepartain et al. (2006) suggested a need to examine how the social sciences like sociology, psychology, anthropology, connect to and overlap with religion and spirituality. Tension has developed as religion and spirituality have crossed into other mainstream sciences and thus programming related to spirituality practices like mindfulness and meditation, both in schools and outside in the mainstream environment, have become more prevalent. (Roehlkepartain et al., 2006). Ross (2016) developed this theory as well, describing how spirituality practices used by celebrities have given them attention and normalized them today.

Roehlkepartain et al. (2006) studied the science behind religion and spirituality and they considered spiritual development to be a universal human process.

Although the evidence is incomplete, the editors hypothesize that spiritual development is a dimension of human life and experience as significant as cognitive development, emotional development, or social development. All of these dimensions of development are interrelated. It is the spiritual dimension that is most involved in a person’s effort to integrate the many aspects of development (p. 9).

These researchers, who have studied the correlation between spiritual life and the other social sciences recognize what I have long witnessed in my work in school settings. This connection appears to have been ignored, for arguably legitimate reasons, yet now warrants further study
and contemplation of the spiritual development of the human person in the same way one studies
cognitive, social, and emotional development.

Roehlkepartain et al. (2006) further noted, “evidence is growing that spiritual
development is a vital process and resource in young people’s developmental journey from birth
through adolescence” (p. 6). This research study focused on elementary, middle, and high school
student spirituality and the benefit spirituality practices may provide for students at the various
levels. In order to better understand students’ developmental levels and needs, I used Fowler’s
stages of faith development (Fowler & Dell, 2006) which provided detail regarding the various
stages of spiritual development and the ways they overlapped with physical, social, and
emotional development.

Stage one, primal faith, runs from infancy to age two (Fowler & Dell, 2006). This time of
tremendous growth and change focuses on development of trust and the formation of attachment
bonds with caregivers. Because the primal faith stage falls during a pre-language stage of
development, attachment through sight, touch, and sound are particularly important (Fowler &
Dell, 2006).

The second stage, intuitive-projective faith, takes place during early childhood (Fowler &
Dell, 2006). Children at this age begin to gain a sense of independence. They enjoy stories and
storytelling, and play becomes episodic as a result. Children at this level find it impossible to
separate fantasy and make believe from fact. Development of good versus evil becomes a part of
their play at this stage. The capacity to align powerful religious symbols with deep, positive
feelings like love and companionship, or negative ones like terror and guilt, develops at this
stage (Fowler & Dell, 2006).
The next stage, middle childhood and beyond, entails what Fowler labeled mystic-literal faith (Fowler & Dell, 2006). In this stage, the child cannot yet construct the feelings, attitudes, and internal guiding processes of themselves or others. They are just learning to recognize and interpret feelings. Children with literal faith do not see God in a personal way, but they can recognize the pattern of God’s rule or control of the universe and understand God to be a model of a consistent and caring—a fair—ruler or parent. They see goodness rewarded and bad behavior punished (Fowler & Dell, 2006).

The next phase, synthetic-conventional faith, takes place during adolescence and beyond (Fowler & Dell, 2006). Adolescents can use and appreciate abstract concepts and have developed stronger formal operational thinking. They can articulate their thoughts and use reason to make arguments. They become acutely aware of their own perspective and that of others, they develop their own personalities, and they recognize the changes in relationships between family and other adults (Fowler & Dell, 2006).

Fowler and Dell (2006) indicated the inability for youth to take a third person perspective during the synthetic-conventional faith stage. This suggests that they lack the ability to hold themselves off and examine a situation from another frame. As a result, these adolescents desire to seek confirmation about their identity from significant others. They are thereby heavily influenced by other people in both positive and negative ways (Fowler & Dell, 2006).

According to Fowler and Dell (2006), the three final stages of faith that happen later in life and include individuative-reflective faith, conjunctive faith, and universalizing faith (2006). Individuative-reflective faith calls the person to reflect critically on the values and beliefs that became part of the previous stages of development. They also struggle with developing self-identity and self-worth in relation to those of the world. Those in the conjunctive faith stage
represent reflective adults who can balance the tensions of faith and life. They understand and remain open to the truth of other religious traditions and have the ability to explore paradoxes of these different religions. Finally, those in the universalizing faith stage recognize the humility of being human and strive to live a life of goodness as they understand God intended (Fowler & Dell, 2006).

Both strengths and limitations of using spirituality practices exist in K-12 education relative to faith development theory. The elementary years represent numerous developmental stages and students may not develop at the same rate as their peers. It may also be important for the primal faith stage to be addressed and developed, though at a much later time in life than described by Fowler & Dell (2006).

At the middle and high school levels, this theory suggests that students begin to develop a greater worldview and can recognize abstract concepts like a Higher Power and universal good (Fowler & Dell, 2006). They develop the ability to see themselves in relation to something much bigger and begin to recognize what they can control and what they cannot. They cannot control the physical changes and their narrow vision of the present and the future (Fowler & Dell, 2006). At this level, students have the cognitive ability to study practices and use them to their advantage. They can articulate their thoughts and feelings in a way that younger children cannot. They can recognize that the most important force of control is that of themselves, in their bodies, their decisions, their actions, and their reactions. Fowler and Dell (2006) said that they develop their own personalities and perspectives. Their focus on identity highly influences their relationships with peers, family members, and others.

In addition to examining the needs of elementary students, I felt an especially strong interest in addressing the growing mental health needs of adolescents and high school students.
The major body of the literature collected some form of qualitative data in which the adolescents themselves reflected on their personal growth and feelings related to the spirituality practices. Again and again the testimonials confirmed the personal power they gained in being able to self-regulate (Edwards et al., 2017; Himelstein et al., 2014; Mendelson et al., 2010; Titone et al., 2017).

Adolescents also face various limitations during this stage of development. They face struggles with physical change and the accompanying stressors (Fowler & Dell, 2006). They maintain an inability to see life from the third-person perspective and put themselves in another place and time. They struggle to find their identity and look to others for confirmation. In many cases this desire to fit in and develop identity leads to destructive behaviors like substance abuse (Fowler & Dell, 2006).

I noticed that a cycle of need (see Figure 1) appears in adolescent spirituality. Because of their cognitive developmental level, adolescents have the capacity to successfully utilize spirituality practices for their own good. They can articulate their needs and cognitively participate in the activities. They can use spirituality practices to help them cope with the struggles that are naturally a part of adolescent development. But because they remain in this adolescent phase of life, they may still struggle to understand the world and how exactly they fit into it because of their underdeveloped emotional and social skills. Because this underdevelopment exists, there is an even greater need to use spiritual practices to cope with the stresses of these tumultuous times.

Spirituality practices may be a key strategy in helping students face many challenges that come with adolescence. The synthetic conventional faith stage introduced by Fowler and Dell
Figure 1. Cycle of Need in Adolescents. This figure demonstrates how mindfulness practice at the adolescent level may strengthen regulation and, in a cyclical pattern, grow spirituality practice and development (Kramer, 2020).

(2006) emphasizes maturation to the point where adolescents can articulate feelings, suggesting that students of this age have the cognitive wherewithal to explore their experiences, their relationships, and their feelings. At this stage, they can articulate to an extent their needs and assess their own personal growth. They also have the sustained attention skills necessary to participate in meditation exercises (Fowler & Dell, 2006).
Summary

The review of literature pinpointed three primary areas of spirituality including mindfulness (Kabat-Zinn, 1994; Talathe & Mhaske, 2017; Barnert et al., 2014), meditation (Britton et al., 2014; Shapiro & Walsh, 2003), and forms of movement (Bao & Jin, 2015; Bergen-Cico et al., 2015; Fishbein et al., 2016; Hagan & Nayar, 2014; Terjestam, Jouper, & Johansson, 2010). The studies reflected a focus on specific populations including incarcerated youth (Barnert et al., 2014; Himelstein et al., 2014), students with academic challenges (Broderick & Frank, 2014; Harpin et al., 2016), students facing homelessness (Grabbe et al., 2012, Viafora, 2015), and those coping with attention disorders (Burke, 2009; Kiani, Hadianfard, & Mitchell, 2017; Meppelink et al., 2016; Singh et al., 2014). The literature presented several positive outcomes for those who chose to implement the varied practices. Young people demonstrated greater self-compassion (Broderick & Frank, 2014; Meppelink et al. 2016), they slept better (Britton et al., 2010; Himelstein et al., 2014), and they developed a greater capacity to self-regulate (Barnert et al., 2014; Broderick & Frank, 2014).

Both faith development theory (Roehlkepartain et al., 2006) and holistic education theory (Miller et al., 2005) aligned well with this study of spiritual practices used in K-12 educational settings. The literature and faith development theory suggested that students at all levels could benefit from various forms of spirituality practices such as mindfulness, meditation, or movement. Holistic education theory indicated the ability to meet the many facets of individual students, including the spiritual side, with the potential to raise a person’s awareness and higher faculties, which are often excluded in traditional United States education. This review of literature indicated the feasibility of incorporating such spirituality practices for the benefit of all students.
Considering the limitations of spirituality and religion, following the review of literature, I set out to explore mindfulness practices and their value in Minnesota schools. I maintained a goal of developing grounded theory as it pertained to implementation of mindfulness practices and its connection to the phases of spiritual development. I next explore in depth the methodology I chose to enlist in this research study.
CHAPTER THREE: METHODOLOGY

This research study began with a desire to explore “spirituality practices” such as mindfulness, meditation, and movement (i.e., yoga) in middle schools, but like most research journeys, it took some twists and turns. I altered my terminology and objectives, and ultimately settled on the following research questions:

1. How do K-12 teachers and professional staff implement mindfulness techniques to facilitate learning and promote social-emotional health and wellness in their students?

2. What, if any, impact does this implementation have on school climate, students, and staff as identified by school personnel?

Under a constructivist-interpretivist framework, I enlisted qualitative research techniques, believing this format would allow me to immerse myself in the data in a way not possible with quantitative studies.

The review of literature indicated a base of qualitative data collection with little quantitative data to report. Many researchers studied mindfulness practices in adults, but children and schools needed further exploration and study. Researchers suggested a need existed for further quantitative data to clearly demonstrate the merit of such practices (Biegel et al., 2009; Burke, 2010; Roberts et al., 2008; Thompson & Gauntlett-Gilbert, 2008). There appeared to be a gaping quantitative hole. However, collecting numerical values in this type of study would be flush with problems. Crotty (2015) explained well the struggle I encountered as I embarked on the journey:

A positivist approach would follow the methods of the natural sciences, and, by way of allegedly value-free, detached observation, seek to identify universal features of humankind, society, and history that offer explanation and hence control and
predictability. The interpretivist approach, to the contrary, looks for culturally derived and historically situated interpretations of the social-life world. (p. 67)

Although value exists in scientific inquiry and data collection through comparison groups, the interpretivist lens ultimately felt more appropriate because, as Crotty (2015) explained, while “scientific experiments seek to know and explain . . . inquiry into human affairs seeks to understand (Verstehen)” (p. 94). This suggested a more appropriate approach came not from an attempt to control and predict, but an interpretation format. The number of variables in classrooms today make comparison grouping designs an idealistic impossibility. Instead of attempting to control and make predictions, this study sought to follow Max Weber’s Verstehen (understanding) approach to research (Crotty, 2015), with an aim to develop grounded theory.

Believing that data collected by others in these case studies provided value when working through an interpretivist lens, I chose to include them to establish a more holistic picture of the schools’ perceived impact of mindfulness programs. These data points proved rare and minimal at best, including such areas as discipline referrals, high school student surveys, and feedback measures from school staff. In the process of soliciting participants, I moved from a positivist approach to proving/disproving a theory to an interpretivist perspective grounded in careful understanding (Crotty, 2015). I took note of the quantitative data that a few participants collected and included them in my findings chapter. These data, coupled with anecdotal records from interviews and observational field notes, helped to ground my study and prepare for the development of theory.

**Research Design**

This study of mindfulness practices in K-12 Minnesota schools followed a qualitative design with multi-case study and grounded theory methodologies. In the sections that follow I
explain the rationale for choosing this framework beginning with the decision to abandon a positivist approach and use qualitative methods and a constructivist-interpretivist paradigm. I then address the multi-case study and grounded theory methods and their links to the tenets of interpretivist theory.

Qualitative Research

*Time Magazine* published a special edition entitled “Mindfulness” in March 2018 boasting the benefits of mindfulness practices for children as well as adults (Oaklander, 2018). They cited cases demonstrating improved self-control, less depression, fewer attention deficit hyperactivity disorder (ADHD) symptoms, better math scores, improved focus, and kinder kids. I accepted the challenge to explore what these claims looked like in actual practice in Minnesota K-12 schools and the impact felt by the school systems. I enlisted case study and grounded theory methodologies in this research undertaking with an overriding interpretive (Crotty, 2015) or social constructivist paradigm (Creswell & Poth, 2018).

Given the nature of classrooms and the high-level of variability in collecting numerical data, a qualitative approach provided the most effective means of study. Creswell and Poth (2018) described social constructivism as a means for “individuals (to) seek understanding of the world in which they live and work. They develop subjective meanings of their experiences …” (p. 24). In studying classroom settings, the social backdrop provided a valuable picture only assessed qualitatively. This linked closely to grounded theory where theory is developed through an understanding of the lives and perspectives of the participants (Charmaz, 2006). This study utilized qualitative research methods including in-depth interviews with school staff and administration, classroom observations, and a review of curriculum materials discussed and demonstrated through the interviews and observations. As the primary researcher, immersing
myself in the study qualitatively afforded me the opportunity to gain a deeper understanding of the lives of the participants. Exploring multiple participants in school settings also allowed for a deeper understanding of the institutional processes needed for social constructivism.

Qualitative data collection, a technique described by Creswell and Poth (2018), allowed not only for collection of the described impact of mindfulness practices in schools, but also permitted an exploration of the motivation of teachers and schools behind implementation of these practices. Use of in-depth case study interviews with teachers and school personnel (i.e., administrators, school psychologists, and social workers) provided a window to the why? rather than a straightforward quantitative collection of data.

Patton (2014) called context a central aspect of qualitative inquiry. In this study, observations were conducted when possible to contextualize the concepts that participants discussed in the interviews. The observations deepened my understanding of what the mindfulness techniques described looked like in actual practice and widened the scope of the visible impact the practices had on the students and staff. Furthermore, I witnessed the students’ behavior prior to and immediately following use of classroom practices.

In my preliminary reading, I discovered a wide scope in mindfulness programing in schools today, making a study of the specific curriculum options a necessary part of this study as well (see Chapter Four). The programs varied according to developmental level, format of content, and focus of activities. These differences could only be understood through qualitative study, comparison, and analysis. Experiencing bits of the curriculum in practice in classrooms during observation opportunities provided an additional bonus.

Working from what Creswell and Poth (2018) described as a social constructivist perspective, I chose to take my study in two methodological directions: multi-case study and
grounded theory. The two processes provided a valuable and cohesive balance and will be described in the sections that follow.

**Multiple-Case Study Methodology**

The interpretivist approach to research parallels a pragmatic philosophy in which “the world is a world to be explored and made the most of, not a world to be subjected to radical criticism” (Crotty, 2015, p. 74). The use of mindfulness programs, with their diverse styles, contexts, and implications, needs to be understood first. A close look at the social systems and motivation for implementation establish context and deepen our level of understanding (Crotty, 2015). I selected multiple-case study design to explore the big picture and attempt to understand the programming without preconceptions or judgment. This format included observations, in-depth interviews, and curriculum review to better understand the social impact of mindfulness.

According to Yin (2018), a case study provides an empirical method for looking at a contemporary issue. A multiple-case study design allows for replication and validation through the exploration of more than one case. This study of 13 school staff members provided six cases, namely six different school districts. Each of the cases represented an individual story, but collectively they provided opportunities to look for connections. The similarities and differences in the various cases then assisted in the development of grounded theory regarding the most effective practices at respective developmental levels for K-12 students as described by school staff. Yin (2018) indicated that case studies represent a means to glean a holistic look at a given situation. Case studies position themselves in the real world and establish a seat from which the researcher may analyze the here and now.

Yin (2018) also stated that case study research encouraged triangulation of data. Therefore, conducting observations and studying curriculum materials schools chose to
implement provided the most relevant means to develop a holistic picture of mindfulness in schools today. Each of the six cases added greater depth to the study, allowing me to advance our collective knowledge and theorize developmentally appropriate practices.

Yin (2018) detailed the many advantages of case study research which provided a holistic look at education. Classroom settings vary greatly and thus provide a wealth of qualitative data opportunities. Case studies give ample time and opportunity to fully explore the objectives teachers undertake and the perceived effects of their methodological decisions. This research method allowed for opportunities to witness and experience a situation firsthand which allowed for quality storytelling to better inform the profession and build grounded theory.

This multiple-case study approach shared the story from the vantage point of districts of varying size, socio-economic status, and cultural mix. The interview participants told their story of implementation of mindfulness practices, from their motivation to their outcomes, and the time spent observing allowed me to deepen the story through first-hand witness perspective. The review of curriculum options allowed for extended examination of the practices being implemented, and ultimately a more thorough description than what could be described in an interview or observed in a visit. Ultimately multi-case study research deepened understanding and immersed me in the rich data, a process necessary for grounded theory development which I describe in the next section (Charmaz, 2006).

Grounded Theory Methodology

According to Strauss and Corbin (1998) grounded theory research is generated from the data as detailed by the participants. It comes not from the literature but from lived experiences. In this study, I sought to immerse myself in school settings and conduct interviews with as many staff members as possible. I set out not knowing very much at all about mindfulness practices in
public schools and through my in-depth study, I developed a theory of implementation based on my findings. This theory was grounded in this particular research experience, not from an outside source, previous learning, or other experiences. Observing in schools and classrooms, studying available curriculum options, studying data collected by participants, and conducting interviews with teachers, social workers, administration, and others gave me the information needed to develop a general theory of the types and processes of incorporating mindfulness practices, the motivation in doing so, and the level of impact (Creswell & Poth, 2018).

The interpretivist paradigm provides a solid backdrop for grounded theory development. Charmaz (2006) noted, “Interpretivist theory calls for the imaginative understanding of the studied phenomenon. This type of theory assumes emergent, multiple realities, indeterminacy; facts and values as linked; truth as provisional; and social life as processual” (p. 126). Charmaz hit the high notes of my study which aims to understand the realities of mindfulness in various settings, the struggle to make any strong claims due to varying concepts of truth, and the process of using findings to develop theory. The grounded theory work I engaged in understood and relished in murky waters. It sought understanding, and perhaps common ground, even amidst markedly unique settings.

I chose to follow the basic tenets of grounded theory development with most emphasis on Charmaz’s (2006) constructivist approach versus Corbin and Strauss’ (1998) systematic approach (Creswell & Poth, 2018). Charmaz’ (2006) process includes gathering rich data, development of codes and categories, memo-writing, theoretical sampling and sorting of findings, and construction of a theory. Next, I examine my process in each of these phases considering my social constructivist or interpretivist lens, beginning with gathering data.


**Gathering Rich Data**

Charmaz (2006) recommended examining “the world as our research participants do—from the inside. Although we cannot claim to replicate their views, we can try to enter their settings and situations to the extent possible” (p. 14). This recommendation led me to conduct both in-depth interviews and observations. I utilized a flexible interview model with a basic set of questions (see Appendix A) that evolved with the flow of conversation. I specifically addressed motivation, implementation process, and impact in each interview, but no two interviews looked alike. The flexibility allowed me to glean the topics around which participants felt most passionate.

The observations too, gave me a foothold to the “inside” (Charmaz, 2006). Seeing the mindfulness tools, specialized rooms, and lessons in progress provided me with a first-hand experience that proved necessary for developing grounded theory. The rich data came from use of these methodologies as well as exploring a variety of school settings, a large age range of students, and diverse school personnel roles. Throughout the process of data collection, I developed a coding system which is detailed next.

**Development of Codes**

Using an online data analysis program called Dedoose, I developed preliminary codes following my first interview. The program allowed me to use a line-by-line format to categorize bits of information into usable formats (Charmaz, 2006). I then extracted themes and quotes from interview transcripts. I added these to an axial coding (Straus & Corbin, 1998) diagram in my research log to display significant findings and demonstrate connections.

I then moved to Charmaz’s (2006) focused coding process which means “using the most significant and/or frequent earlier codes to sift through large amounts of data. Focused coding
requires decisions about which initial codes make the most analytic sense to categorize your data incisively and completely” (p. 57). To accomplish this process, I created tables detailing emerging themes with support from transcripts. This, along with memo-writing, provided another opportunity to engage with the transcripts and wrestle with emerging ideas and theory.

**Memo-writing**

The process of memo-writing forced me to think on paper about the processes I observed and discussed, and as Charmaz (2006) suggested, they happened early and throughout my research journey, “Memo-writing constitutes a crucial method in grounded theory because it prompts you to analyze your data and codes early in the research process” (p. 72). Following each interview and/or observation, I recorded voice or written memos. This provided a “gut reaction” response and highlighted specific concepts. In an ongoing way, I also wrote “reflections” as I grappled with ideas and attempted to capture connections between the various settings (see Appendix B).

**Theoretical Sampling, Saturation, and Sorting**

All participants were given the opportunity to review transcripts and provide feedback. I then worked from their contributions and re-examined transcripts. The reflections, months of contemplation, and creation of matrices to look for patterns ultimately led to a development of findings. I then wrote findings and revisited transcripts to confirm cohesion of interviews with theory.

**Construction of a Theory**

The constructivist approach to research was central in this research study as I aimed to develop theory. Charmaz (2006) explained, “A constructivist approach places priority on the phenomena of study and sees both data and analysis as created from shared experience and
relationships with participants” (p. 130). This approach to working alongside participants and inviting their feedback played a critical role in theory development. Because Charmaz further explained that constructivists study how participants make meaning of their circumstances and a given phenomenon, I saw my relationship to my participants and the feedback they provided as infinitely valuable.

Having described the research design for this study with its implications for methods, I now describe the elements of my research design beginning with my work with the Institutional Review Board and continuing chronologically through the study. I include background information on the participants, schools, data collection, analysis of findings, my personal experience and bias, validity of the study, and ethical considerations.

**The Institutional Review Board**

The Institutional Review Board at the University of St. Thomas, like any IRB, seeks to ensure ethical treatment of participants and their personal information (Creswell & Poth, 2018). I submitted an application to the Institutional Review Board for approval of my study that detailed the methodology and upon approval, began contacting schools to set up interviews. Prior to each interview, I emailed the IRB general consent form and asked for signatures to ascertain consent to participate. This consent form explained to participants my goals and plans for the study, and my research questions:

1. How do K-12 teachers and professional staff implement mindfulness techniques to facilitate learning and promote social-emotional health and wellness in their students?

2. What, if any, impact does this implementation have on school climate, students, and staff as identified by school personnel?
Participants also received details regarding confidentiality and developed an understanding of their flexibility in participation.

Initially, I attempted to garner the interest of three districts to participate in this study, but I struggled to gain access given the sensitive nature of the term “spirituality.” I altered my IRB application and instead decided to recruit individual participants. This proved to be a wise move and allowed for snowballing, ultimately permitting me to interview school personnel at various levels, in multiple geographical areas, and often gave me access to several participants representing the same school system. While admittedly a frustrating struggle at the time, the change in my IRB plan ultimately provided greater insight through a wider variety of participants. I next describe this process of recruiting diverse study participants.

**Recruitment and Selection of Participants**

I began by making phone calls to school districts that had begun introducing mindfulness programming in their schools in an attempt to focus primarily on only two or three school districts. Once again, having encountered that bump in the research road, I adjusted my plans to recruit individual teachers rather than school districts. I allowed three methods to guide recruitment: survey phone calls, referrals, and snowballing.

Initially, I made phone calls to district offices and connected with personnel responsible for social-emotional learning. This effort to survey possible candidates proved beneficial particularly in District E. The SEL Coordinator recommended teachers and staff members who were known to be using these techniques with some level of fidelity. Referrals also led me to interview candidates. Friends, colleagues, and Kathy Flaminio, a local mindfulness instructor, assisted me in making initial contact with schools who received training through her company. In
each interview, I asked for recommendations, incorporating the snowball technique, which led me to further possibilities.

In the end, my participants totaled 13. They represented a variety of roles in the academic setting including two principals, two social workers, five classroom teachers, an interventionist, a school psychologist, a paraprofessional, and an instructional coach (see Table 2). I used email to connect with individual participants to set up interviews and observation opportunities. I chose to include only Minnesota schools because I valued the role of observations in this study and I needed manageable conditions. Six school districts were included in this study, with three of them having multiple opportunities for interviews and observations.

**Description of Schools/Districts in the Study**

The diversity of school systems, socio-economic backgrounds, and age levels made for a bounty of information, and each system demonstrated a unique case for exploration. Table 3 details the schools and districts included in this study along with demographic information. The table demonstrates levels of economic status, the most dominant race(s), and special needs populations. In three of the districts (District M, District E, and District B), this study included interviews with two or more staff members. I also conducted observations in classrooms in each of these districts. The other three districts represented “Lone Rangers” where just one school staff member took part in the interviews. In these schools, no school- or district-wide programming had yet been undertaken.

**District M**

District M fell on the outer edge of the suburbs and was a smaller school district with just one elementary and one high school (7-12). Alisa described District M as a shrinking district, due to a lack of housing options for growing families. The school system was overwhelmingly
### Table 2

**Study Participants**

<table>
<thead>
<tr>
<th>Name</th>
<th>School</th>
<th>Role</th>
<th>Education Level</th>
<th>Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alisa</td>
<td>School ME Elementary School</td>
<td>Social Worker</td>
<td>MSW</td>
<td>11 years</td>
</tr>
<tr>
<td>Brenda</td>
<td>School CC High School</td>
<td>ASL Teacher</td>
<td>M.Ed. Leadership in progress</td>
<td>10 years</td>
</tr>
<tr>
<td>Lauren</td>
<td>School MN Middle School</td>
<td>School Psych</td>
<td>Ph.D. in Ed. Psych.</td>
<td>12 years</td>
</tr>
<tr>
<td>Cora</td>
<td>School EB Elementary School</td>
<td>Teacher</td>
<td>M.Ed. Curriculum and Instruction</td>
<td>20+ years</td>
</tr>
<tr>
<td>Brielle</td>
<td>School EB Elementary School</td>
<td>Teacher</td>
<td>M.Ed.</td>
<td>32 years</td>
</tr>
<tr>
<td>Summer</td>
<td>School EC Elementary School</td>
<td>SPED Para</td>
<td>3 years of college</td>
<td>13 years</td>
</tr>
<tr>
<td>Emily</td>
<td>School EC Elementary School</td>
<td>Instructional Coach</td>
<td>M.Ed.; Ed. Leadership and Principals Licensure in progress</td>
<td>3 years</td>
</tr>
<tr>
<td>Denise</td>
<td>School MH High School</td>
<td>Social Worker</td>
<td>Licensed Social Worker</td>
<td>17 years</td>
</tr>
<tr>
<td>Laneya</td>
<td>School EC Elementary School</td>
<td>SPED and Gen. Ed. Interventionist</td>
<td>Certified in SLD and ASD</td>
<td>22 years</td>
</tr>
<tr>
<td>Karen</td>
<td>School IA Middle School</td>
<td>Science Teacher</td>
<td>M. Ed Leadership in progress</td>
<td>5 years</td>
</tr>
<tr>
<td>Jamison</td>
<td>School BS Elementary</td>
<td>Principal</td>
<td>Superintendent licensure; Ed.D. in progress</td>
<td>26 years, 13 as principal</td>
</tr>
<tr>
<td>Judy</td>
<td>School EB Elementary</td>
<td>Principal</td>
<td>SPED, EBD, LD, Reading licenses</td>
<td>15 years in SPED; 16 years as principal</td>
</tr>
<tr>
<td>Sharon</td>
<td>School BS Elementary</td>
<td>Teacher –grade 1</td>
<td>M.Ed. in Reading</td>
<td>7 years</td>
</tr>
</tbody>
</table>
Caucasian (95.6%) with an English Language Learner (ELL) rate of 1%. Their free/reduced lunch (FRL) rate was 23.2%, and 26.7% represented special education (SPED). I conducted interviews with the social workers at each of the two buildings. In the elementary building, I observed in several classrooms and in Alisa’s specialized classroom. Brenda, the high school social worker, gave me the opportunity to see the newly implemented Change to Chill room in her building. In addition, a student intern joined us for both interviews. School population in each school averaged 450 students.

**District E**

District E demonstrated a much bigger district than District M and provided six interview opportunities with staff members in various roles. I also observed in several classrooms in two different buildings and examined the “safe spots,” specialized rooms with resources for self-regulation, utilized throughout the buildings. Ethnically the two schools (School EB and School EC) were slightly more diverse than those of District M (with about 71% of students described as Caucasian in both schools). The FRL rates for School EB and School EC were 15.9% and 22.9% respectively. The schools averaged 625 students.

**District B**

District B had a smaller population than District E (430 students) but much greater diversity (18.6% Caucasian, 32.3% Hispanic/Latino, 35.6% Black/African American). The FRL rate of 75.1% was significantly higher than the other schools. SPED rates fell at 19.8%. Participants described students as coming from high-density housing and apartments, and homelessness ranked nearly the same as the others (1%).
Table 3

**Participant Districts and Schools with Demographics**

<table>
<thead>
<tr>
<th>District</th>
<th>School</th>
<th>Grade Level</th>
<th>White %</th>
<th>SPED %</th>
<th>FRL %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>District M</strong></td>
<td>School MH</td>
<td>High School (7-12)</td>
<td>95.1%</td>
<td>24%</td>
<td>21.6%</td>
</tr>
<tr>
<td></td>
<td>School ME</td>
<td>Elementary School</td>
<td>95.2%</td>
<td>13.6%</td>
<td>17.2%</td>
</tr>
<tr>
<td><strong>District E</strong></td>
<td>School EB</td>
<td>Elementary School</td>
<td>72.9%</td>
<td>12.4%</td>
<td>15.9%</td>
</tr>
<tr>
<td></td>
<td>School EC</td>
<td>Elementary School</td>
<td>71.6%</td>
<td>11.8%</td>
<td>21.3%</td>
</tr>
<tr>
<td><strong>District B</strong></td>
<td>School BS</td>
<td>Elementary School</td>
<td>36% Black</td>
<td>33% Hispanic/Latino</td>
<td>19.8% SPED</td>
</tr>
<tr>
<td><strong>District C</strong></td>
<td>School CC</td>
<td>High School (9-12)</td>
<td>69.1%</td>
<td>13.7%</td>
<td>24.3%</td>
</tr>
<tr>
<td><strong>District P</strong></td>
<td>School PN</td>
<td>Middle School</td>
<td>38.7% Black</td>
<td>26.2% White</td>
<td>25.5% SPED</td>
</tr>
<tr>
<td><strong>District I</strong></td>
<td>School IA</td>
<td>Middle School</td>
<td>89.7% White</td>
<td>21.6% SPED</td>
<td>29.2% FRL</td>
</tr>
</tbody>
</table>

*Lone Ranger Schools*
**Lone Ranger Schools/Districts**

Districts C, P, and I fell into the lone ranger group. These study participants represented individuals who utilized mindfulness practices primarily in isolation. These teachers began implementing mindfulness programs in their individual classroom settings without the benefit of school- or district-wide programs and support. Although I did not conduct observations of individuals in these schools, I found the interviews to be valuable and worthy of inclusion in this analysis, especially because they represented middle and high school student populations. The three schools demonstrated a similar socioeconomic status with approximately a quarter of the population using the free and reduced lunch option. In school CC and School IA the majority of students were White, while School PN was split between Black, White, and Latino.

From these varied schools and participants, I collected qualitative data through in-depth interviews, observations, and a review of the mindfulness curriculum programs schools opted to utilize. I detail the process of collecting these data in the next section.

**Data Collection**

Crotty (2015) emphasized the research story behind and throughout the data collection process. I chose to triangulate my data by enlisting three techniques including interviews, curriculum review, and classroom observations to accurately capture the story of my participants and their implementation of mindfulness practices. I used a carefully developed plan for collection and analysis of data (see Figure 2) to maintain consistency with each of the participants.

**Interviews**

I conducted interviews in person and via an online platform called Zoom that ranged from 45 to 90 minutes. Interviewees were given the option of in-person or online meetings, and
due to the distance and challenging schedules, the majority took place via Zoom. This allowed for a level of comfort, flexibility, and choice in their busy lives. Rev.com produced transcripts of the recordings following each interview that I later analyzed.

In establishing a method for interviews, I chose to use a combination of an interview guide approach along with an informal conversation interview as described by Patton (2015). In developing grounded theory, Charmaz (2006) recommended intensive qualitative interviews because they are “open-ended yet directed, shaped yet emergent, and paced yet restricted” (p. 28). I used a list of questions that gave the interviews a roadmap but did so in a flexible manner, giving participants the opportunity to guide the interview with descriptions most meaningful from their perspectives. While I sought answers to the list I created for overall consistency, this flexible format fit well for grounded theory development.

I began interviews with a friendly approach, expressing my gratitude for their willingness to take part in this study and reminding them of professional confidentiality. In some way, each participant had been recommended as a leader in this field, which I called attention to during the initial conversation. I wanted to affirm their “expert status” and thereby welcome open sharing. I then moved into the interview questions (see Appendix A for the initial list of questions). Having standardized, open-ended questions allowed me to utilize a framework that was flexible enough for each interviewee in my study yet met the objectives of my research questions. I wanted the interviewees to be able to truly guide the process and share their stories about the efficacy (or lack) of mindfulness practices in their own setting. I also chose to use a
flexible model so that questions could be added in subsequent interviews as determined necessary.

Grounded theory seeks to gather “rich data” (Charmaz, 2006), so the flexible model permitted me to go deeper with subsequent questioning in areas that participants elicited. Review of the transcripts indicated many phrases such as “Tell me more about…” to gain further connection to the participants experience. While this flexible model proved valuable, the creation of a list of guiding questions could not be understated in conducting the 13 interviews. In establishing a grounded theory, I needed to use questions consistently and make observations comparatively. As I reviewed my findings and looked for patterns, that basic set of questions permeated the entire research study and helped me remain connected to my overriding questions:
1. How do K-12 teachers and professional staff implement mindfulness techniques to facilitate learning and promote social-emotional health and wellness in their students?

2. What, if any, impact does this implementation have on school climate, students, and staff as identified by school personnel?

Patton (2014) further suggested that this method makes productive use of a limited amount of interview time. In this case, utilization of an interview guide approach fit my theoretical constructivist-interpretivist paradigm and allowed for greater depth in personal storytelling as well as provided common questions and responses for analysis.

I recorded interviews on an iPhone and later uploaded them to Rev.com for production of transcripts. I then uploaded the transcripts to Dedoose.com, a qualitative data analysis software program. I reread each of the transcripts in their entirety to glean an overall picture, and then proceeded to begin the coding process. I explain the analysis of data in a subsequent section.

After completing the interviews, I also followed Charmaz’ (2006) recommendation to write memos. Depending on my interview schedule, these were sometimes voice recordings that I later transcribed or my own written responses. The memos provided a “gut reaction” view that proved to be valuable during the analysis process. The topics that stood out initially often led me to themes and findings as I saw them develop in subsequent interviews. Charmaz (2006) recommended using these hunches and adding to the interview as theory began to take shape, so the writing of memos held great value in the analysis process.

Observations

With the consent of individuals who had established a consistent practice of mindfulness in their classrooms or schools, I conducted observations to develop a first-hand understanding of the methods currently being used. In some cases, I examined data collected by the schools to
further enhance my knowledge. These data included teacher surveys, high school student surveys, and behavior referrals. The current research indicated that many schools have implemented mindfulness practices without necessarily obtaining statistical data to prove the efficacy of doing so.

Because of student confidentiality, I chose not to record classroom observations. Instead, I took careful notes during my visit and scheduled time shortly following the observation to voice record my thoughts for later review. I created my own observation form to maintain a consistent approach which included sketching a map of the classroom to trigger my memory during analysis later.

Again, observations provided a source of “rich data” (Charmaz, 2006). They permitted me to witness, firsthand, the needs of the teachers and students and allowed me to describe what occurred during activities and lessons these participants used. I designed an observation form that provided space to sketch the room and describe both teacher and student behaviors. This form gave me a consistent method of data collection and assisted during analysis later. In writing my research story, the observations gave me a setting, a backdrop, and provided a more solid understanding of school cultures, motivation, and outcomes.

**Curriculum Review**

During the interview process, some participants described curriculum and teacher resources that they used to teach mindfulness programming in their school settings. Some also identified apps and Internet resources. In order to get a richer feel for each of the suggested resources, I chose to spend more time examining them following the interviews. Due to time limitations during interviews, I felt extensive time with the various methods would deepen my understanding of the structure and benefit of the individual curriculum options. This enabled me
to compare and contrast the various methods and make recommendations consistent with
grounded theory development (Charmaz, 2006). I provide a thorough description of this study of
instructional programming in my findings chapter.

**Data Storage**

I kept the records of this study confidential using several techniques. I designated
pseudonyms for personnel and schools throughout this document to avoid identification of
participants. I coded all study participants and only provide demographic information here as it
pertained to the study. The types of records I created included recordings, transcripts, master lists
of information with coding, and computer records stored in a password-protected site
(OneDrive.com). I submitted audio recordings to Rev.com for transcripts and then stored the
transcripts in a password-protected OneDrive account. Participants who requested copies of the
transcripts received them via email. Only the researcher and study chair were permitted access to
the collected data. Upon completion and defense of this dissertation, all audio recordings will be
destroyed. All signed consent forms will be kept for a minimum of three years upon completion
of the study.

**Data Analysis**

Data analysis took different forms as previously described related to case study and
grounded theory methodologies. Grounded theory building, not unlike case study research,
requires a level of careful analysis to remain authentic. Charmaz (2006) recommended several
steps that I utilized in this study. I conducted intensive interviews and observations in an effort to
obtain rich data. During the interviews I took careful notes but tried to listen as much as write,
allowing for a conversational feel. Following the interviews, I created personal memos to capture
interview insights while ideas lingered in my mind. Using Charmaz’s (2006) theory framework, I then used the memos to develop codes.

**Coding**

The coding process came next. I conducted one preliminary interview a year before the others that gave a springboard for initiating a coding system. Using an online qualitative analysis platform called Dedoose, I uploaded my transcripts as I obtained them. When I set up the codes in Dedoose, I had just one interview completed from which I developed a list of 26 codes. Dedoose permitted me to write a description for each code as I entered it into the system. During the coding process, I could toggle over my descriptors to recall the confines of each code. I added color codes for efficient recall. As more interviews took place, I refined and created additional codes, being careful to follow grounded theory practices (Charmaz, 2006) which require the codes to naturally spring from the data.

The following year when conducting subsequent interviews, I followed the same procedures. Given the volume of qualitative data collected, this process proved necessary. The first type of coding was a line-by-line method to look for patterns and develop categories. I used axial coding to develop specific categories and their aggregate parts (Charmaz, 2006, Creswell & Poth, 2018). With the assistance of Dedoose, as well as my own memos and perspective, I uncovered categories or themes that I developed in an ongoing way as I collected further data. I considered all these data as findings and grounded theory evolved during the research process.

The creation of concept maps (see Figure 3) demonstrated the reoccurring concepts as axial codes. In an ongoing way I wrote memos or reflections, moving back and forth from the data to the codes and back to the data. I wrote memos regarding specifically highlighted themes as a means for analyzing the data and thereby developing theory.
During the process of analysis, I read the transcripts a third time and developed a matrix that again addressed emerging themes (see Figure 4). Figure 4 demonstrates my analytical thinking with codes listed as column headers. I included quotes and anecdotal notes from observations in the vertical columns. I produced a similar color-coded matrix for each of the 13 schools. This contained the 26 codes developed through analysis of participant responses and
observations. The development of the matrix forced deep immersion in the data and assisted in development of themes and ultimately theory.

**Figure 4**

**Sample Matrix Page**

<table>
<thead>
<tr>
<th>IMPACT</th>
<th>SETTING</th>
<th>GATEWAY PROGRAMS</th>
<th>RELATIONSHIP</th>
<th>BRAIN &amp; SCIENCE</th>
<th>CLSIB PROCEDURES</th>
<th>TCHR/INSTRUCT. PRACTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some of our students' behavior kids, most of them can stay... get this up</td>
<td>She has a full classroom &amp; goes into others' rooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd grader example</td>
<td>Dim lights, lights covered to soften room when they enter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many SFPS stay in the room for her classes</td>
<td>On the light covers are clouds and stars, and it's just the image of laying on the floor and looking up</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give students permission to turn off their brains (i.e. to help sleep)</td>
<td>Imagine that you are under the clouds. You're outside. That image of being outside is really awesome</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One kid needed to do yoga poses before going back to class</td>
<td>Diffuser with colored light</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFPS Students: &quot;...whether it's relaxation or the movement poses, or just breathing exercises, you know, we do a lot of breathing exercises, the kids are starting to identify what they need.&quot; (i.e. guided imagery, the drum, to move, wake up)</td>
<td>&quot;I'm not just about movement. It can be about awareness of smells and how comforting they can be, or how annoying and distracting they can be.&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The classroom is the rug and the classroom is always tricky and I feel like next year that's going to be a huge part for me</td>
<td>Water fountain used during some guided imagery: &quot;What do you hear in my room? What do you smell?&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This year, started reading &quot;I Am Peace&quot; about mindfulness</td>
<td>Her room has not become a resource room or &quot;safe spot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posters with yoga poses (translations for in the hallway)</td>
<td>All students know her and are comfortable with her</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Turn your brains off... Get rid of your worries... I want you to be present...&quot;</td>
<td>Teachers need brain research</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part of Mind Up curriculum</td>
<td>Live goes to their rooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crime or breathing bell—students take turns helping</td>
<td>Second Step Lesson (e.g., empathy, problem solving, anger management)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outreach (YMMs for Patients)</td>
<td>Share zones, invite others to share, then the lesson—SFPS student lessons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small groups of 2-5 students 2 a/week for 20-30 min.</td>
<td>This year, started reading &quot;I Am Peace&quot; about mindfulness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Yes—notice breathing—holding breath when stressed and developing headaches.&quot;</td>
<td>Big things happening in HS—TCHRS say they need it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not sure if teacher observers are impacted.</td>
<td>&quot;Yes—notice breathing—holding breath when stressed and developing headaches.&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 4.** Sample Matrix Page. The matrices permitted analysis of various codes and prompted thematic development and further analysis (Kramer, 2020).

Three primary themes became evident during the process of developing the matrix and examining each individual interview in light of the other interviews. These included the foundational processes, the implementation processes, and the impact of mindfulness practices.

The ultimate goal in this process of interviewing, coding, memoing, reading, rereading,
analyzing, writing, and theme developing was to understand how schools use mindfulness techniques today and the level of impact they have on students’ social and emotional health. Grounded theory and case study development processes of collecting data from multiple sources, analyzing transcripts and field notes, and looking for codes provided the means to meet this goal (Charmaz, 2006; Yin, 2018).

I next move to an examination of my personal role in the research process. Crotty (2015) stated that “no object can be adequately described in isolation from the conscious being experiencing it, nor can any experience be adequately described in isolation from its object” (p. 45). This requires the researcher to identify his or her role in the research process which I aim to do in the next section.

**Researcher Experience and Bias**

Of special consideration is my role and background in Catholic education as a teacher and administrator. My study began with a contemplation of spirituality because my I felt interested in that area. As described earlier, however, I shifted to a study of mindfulness that in practice looks radically different than any programming in spirituality or religion in my professional experiences. Mindfulness practices have not been a part of my personal practice or experience in Catholic schools, creating greater ease in exploring a new concept across various school settings. This facilitated a separation of my research from my personal experience.

My study and background required me to step out of the private, Catholic sector and instead observe in a straightforward manner the mindfulness strategies that teachers and school personnel in public schools incorporated into their school day. Grounded theorists begin by studying contributors to the phenomenon, collect data surrounding the phenomenon, and analyze...
it to develop a theory (Charmaz, 2006). Following this procedure, studying secular environments, allowed me to separate my own background from the research study.

While I fully acknowledge that I have always been more connected to the spiritual than the secular, the research conducted in this study aimed to understand the experiences of my participants without personal influences. The caveat fell in analysis and development of theory. While I made every attempt to distance my personal experiences from the data, according to Crotty, theory development is derived in part with the influence of personal experience and is therefore unavoidable (2015). I began with a recurrent theme of spirituality, disassociated myself from my personal experiences in studying mindfulness in the research process, but ultimately circled back to the impact of spirituality as an overriding theme. The ultimate connection appeared inescapable from my perspective.

Criteria for Evaluating Qualitative Research/Validity

Data collection for this study was qualitative in nature. I recorded all interviews and Rev.com transcribed them all for interpretation of findings within a concrete format and not from memory. I used a methodical process to maintain fidelity and to serve as a blueprint model in an otherwise cloudy process. Interviews followed a semi-structured format. This allowed for consistency of data collection yet flexibility for interviewees’ personal stories and compliance with grounded theory methodology (Charmaz, 2006). I read and coded transcripts several times for reliability. In this project I worked alone and therefore coded the data in isolation. This presents a limitation according to Creswell and Poth (2018) since no additional team members coded and addressed the reliability factor.

I created forms for curriculum review and observations to gather similar information and establish clear comparisons between different school settings. These forms focused my
observations and review of materials in specific areas. During observations, I paid close attention to physical settings, student behaviors, and the role of the teachers.

While reviewing teaching materials, I sought to understand goals and objectives, curriculum structure, timelines for implementation, and training of teachers/instructors. Using the constructivist-interpretivist paradigm, this structured approach provided a framework for understanding the various elements of a classroom in a semi-structured, and arguably more meaningful way. Crotty (2015) noted that phenomenology “requires us to engage with the phenomena in our world and make sense of them directly and immediately” (p. 79). Using this approach to observations drew me into the world of the participants in order to develop a deeper understanding.

I also considered sensitivity to terminology an important consideration in this study. I found that schools focus on the specific terms like mindfulness, yoga, or meditation rather than the umbrella philosophy of “spiritual practices,” so I used this awareness in my interviews to foster open conversation. The focus rested on the social-emotional benefit of using specific mindfulness, meditative, or movement practices for their students, and my terminology throughout the process reflected that.

As recommended by Creswell and Poth (2018), following collection and analysis of data, I included participants in the process of validation, a process call “member checking.” Most of the participants wanted a copy of the transcripts which I sent via email. One participant provided additional clarification and feedback following the review of the transcripts. This system of member checking gave participants an opportunity to add to the dialogue and clarify points of our conversation and errors in the transcription. I then used the feedback provided during the process of analysis.
The constructivist methodology enlisted here also presented some limitations. The theory developed in this study reflected this group of participants and made no claims of replicability in another setting. As a social constructivist researcher, I recognized the contribution each participant made to our collective knowledge and understood that replication and generalizability in a study of this type was impossible, if even desirable. This study presented merely a snapshot of Minnesota K-12 school personnel in the early 20th century who chose to make mindfulness a priority. I next examine the steps taken to assure the confidentiality and proper respect due my study participants.

**Ethical Considerations**

The practice of ethics was as important in this study as in my work in the profession. I took measures to assure all participants and practices maintained a high-level of respect. This began with thorough preparation for the interviews, observations, and curriculum study. I spent time preparing for interviews and analysis by reading current literature to understand what was needed and to create my own personal form of research methodology under the case study and grounded theory frameworks.

**Participants**

The role and value of participants cannot be understated in a case-study project like this. I therefore took measures to treat my interviewees in a respectful, professional manner at each stage—recruitment, interviews, observations, and follow up. This included respecting their confidentiality from transcription to publication. I allowed my participants to share their personal stories about the implementation of mindfulness practices. I then used their stories to contribute to the body of knowledge on this topic.
Participants signed informed consent forms prior to the interviews and observations which detailed the process and provided an initial list of interview questions. I took measures to protect the privacy of the participants in this study through use of pseudonyms and collected documentation in password-protected sites with recordings and transcripts saved on OneDrive. Upon completion of the study and final approval, all confidential materials will be destroyed.

I also worked with participants through follow-up practices, including sharing of transcripts and accepting feedback. I took time to express my gratitude during the interviews and observations as well as through written appreciation later. I gave participants the opportunity to provide further feedback and clarification as well, affirming their role as important informants.

**Practices**

I also understood the value of ethical practices and procedures throughout the research journey. Toward that end, I used forms and procedures that ensured a consistent approach to observations, interviews, and analysis at each school setting. I obtained IRB approval prior to conducting interviews which explained that this study posed no danger to teachers or students. Working from a constructivist-interpretivist paradigm (Crotty, 2015), I attempted simply to observe, analyze, and understand without judgment. While I wanted consistent measures of data collection, the storytelling by the participants allowed for flexible interviews and the freedom to move the interview to topics most meaningful to them. Use of this model and these techniques fostered a balance between consistent data collection and participant freedom.

**Summary**

Whether we call it a research journey or a storytelling process, the path I took was one of twists and turns. I initially used the terminology “spirituality” instead of mindfulness and found quickly this presented a tough bird to swallow for prospective school districts. I changed my
terminology to “mindfulness practices” instead and moved to a study of individual teachers rather than complete districts. This proved wise as I benefitted from a much more diverse body of participants. Ultimately, I included six districts, observed their processes, and interviewed school personnel and administration to learn more about implementation, motivation, and obstacles. My own understanding of mindfulness reminds me to accept each leg of the journey with grace and confidence, believing in the necessity of hard work and a motivating vision. Although the obstacles I faced left me frustrated at times, I trusted they were a necessary and valuable part of the journey. I knew the mountain peak could not be far away and the view from there incredible. In chapter four I share a glimpse of that view, that is, my findings.
CHAPTER FOUR: FINDINGS

The purpose of this grounded theory case study research was to explore mindfulness practices teachers and school staff (administrators, social workers, etc.) choose to use with Minnesota K-12 students, the reasons for doing so, and the impact of implementation on students’ social and emotional health and well-being. I looked for patterns of implementation with the hope of creating a model for administrators and teachers who desire to do the same in the future. I conducted 13 interviews with teachers and school staff at various levels including one high school teacher, two middle school teachers, two elementary teachers, one elementary school social worker, and one high school social worker using the following questions as a guide:

1. How do K-12 teachers and professional staff implement mindfulness techniques to facilitate learning and promote social-emotional health and wellness in their students?

2. What, if any, impact does this implementation have on school climate, students, and staff as identified by school personnel?

Several themes emerged through the process of coding and analysis of data, which I organized in a general framework of the phases for implementation of mindfulness practices in K-12 schools. These phases included initiation, implementation, and impact and are detailed in Figure 5. During the initiation phase, important findings included the role of powerful people to begin and carry out programs and motivational experiences for beginning the process. As programs began implementation, participants described the obstacles they faced, the influence of gateway programs, and the specific practices schools utilized. Finally, the impact stage provided insight into the ways that mindfulness allowed students to disconnect, prepared them to self-
regulate and get ready to learn, and how it could ultimately lead to adult practice and culture shifts.

Figure 5

*K-12 Mindfulness Implementation Findings*

![K-12 Mindfulness Implementation Findings](image)

*Figure 5. K-12 Mindfulness Implementation Findings. This figure represents the overall findings of this study of mindfulness implementation in K-12 schools (Kramer, 2020)*

Table 4 provides a summary of participants and these findings. I used this matrix to understand what reoccurring themes presented themselves. In review of transcripts, I used Dedoose to begin developing codes. These are displayed vertically at the top of the chart. The matrix demonstrates the participants that discussed the themes during their interviews. I begin
Table 4

Summary of Themes that Affect Mindfulness Implementation

<table>
<thead>
<tr>
<th>Participant</th>
<th>School</th>
<th>Typical</th>
<th>Angelic</th>
<th>Teacher Leader Role</th>
<th>Grassroots Approach</th>
<th>Religion</th>
<th>Vulnerability</th>
<th>Lone Ranger</th>
<th>Self-Regulation</th>
<th>Gateway Programs</th>
<th>Relationship</th>
<th>Wellness Programs</th>
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*Table 4. Summary of Themes that Affect Mindfulness Implementation. This table reflects the emerging themes that developed through analysis and coding of data.*
with a discussion of the first set of findings described in my K-12 mindfulness program implementation model (see Figure 5), the initiation process.

**Initiation**

Summer summed up her motivation for implementation in saying that “students today need more … more attention, affection, and time.” Other participants in this study shared similar feelings in both their motivation for implementing mindfulness programs as well as the perceived impact they found in their individual settings. In this section, participants demonstrated the “more” that Summer suggested as discussed in the key areas of motivation and the influential people who began the process in the various school settings.

**Motivational Experiences**

Each participant in this study shared their reasons for implementation of mindfulness programing and the responses included key areas such as self-regulation and preparing students to learn, providing an opportunity to disconnect, and providing life-long tools for coping with stress, anxiety, and trauma. I next explore each of these areas in turn, beginning with the desire for greater self-regulation.

**Self-regulation and Preparing Students to Learn**

Four participants pointed specifically to regulation goals. They described the need to develop programs to assist students in managing their behavior and emotions, commonly called self-regulation. Laneya explained that in her experience, dysregulation sometimes stemmed from trauma, citing such examples as refugee experiences, victim or witness of abuse, death, or divorce. She summed it up, “Dysregulation is kind of an escape in a sense.” Brenda shared her concern in coping with her high school students’ blow-ups and behaviors, and she felt that “the self-regulation piece was missing.” Judy and Jamison, as administrators in School EB and BS
respectively, also felt a need for students to develop skills in self-awareness and grow in their ability to regulate their bodies and minds.

Other participants in this study identified a need to curb disruptive behavior. Cora began her practice because of the challenging needs of a particular class of third graders, a group of 29 with four students coping with level three emotional-behavioral disorder labels. She found the students could not focus the last 40 minutes of the school day and she needed to try something new. Mindfulness provided, she hoped, the answer. Like Cora, Emily in her role at another school, also in District E, tried mindfulness.

Three participants in this study worked closely with special education programs and each spoke to the need for programs that meet the needs of more students in the regular classroom setting. Giving students, those with special needs or otherwise, a home in the classroom was a valuable endeavor for Denise as she explained:

We don’t have to remove SPED or ADHD students for sensory or movement breaks. All students can benefit and not be singled out. We know that every kid can benefit from the movement, but we don’t have to remove that one child.

Students with behavioral needs were often the ones Denise and Alisa worked with in their pull-out classrooms in District M, but they both made a case for using mindfulness techniques to enable these students to self-regulate and remain in the regular education classroom and learn with their peers. Alisa echoed Denise’s feelings:

I also, for the last nine years have watched a number of kids have to leave the classroom for movement and sensory breaks and it’s gotten to be where we’ve all talked about different kinds of meetings. It’s like, why aren’t we doing things in the classroom? Instead of having ten kids leave, why don’t we start?
Similarly, Summer, a paraprofessional in School EC, recognized the chain reaction that led to students being separated from the other students:

   Very rarely is there somebody with just a label. A frustration turns into a behavior, turns into can’t work, can’t be in the classroom. So having these regulations, ways for them to bring it back so that they are in a place where they can learn, where they can be with their peers and find success … That’s a win for everybody.

Although this study focused primarily on students in the regular education setting, the growing needs of students not yet diagnosed with special needs who also deal with behavior issues obviously presents a concern for traditional and special education staff. Next, participants discuss their goal of making mindfulness available in both the regular and special education settings.

*An Opportunity to Disconnect*

Brenda and Denise identified the struggles they witnessed at the high school level in students and their perceived need for a break from technology. Denise said:

   I'm just so glad I'm not a teenager today. 'Cause I mean so many of them just can't shut off or shut down. I mean they're constantly on their phones, waiting for that next notification … The students come in and like, "I need my phone. It's emotional support." I'm just like, no, you're addicted to it. It's not an emotional support. You don't need your phone. And your phone is what's causing all these problems. But they don't see that. So many of them can’t shut off or shut down.

Like Denise, Brenda shared that her high school used a one-to-one technology program and students needed “an opportunity to disconnect.” Brenda said that mindfulness could be another tool for students “to take beyond high school or beyond school … to fall asleep or unwind.”
At the elementary level, an increasing number of students today work in one-to-one technology environments. Alisa shared her frustration with too much noise and talking, “As adults … if it's not people clamoring to us, it's our phones, it's the computers …” Brielle shared that at School EB they have a one-to-one devices model as well, and even though they limit technology use to 20 minutes each for math and reading, students still use technology at home. Brielle said, “I would say probably at least half of my class has some type of device on their wrist that they're able to text from.” The availability of digital media interaction made it a challenge for students to truly disconnect. The participants in this study suggested that mindfulness programming could provide a tool for coping with all the “noise” which is addressed next.

**Tools for Coping with Stress, Anxiety, and Trauma**

Four participants identified their belief that mindfulness had the potential to help students cope with stress, anxiety, and/or trauma. Jamison, principal at School BS, addressed a school-wide need for programs to help their students cope with trauma. He shared, “There are a lot of challenges that come to the building, trauma-wise. What we were trying to do, is … we’ve done a lot of work around being trauma informed, understanding our students, and mindfulness fit in with that.” Jamison further explained his hope to transfer the de-escalation techniques of mindfulness to the home through community outreach.

Brielle specifically identified several forms of anxiety, “I think anxiety is a big piece of our world.” She addressed two areas she witnessed with her primary-level students: test anxiety and ability groups. The first lesson of the year during mindfulness instruction asked the students “What do you worry about?” and Brielle shared, “It’s heartbreaking what they come up with.” She went on to address ability groups as a high area of stress for her students, “In first grade that
was one of the highest anxiety producers. What group they’re in. It’s like ‘Baby, you’re six. That shouldn’t even be on your radar.’” Brielle also recognized test anxiety becoming a problem at School EB. She said seeing test anxiety helped her to see the ripple effect in other forms of anxiety.

The middle and high school representatives in this study, Denise and Karen, addressed stress as a motivator for implementation. They identified very different stressors at this level than those experienced by elementary students. Denise expressed concern over the power of social media, “Everything looks rosy for people when it’s not.” Young people compared themselves to the “rosy” lives of others and easily became more anxious or depressed. When asked to identify other specific stressors her students face, Denise added environmental factors, parents’ mental health, substance abuse, high FRL, and disconnection—-isolation from others due to video game use—-on weekends. Karen added other stressors such as vaping, drugs, smoking, eating disorders, and self-harm (i.e. cutting) in addition to the teenage stressors of past generations. Karen said that mindfulness “is giving them some sort of way to kind of cope … with their stress that’s a healthy way.” I next move to a discussion of the influential people who initiated mindfulness programing and their impact on the level of success.

**Powerful People**

The participants in this study shared a strong connection to professional development and a passion for developing new programs for their students. Participants shared the roles of administration, strong teacher leaders who become catalysts for change, and “lone rangers” who chose to implement mindfulness independently in their school settings. Each provided a unique perspective in understanding effective means of implementation.
Administration

Participants in this study included both passionate teachers and administrators. In the interviews, they shared how working with both types of leaders simultaneously made for the most synchronous and influential mindfulness programming. This study included two principals. The first was Jamison of School BS, and following the interview, he set up an observation and interview with one of his passionate teacher leaders, Sharon. In School EB, I interviewed several teachers and two of them recommended that principal Judy also be interviewed. In each interview I asked for recommendations of others who should be interviewed, and no other principal recommendations were made. This, as well as the conversations that took place with teachers and other staff members, indicated that passionate teacher leaders most often took the key player role in implementation of mindfulness programs. Those teachers began mindfulness practices in their personal or professional lives, found value in doing so, and then approached administration for further training and development in their educational settings, what may be referred to as a grassroots approach.

Typical approach. A typical approach for administrative involvement largely included completion of administrative tasks, which to a greater or lesser degree in each school, reflected the administration’s level of commitment to try the new programming. Alisa identified her principal as “on board,” and they agreed to try it, but they warned her of the existence of naysayers. Brenda said her principal “supported it but didn’t praise it.” Her interpretation for their minimal involvement and commitment stemmed from a concern about religion. Cora and Laneya felt administrative support because they provided training opportunities and funding. Others enlisted the assistance of principals to write grants. These included Alisa, Brenda, Lauren,
Cora, and Denise. Grant writing to obtain funding will be further addressed in a subsequent section.

Incorporation of professional development opportunities related to mindfulness also indicated the role and level of involvement of administrators. Training and workshops initiated by the principal trained teachers in mindfulness habits for both the adults themselves as well as their students. Laneya, at School EC, described the whole-school mindfulness activities that took root with administrators introducing new practices during “Mindful March.” Laneya commented, “I think definitely administration sees that there is a need for helping kids across the board deal with their emotions and be mindful of their social interactions.” This was evidenced in the training provided for school personnel.

Several participants pointed to the powerful role of administration in the ways they establish programming and culture. Sharon and Brielle described, echoed by principals Jamison and Judy, a concern about the mental health of staff as well as students. Principals Jamison and Judy both demonstrated strong levels of staff support, both informally as well as through formal training. Brielle indicated that Judy initiated two separate trainings in adult self-care. Even in schools like Karen’s, where she took a grassroots approach, the principal gave her a voice in their professional community by inviting her to share her personal findings regarding the practice of mindfulness in her classroom.

Participants described the level of power of administration and the “typical” approach described most often. It took form through financial support, professional development, and social programming for the school culture. School BS described an atypical approach to administrative involvement in mindfulness programming.
Atypical approach. Principal Jamison’s role could perhaps be described as even more far-reaching than those previously described. In his interview, he shared, “I don’t dabble. If we’re gonna do something, we go full out.” He demonstrated this in his commitment to providing funding through grants and use of Title I funds. The level of training was unrivaled by any other participant in this study. He established training for the entire school community, including teachers, support staff, and even clerical and custodial services. Sharon, a first-grade teacher in Jamison’s building, described how the custodian laughed when he received the book they were assigned to read about Yoga Calm. “Look, it’s for everybody,” Jamison responded.

While most of the other schools provided some form of professional development in mindfulness practices, Jamison’s school alone described this high-level of staff, student, and family training and participation. Administrators, while valuable, represented only part of the leadership required in initiation of mindfulness. Passionate teachers also stepped up.

Teacher Leaders

While the role of administrators carries a significant amount of weight, strong teacher leaders overcame any such restrictions and developed programming themselves, often before the administrators developed an interest. Cora followed both her administrator’s lead and branched out on her own. After a brief introduction to mindfulness and yoga, she sought out more detailed plans to use with a particularly challenging class. She reported:

So we would come back after math; everybody would gather back in the classroom and we would have about 40 minutes left of the school day where we were supposed to teach science, social studies, and health as our theme topic at the end of the day. And my kids could not refocus at the end of the day, and I knew by the second week of September that I needed to be able to do something. So I began researching mindfulness.
Her research uncovered mindfulness activity cards, and when she used them with her students with success, she registered for an online two-credit course to learn more. The course validated what she observed in the classroom and encouraged her to continue with greater intentionality. Ultimately Cora’s leadership and sharing of techniques prompted her colleague Brielle to accept the challenge.

Laneya and Emily held specific roles in their district that reinforced their leadership. Laura received Yoga Calm certification and presented a couple of overview training sessions for District E. Emily served as an instructional coach with a primary role of supporting teachers who desired to obtain more mindfulness strategies for their toolbox. Those teachers practiced yoga personally as well, something that they described as an essential element of implementation of mindfulness programming. Their leadership began with a personal passion that they transferred to the school setting in an effort to make positive change.

Sharon, a first-grade teacher at School BS, played an instrumental role in bringing mindfulness into her school as well. She shared a powerful personal story about her preschool-aged son coping with sensory needs and the coaching and education she received from an occupational therapist. District B permitted a Yoga Calm residency in several classrooms, and Sharon volunteered. Although the program did not take off immediately following the residency, Sharon said, “the idea did not die off.” In the few years that followed, she and others on School B’s Building Leadership Team (BLT) wrote grants and worked with principal Jamison to find funding for school-wide training and implementation.

Sharon’s belief in the value of the program pushed them to the next level after a tough winter and dwindling spirits during a challenging school year. She approached the principal and developed “Mindful March” activities to rebuild momentum, all while working on the
certification process to become a Yoga Calm trainer. She made a case for adding this training role to the school budget to develop a sustainable program long-term. Understanding the dynamics of this particular school setting and the level of teacher turnover, Jamison agreed to make Sharon’s training in Yoga Calm an additional part of the initiative.

The value of administration and passionate teacher leaders became evident throughout this study, but several schools also presented an alternate approach which I labeled the “Grassroots Approach.” This approach connected with the idea of strong teacher leaders, but at the time of the interviews, these leaders functioned primarily as “lone rangers” in their school systems. I describe the grassroots approach to implementation next.

Grassroots Approach

The interviews with Alisa, Karen, Brenda, and Denise provided concrete examples of the grassroots approach to introducing mindfulness in their classrooms. Alisa, a school social worker at School ME, worked with students in both regular and special education settings. She taught character education to students at various levels and chose to attend a three-day Yoga Calm training to add to her “toolbox.” She then began incorporating the techniques and brought this to the attention of the school principal. She shared:

Our principal down here is still, you know, a couple of years in, still kind of new, but he is like willing to … “let’s do this, let’s try this.” When I asked him about writing the grant … he said, “Yep.” I said, “I know not every teacher is going to appreciate it. There will be some naysayers.” And he said, “I just want you to know, yes, that will be the case” … but I don’t think that can change me moving forward on this.

While the administration may not have led the charge, Alisa indicated the importance of their support alongside her personal conviction.
In District M, administration supported grant writing to obtain mindfulness teaching tools (i.e., breathing balls) and upgrades to the school’s “Smart Room.” Furthermore, this district expanded its mindfulness programming with staff workshops. Even with these initiatives, during the two interviews conducted with Alisa during this study, she described only minimal carryover occurred in the regular education classrooms.

Programming at the middle and high school levels, as observed in this study, could all be categorized as a grassroots approach. Denise, a social worker at School MH, took part in a three-day Yoga Calm training with Alisa, the elementary social worker, and then began her work with Change to Chill. She shared a feeling of frustration that the staff at her school did not yet value mindfulness practice because they did not recognize the benefit and had not yet developed a personal practice. Some believed it was “foo foo,” and Denise concluded that the techniques pushed them outside their comfort zone.

Brenda, a high school ASL teacher, took the personal interest in mindfulness she developed during a graduate course back to the classroom independently. Her introduction of mindfulness practices for high school students included both those in regular and special education settings and became a natural extension of the school’s wellness center. She also felt supported by administration in writing a grant to obtain materials and even had one school leader join the class for their mindful moment of the day. However, she expressed some frustration in her isolation:

Are they supportive of what I'm doing? I think so. Do they go out of their way to say, “you're doing great things by bringing this into your classroom for our school as a whole?” No. Are they seeing the benefits of it? Yes. You know what I mean? It's like I
don't think that they disagree with it. I'm not doing it on the sly, but we're not doing it as a complete school either.

Lauren began an independent personal mindfulness practice about two years before she brought it into the classroom. She felt strongly that teachers must also practice mindfulness to be truly effective. She said that her personal practice, “100 percent affects my ability to teach.” Her motivation to learn mindfulness stemmed from her own issues with anxiety and she attested that she experiences less anxiousness now than when she began practicing five years ago.

In every case explored, participants noted the role of administration as an important path to implementation. Participants indicated a variety of formats for implementation including a “top-down” methodology, through passionate teacher leaders who pushed administrators to move further down the track toward full implementation and training, and “lone rangers” who began implementation without a structured system of support. Each of these methods for implementation came with their own set of challenges which I discuss in the next section.

**Implementation Process**

Following initial consideration and developing a motivation, participants indicated distinct aspects for consideration during the implementation process. These included elements that made implementation challenging and others that facilitated a smooth process. In the next section, I address both of these areas before detailing the specific programs and tools that schools chose to incorporate into their mindfulness practice.

**Obstacles to Implementation Faced by Stakeholders**

Adopting educational initiatives always presents a challenge for school systems, but participants indicated that in an undertaking like mindfulness, the obstacles manifest themselves in arguably more powerful ways. The findings related to obstacles fell into three major
categories including the question of religion, vulnerability, and what I termed the “lone ranger” syndrome. Each of these challenges reflected the powerful dynamics of personal experiences and the language utilized to communicate with the public. I begin with a discussion of the obstacles faced by stakeholders related to religion as identified by the participants in this study.

Religion

When asked about any obstacles they faced in implementing mindfulness programs, six participants identified religious connotation as an obstacle. They addressed the concern from two angles: the history and personal experiences of religion and/or yoga, and the terminology used to communicate mindfulness techniques.

History and beliefs. Four participants, Laneya, Brenda, Karen, and Judy, noted that personal beliefs about yoga and its connection to religion created tension and some level of opposition, particularly for parents. Laneya shared:

A lot of people still have a religious connotation with yoga … When I’ve tried to bring some of those pieces in, there have been some students that weren’t allowed to participate. Definitely when I was going in and doing some of those full class lessons, there would be a few students that were sitting out because their parents had indicated that they weren’t okay with that, so that can be an obstacle.

Karen too, noted that some students from “conservative families would say it was against their religion to participate,” which led to careful use of terminology and communication with families to more clearly articulate the program objectives.

Terminology. Judy, Alisa, Denise, and Karen addressed a concern over use of secular terminology. Alisa attended a three-day Yoga Calm workshop and leaders there addressed the
difference between religion and spirituality. Alisa described the need to develop appropriate terminology:

When you bring this back to your school, for most of us, it's public school. You need to come up with a name that your school community can live with. Because there are … people that right away go to the history of that based on religion.

Karen too chose to entitle her classroom mindfulness practice “Mindful Minutes” in order to avoid religious trigger words like “meditation,” and Judy identified the terms “centering” and “mindfulness” to best fit her school setting.

In a background interview with Kathy Flaminio, founder of 1000 Petals, she specifically addressed religiosity and the need to use secular terminology to avoid misrepresentation. In her training programs instructors used words like “reflection” versus “meditation” and “Mindful Movement” instead of “yoga” to more clearly articulate the practice without eliciting an image of religiosity. According to Flaminio, the Mindful Movement program used care to avoid chanting or mantras, chakras, and namaste for these same reasons. Teacher resistance represented another obstacle to implementation of mindfulness practices which is included in the next section on the obstacle of vulnerability.

**Vulnerability**

Vulnerability takes a variety of forms, and participants discussed its influence on both students and adults alike. The reasoning behind this form of resistance took various forms which fell into three primary areas including physical vulnerability, social-emotional vulnerability, and teacher beliefs. Four participants described some resistance due to physical limitations, but a more important finding was the number of people who addressed social-emotional stressors that
led to a resistance to participate. I begin with a discussion of the findings related to physical limitations.

**Physical vulnerability.** Yoga programs involve stretching and moving the body that for some people may feel physically uncomfortable or awkward. Brielle shared the struggle she encountered with her second-grade students:

> When we do the GoNoodle videos on a rainy day just to get energy out I would say three or four out of my 24 are like, “I'm not doing that,” especially the guided dance ones. There are some kids that are just like, I'm just not into that. When we do anything mindful all of them do it.

This seemingly simple shift from yoga to mindfulness made a significant difference in her classroom. Cora also discovered that students in her classroom needed a similar shift.

> They have these little cards that you can use, and I already had yoga in the classroom that I had been using for several years before that. This particular group was not … yoga was difficult for them because they felt awkward, and when they felt awkward, they misbehaved. So, I began using the mindfulness games with them and really they were just basic breathing exercises and things like that and visualization.

While yoga made students feel awkward, a mindfulness approach proved a better fit for Cora’s students.

Sharon alone addressed physical limitations that teachers may cope with and the ways they hinder implementation of yoga or other movement formats. With her bad back, she physically could not move her body into the yoga poses. She overcame this obstacle with the assistance and encouragement of trainers who completed residency programs in her school, which is addressed more fully in a subsequent section.
Lauren and Karen, representing the middle school perspective, identified the physical struggles of this particular age group. In Karen’s experience, some students were just “too cool or just didn’t want to do it.” One student identified a legitimate concern given the movements and poses, “I’m gonna rip my pants.” Middle and high school students provide insight in the way they articulate physical limitations associated with yoga. Like the experience of Cora and Brielle at the elementary level, Lauren adapted her programing in a direction toward mindfulness. She explained:

In my own practice, I tend to err on the side of mindfulness things, just because they, again it's a little safer and less, I don’t know, I think the kids get really nervous about being asked to be vulnerable in that physical way and show kids that they’re doing something with their body that might be difficult for them. And so I err on the side of having less yoga and more mindfulness activities.

Physical vulnerability explains some of the resistance, particularly for middle and high school developmental levels. Next, we move to a discussion of the social-emotional obstacles related to mindfulness practices which participants identified with greater frequency than physical limitations.

**Social-emotional vulnerability.** Interviews led to identification of several social-emotional obstacles both for teachers and students. Eight of the thirteen participants in this study identified the way social-emotional obstacles for students connected to trauma and/or anxiety. Brenda and Alisa spoke to giving students the freedom to choose to close their eyes, leaving lights on, and cracking the door. Both received training to prepare themselves for students coping with trauma, and Alisa shared, “In my training, I invite them to close their eyes. That’s really, really important because for some kids that’s not comfortable. For maybe some kids with trauma,
that is scary and brings them places they don’t want to go.” Brenda too said that she learned “to crack the door so students do not feel trapped, especially those who have experienced trauma.”

Laney a, who created mindfulness programs to assist teachers, addressed the wariness some students have toward participation:

Some of my students aren’t ready to go to that calm place right now due to trauma and other pieces, that I’ve had to tread a little bit lightly. … Right now I have just a lot of students that are very, very uncomfortable getting to that calm state. That’s kind of where I’m at with a few of my students that … they’re trying not to think about a lot of things, and so getting calm can be a little scary.

She added that she discovered a pattern that suggested more boys have been less comfortable, she suspects due to trauma in their lives (separation from birth parents, abusive backgrounds).

Furthermore, because some of Laneya’s students used mindfulness techniques in therapy outside of school, they dismissed them because “they didn’t work.” The irony of mindfulness work addressed by the participants was that while schools offered mindfulness tools to manage anxiety and trauma, anxiety and trauma also prevented students from engaging in the practice.

Lauren concurred with this notion, addressing the concern for adults as well as students in demonstrating vulnerability. She identified a resistance for teaching staff to participate because mindfulness led to “bringing up feelings that a lot of people push down.” She spoke to the need for elements of choice to give control to the participants and thus create some level of buy in. The next section explores some of the teacher beliefs that prevent buy in.

**Teacher beliefs.** Alisa called them “nay-sayers,” but whatever the identifier, some teachers and school staff rejected participation in, and instruction of, mindfulness programs. Participants suggested that mindfulness activities took adults outside of their comfort zones, and
adults believed that students would think this programming lacked purpose and therefore would not buy in. Also, they indicated that adults lacked a personal mindfulness practice that prohibited them from becoming comfortable and able to serve as a mentor in practice.

For some teachers, mindfulness or yoga programs simply had not been a part of their prior experience or their personal practice. Denise reported, “Some staff don’t, maybe, see the benefit or aren’t as comfortable doing it.” Alisa put it concisely, “It’s outside their comfort zone.” Judy discovered the difficulty for people who did not practice mindfulness themselves in terms of focus, mindful awareness, and/or calming activities. Like Judy, Denise noted that some needed to experience the benefits for themselves through self-practice to be convinced the program held value. She referred to several trainers who said:

Before she actually practiced it, she thought it was all foo-foo too. And so, I think really for people to actually be able to do it themselves and see, wow, that really does make a difference, it really is helpful.

Sharon recognized the value of teacher personal practice, coupled with the tremendous challenge. Even after full implementation and extensive work building-wide at School BS, she stated that they had still only developed about 80% buy-in from the school staff.

As a school social worker, Alisa described how she visited each elementary classroom and trained students while teachers remained in the room. Although this design encouraged teachers to practice along with the students, she said teachers “seem receptive to what I’m teaching … but there are some who are making noise during the chime.” They sometimes observed her lessons, but they also made noise and chose not to transfer Alisa’s lesson into their daily classroom practice.
Participants Judy, Emily, and Cora addressed an argument for teachers about not having enough time, but they quickly formed rebuttals to that argument. Judy said that when people felt stressed, mindfulness took a backseat. “It is almost always because they aren’t managing their time, and to them, it’s not important.” Emily too suggested a lack of priority given to mindfulness because teachers would forget about it in the busy-ness of the day-to-day.

Lauren alone addressed a concern about an adult fear regarding social-emotional behaviors. She said that in her experience adults struggled with the unknown and how they would cope with the emotional reaction of students when they became uncomfortable or vulnerable. This is valuable insight as we look at the reasons adults fail to buy in. Next, participants identified another obstacle toward implementation: teachers who function in isolation or as “lone rangers.”

*Lone Rangers*

Lone Rangers faced a struggle for implementation primarily in terms of funding and professional support. While implementation of mindfulness was not cost-prohibitive, funding demonstrated a level of commitment from administration that equated with professional support. The next section addresses the concerns of lone rangers, beginning with finding funding to support mindfulness programs.

**Funding.** Twelve of the schools in this study utilized some type of grant to develop mindfulness programing, suggesting that finances play a key role in implementation, yet mindfulness was not cost prohibitive. Karen represented the only interview participant who did not describe grant funding as part of her implementation process, choosing to use YouTube videos as the basis of her programming. Grant funding permitted schools to purchase teaching tools such as breathing balls, activity cards, and teacher resource books. A grant gave Alisa an
upgrade to the school’s “Smart Room” in the form of lighting and a special Change to Chill space for the teens in Denise’s building. Jamison and Sharon’s school used both grants and Title I funds to enable affordability. Grants provided professional development for instructors where most school districts lack funding in traditional budgets for this type of social-emotional programming.

Rather than rely solely on grant funds, School EC demonstrated a commitment to mindfulness by hiring personnel (Emily) to serve as an interventionist. Teachers who worked in isolation did not have access to resources for specialized training programs or curriculum development. Cora and Brenda utilized YouTube videos, establishing that while funding would make implementation easier for lone rangers, implementation is still possible without it. The caveat is that it would require significantly more personal investment of time to develop programming, which ties to the need for professional support.

**Professional Support.** Teachers working in isolation struggled to implement programming that they believed had school-wide value when given a situation where they only had control over their own classroom. Sharon, a first-grade teacher at School BS, identified the struggle of implementing mindfulness programs in isolation or in becoming the sole leader. In going through Yoga Calm training, she heard from lone rangers. She said she felt sorry for others who were returning to schools following training programs positioned to be the only one implementing mindfulness programming. Sharon continued, “That’s really hard. There were a couple of us that had the idea, and a couple of us that had kinda dabbled in it, and then it still took three years …” Implementing this type of programming in isolation presented a great challenge for teachers lacking emotional and financial support.
Denise, a high school social worker, expressed frustration that their colleagues had not yet bought-in and begun implementation in their specific classroom settings, still feeling like they were taking “baby steps.” The other middle and high schools also worked primarily in isolation.

Alisa, working with elementary school teachers and students, demonstrated what can happen in a year. In my first interview with Alisa, she described a lone ranger scenario where she modeled lessons in classrooms, but the teachers did not appear to carry over techniques in their own practice. She described the seemingly little impact this time had on the teachers, but by the second year I observed several classrooms in which teachers had begun to incorporate the teaching tools in their classrooms. The number of active participants appeared limited, but progress had been made.

In the next section we look with hope to the programs that facilitate, rather than hinder, mindfulness program implementation, what I labeled gateway programs. This includes existing school climate as an important factor in the implementation process as described by interview participants and observed through school visits.

**Gateway Programs and School Climates**

Participants in this study identified several building blocks or gateway programs that facilitated implementation of mindfulness interventions including self-regulation programs, school or district-wide wellness programming, and the building of relationships. These types of programs set the stage for further social-emotional programming. I begin with a discussion of the strategies study participants used for teaching self-regulation.
Self-regulation

Strategies for self-regulation had become increasingly necessary in academic settings today as described by participants in this study. These took a variety of forms including positive-based intervention strategies (PBIS), zones of regulation, and character education. Each of these programs was designed to work proactively with students to help them notice their feelings and prepare to respond in socially appropriate ways.

Positive-based intervention strategies (PBIS). Positive-based intervention strategies offered a proactive, rather than reactive, method of student behavior management and assisted in training teachers to create a positive learning atmosphere. Six of the 13 participants in this study (Cora, Brielle, Summer, Laneya, Jamison, Judy) identified PBIS as part of their school-wide programming. During observations in Schools EB and EC, teachers pointed out bulletin boards and motivational programs from the PBIS team that encouraged recognition of positive behaviors. Laneya and Summer described the programs in their schools designed to help students be more mindful of their behavior and encourage positive behavior in others. Summer shared:

Last month we did “clover grams.” The kids are caught doing something good, they get a catch of clover, but last year instead of keeping those catches of clovers and putting them in a drawing where they could win a prize, they went and gave it to somebody else. It could be a staff person, it could be a student, it could be somebody in our lunch, it could be their sibling. They got the award and they gave it away immediately. It was pretty neat to see.

PBIS enabled students to grow in awareness, an important step on the mindfulness path. Judy, in her role as administrator of School EB, shared her goal in developing self-awareness in her students and the foundational role of PBIS programming:
It really built out of our PBIS problem-solving model and we did a little bit of work with *The Habits of the Mind* by Covey. He's got a great program, “The Leader in Me”. As we ventured into that, probably about 5 years ago, we found that kids’ self-awareness, the ability to calm, center and really know yourself before you act was missing.

Like Laneya, Judy said she tried “to tie mindfulness and personal reflection into any problem-solving process.” Positive-based intervention strategies challenged students to examine their behavior and problem-solve better choices for the future. The zones of regulation (see Figure 6) provide a closely related program, sometimes overlapping in schools.

**Zones of regulation.** Use of the zones of regulation and/or regulation rooms provided a second avenue for helping students self-regulate as identified by five participants in this study. Like PBIS, this approach provided a proactive, rather than reactive, method of behavior management. I observed the use of zones in both Schools ME and EC. Alisa, a social worker at School ME, shared posters in her specialized intervention classroom. The posters enabled the students to articulate their present state of mind or “zone.” Alisa began her small group time by giving students an opportunity to share their zone. I also observed the zones Laneya used at School EC. Both teachers hung posters in their rooms like the one in Figure 6.

These schools also demonstrated use of regulation rooms. They shared that their objective in working with the zones was to enable students to identify their zones and develop coping strategies to move them into the green zone. Laneya explained how the zones connected to mindfulness work:

> We talk about zones of regulation, which I guess is another mindfulness curriculum and being more mindful of what your emotional state is and what your body is telling you; that kind of thing. I work a lot with that, with students, and trying to weave some of the
mindfulness pieces in there when we talk about setting up a toolbox.

Figure 6

*Sample Zones of Regulation Chart*

Laneya identified here the connection between zones of regulation and mindfulness, where the students learned the language and skills to monitor their behavior and then developed conscious awareness of their behavior, a primary goal of mindfulness programs. Laura and other school staff created lessons to be used by classroom teachers and started the year by modeling one lesson in each room. She shared that she and her colleagues wanted to “help kids to be more mindful of their emotional state and their behavior.”
During observations, I noted that Schools BS and EC also created regulation spaces in the classrooms to provide easy access to regulation tools for students. In Sharon’s classroom at School BS, a simple plastic bin available in the classroom provided a collection of sit spots, fidgets, glitter balls, and breathing balls which allowed students quick access. In one 30-minute observation, I noticed several of her first-grade students get up and find the tools they needed for soothing or calming.

Summer, a paraprofessional at School EC, helped to develop mindfulness boxes throughout her school. She described the purpose of these tools:

We’ve got, I believe in just about every classroom, what we call a cozy corner, or anytime that somebody needs just a few minutes to pull it back together. I think that that’s pretty well across the board. In each cluster in K-5 we’ve got a mindfulness box with some self-regulating tools inside of it.

Schools ME, MH, and EC discussed and demonstrated ways that students and teachers utilize regulation rooms in addition to zones of regulation techniques. Summer described the purpose of these specialized spaces, “We have safe spots … Some kids who just can’t be in the classroom have places that they can go regulate themselves and come on back.” The regulation rooms provided an avenue for helping students to regulate their bodies and emotions.

Both the zones of regulation and regulation rooms focused on the use of tools for managing emotions such as fidgets, breathing balls, cards with movement activities, coloring sheets, or weighted blankets. Emily showed me several spaces in School EC that served as teaching spaces and self-regulation areas. Each space simply provided a variety of resources or tools for calming, de-escalating, and regulating emotions. These included some of the aforementioned tools that could fit in a plastic bin, but also large sensory tools such as yoga
mats, stationary bikes, trampolines, and contraptions to enable students to flip upside down or work on balance. Staff members took students to work in these rooms as needs arose during the school day.

Emily described the use of an additional resource room at School EC they identified as a movement lab:

We have a movement lab with our school that is taught by one teacher, but it's also used as a resource for intervention. A lot of teachers have adopted movement-based strategies in their classroom. It's not specifically mindful, but it is a break from sitting in your chair traditional learning. There are bikes … It's all based on brain research as well. There are cross body activities, there are basketball throws. There are all kinds of ways that incorporate movement and activity with learning the standards. I feel like, thinking through everything I've seen in the classes, I've seen a very intentional introduction of those types of activities too.

Similarly, in School EC participants described the intentional ways they made resources available to assist students in self-regulation. Their strategy has been providing the tools in a variety of spaces. At the high school level, School MH developed a similar regulation room as described by Denise through the Change to Chill program:

I bought a big bean bag, a rug just to make it more homey, a noise machine, salt rock lamp thing, waterfall, stress balls. There's a weighted blanket in there, coloring sheets, fidgets. Just a place for kids to come that just need to chill.

During my visit to School MH, I observed the space Alisa described and noted the specialized tools used in this high school setting mirrored those used in Schools EC and ME. I observed and discussed with interview participants the methods used for self-regulation and found similarities
at the elementary and high school levels, though elementary schools displayed many more 
options and tools. I next move to a discussion of the character education tools that participants in 
this study described in their schools.

**Character education.** Character education described a general term for programs that 
teach children social skills in a concerted manner. These programs, identified by four interview 
participants at both the elementary and high school levels, took a variety of forms which I 
described as character education or anti-bullying. In School ME, Alisa taught character education 
lessons for more than 11 years through weekly visits to classrooms for half the year. In the last 
two years, she switched her focused during these scheduled visits to mindfulness. Denise also 
described the use of an anti-bullying program at her high school. In School EB, Brielle shared 
the role of their school counselor.

Then, our counselor, her weekly lessons have kind of fine-tuned the lessons I guess 
would be a good way to describe it. She does lots of things. She does anti-bullying and 
friendship groups and just “be-a-nice-person groups.” She has added more of the 
mindfulness in probably the last year and a half.

Brielle and Alisa both described the organic way that character education shifted to mindfulness 
programs through the passionate teachers in their buildings who received training in mindfulness 
and brought it back to the schools. Character education provided an atmosphere that made a fluid 
transition to mindfulness. In the next section I describe still one more gateway program.

**School- or District-wide Wellness Programming.**

Participants in this study identified a couple of different influences caused by school- or 
district-wide wellness initiatives. These include programs developed by wellness committees,
teams, or centers. A second, closely connected means shared through interviews included professional development opportunities in the area of social-emotional or mental health.

**Wellness committee programs.** Cora, Laneya, and Brielle each identified school-wide wellness initiatives that prompted development or further growth in mindfulness programs. Laneya discussed Summer’s influential role as a district wellness committee member as well as a special education paraprofessional at School EC.

She's on our district wellness committee. They've definitely been very supportive of these things, so I'm sure she talked to you about her mindful Mondays, and she recruits some of us to get on the announcements on Mondays and share something. She created those (self-regulation) boxes a few years back that just have different tools that students could use, and I think in some grades, they're using more than others. I think she was kind of in the beginning stages of the momentum of this at that time.

Like Laneya, Brenda also credited the role of the wellness staff in her high school for “planting some seeds.” The school had a monthly program called “What Works Wednesday” during which staff shared with colleagues successful programs. She shared the impact of the wellness staff during an initial mindfulness presentation.

We have the opportunity to take classes that other staff members put together. So our wellness staff did something on mindfulness one time, and … they were able to share out and kind of got a lot of us hungry to try it in our classroom.

The wellness teams fostered an openness to sharing that garnered interest, inspired experimentation, and ultimately prompted further professional development opportunities.

**Professional development trainings.** Brenda identified the influence of professional development and school- or district-wide wellness programming. Sharon identified other
trainings that connected to mindfulness including adverse childhood experiences (ACEs) and culturally proficient schools:

Like we've been studying trauma informed practices, and we've been studying poverty, and we've been studying lots of … CPS … culturally proficient schools … We’ve been studying that for years, in our district, as it changed from white middle-class to very diverse, and the socioeconomic change, too … And so, we've been studying all the changes, but then it was like, well, but now what do we do with that?

Sharon described how the cultural trainings held great value in understanding the changing demographics of School BS, but she also recognized the need for programs like mindfulness that provided teachers with strategies for coping with the new struggles related to trauma, diversity, and socioeconomics.

Denise highlighted ACEs training as a steppingstone in her practice as well:

We have a lot of the ACES training too. So it was kind of good timing. We had the ACES training and then we had, I think, the mindfulness and … Change to Chill so being able to kind of plant the seeds of this and why kids might need these things.

These different trauma-related trainings demonstrated the schools’ prioritization of mental health as well as physical health programming. They set the stage for the learning of teachers, and as Cora added, also helped teachers manage their own mental health as they learned how to better serve their students. Next, I move to the findings related to interpersonal relationships that participants addressed, and I observed, in various schools. They demonstrated the value placed on fostering relationships in their school settings.
**Relationship-building**

In addition to programs that fostered openness to formal learning of mindfulness techniques, schools also made establishing a caring climate a priority according to eight participants in this study. Relationship-building included building trust, fostering ownership and choice, and establishing support.

**Building trust.** Brielle, Judy, and Alisa identified the key role of building relationships and a feeling of trust with students. Brielle and Judy shared a formal relationship-building program used at School EB called Check & Connect. The program paired students with significant behavioral referrals or attendance concerns with adult mentors in the building to raise graduation rates. The program fostered strong, positive relationships between students and adults. Brielle explained Check & Connect:

> Often it's a random connection where they just pop in your classroom before school starts and you just give them a hug and say, “Have a good day,” and for some kids it's a little more formal where there's a point sheet that their classroom teacher fills out and tracks their behaviors.

The Check & Connect program, developed by the University of Minnesota, provided a formal avenue to prevent students from slipping through the cracks. When students were identified because they had behavior or disciplinary issues, administration established an adult partner with whom the student could connect.

Alisa, representing School ME, shared the informal development of relationships. She worked with students in a special education setting during which relationships developed. She then transferred these bonds to the classroom during mindfulness instruction where she worked with a combination of students in regular and special education classrooms. Because she visited
each classroom, every student knew her and could feel comfortable addressing needs with her. “Kids need to be heard,” Alisa advised, so she made a habit of being quiet to get her students to talk. She further shared, “But the relationship is … everything stems from it, doesn't it? Because then it's easy to go talk with Mrs. X about maybe a problem behavior or maybe something that's upsetting them at home.”

Whether through formal programming or informal conversations, the schools demonstrated the value they placed on meeting the students where they were at and getting to know them at a deeper level. They did so with the hope that they could help the students cope with any difficulties and move them toward success. One avenue toward helping students reach success involved giving them ownership and choice.

Ownership and choice. As described in the findings section on initiation, mindfulness naturally required a certain level of vulnerability, particularly in schools who used yoga to support their mindfulness programs. This suggested yet another element for a caring climate--ownership and choice. Alisa shared that choice could be as simple for students as closing, or not closing, their eyes, noting “some kids just aren't comfortable.” This caveat was mirrored by Brenda who learned that her high school students also needed the classroom door open in order to feel comfortable. Brielle discussed the importance of giving students the choice of whether or not to participate at all. The GoNoodle application involved dance, and Brielle found that some students simply felt uncomfortable with the structured dance moves.

Lauren noted the importance of giving students choice in still another way:

I was just at a training yesterday where we talked about how oftentimes a will gap … refusing or saying you don't want to, is actually a skill gap, and it's just uncertainty about
whether or not you’ll be able to do it. And I think that’s very true with mindfulness and with yoga … It's really vulnerable to try something new.

Addressing the vulnerability required by giving students choice allowed them the “will” to participate and enabled them to learn the “skills.” Like Lauren, all other participants indicated that they encouraged, but never forced, students to participate. Along the way, teachers and school systems provided the support to accompany the encouragement. I address the various forms of support in the next section.

**Establishing support.** A third element in creating an environment for effective mindfulness practice consisted of developing support and comfort for student, family, and staff practice. In working with first graders and becoming a trained Yoga Calm instructor, Sharon developed an understanding of the support her students needed. She addressed the teacher-student relationship and the impact of understanding the needs of students, “Okay, they’re not being disrespectful; their bodies need to move that way in a mindful and not destructive way.” Knowing her students and their needs meant she could give them the most effective mindfulness tools.

Jamison and Judy, as administrators, spoke to the need for communication with families. Jamison’s tweets and Judy’s newsletters provided families opportunity to deepen their school relationships and understanding of mindfulness programming. School BS offered family events where students took the lead and trained their parents and families. Judy also initiated mindfulness training for her staff at School EB to help them cope with the mental demands of their profession.
Sharon received two strong forms of support to assist her in implementation of mindfulness, especially in her role as a school leader including a co-teacher and outside training support. Her ELL co-teacher worked in the same classroom most of the day. She admitted:

One of the reasons that I could manage the Move Mindfully at such a high-level was that “Audrey” and I were co-teaching the children. So there was … not like a shared responsibility … like we both taught 100%, but if I was managing all that trauma by myself, and trying to teach them, I would not have been able to implement school-wide Yoga Calm.

This high-level of support from a co-teacher, coupled with assistance from trainers made all the difference for Sharon. She discussed the importance of outside support from Yoga Calm trainers for mindfulness training and implementation:

And so, to have that resource right there, every other month checking in with you, I think it's why we were able to shift the whole school instead of just a grade, or a grade level, or … I think it can be done, organically, but I don't think I could have done it organically. Like I couldn't have just taken my book and my idea and gotten the whole staff to shift.

In School BS, support from trainers in mindfulness allowed teachers to ask questions, overcome physical limitations, and implement programs school-wide.

Development of programs that enabled staff members to feel comfortable enough to practice led to more solid instruction and arguably better adult mental health. Lauren noted her capacity to effectively model mindfulness practice and encouraged independent use with her students because she first established her own personal practice. Lauren said that her personal practice, “100 percent affects my ability to teach.” Sharon, Alisa, Denise, Cora, Brielle, Summer, Emily, Laneya, Karen, and Jamison echoed this belief. The participants in this study clearly
identified personal practice as an important factor in effective implementation. Instructors who practiced the techniques developed experiences that enabled them to provide the support students needed. In implementing mindfulness programs, the schools had to cope with obstacles and were bolstered through gateway programs. Next I review the mindfulness curriculum options, tools, and techniques that participants noted during interviews and observations.

**Mindfulness Programs**

Each school and teacher who participated in this study made conscious decisions about the type of mindfulness that best fit their school and students’ needs. Some options included formal published programs with training. Others used a somewhat less structured approach with use of books and resources that served as instructional resources or guides. Still others utilized an even less structured program where resources were simply gathered online and put in a format that made sense for the teachers. I begin by addressing the formal curriculum resources participants identified.

**Curriculum and Program Choices**

The pool of resources for teachers appeared to have grown a great deal in recent years, with several programs being identified by teachers in this study including Yoga Calm, MindUp, Second Step, Learning to Breathe, and Change to Chill. I begin with a sampling of the curriculum options, starting with the most widely used mindfulness programming demonstrated in this study, Yoga Calm.

**Yoga Calm.** Started by a husband and wife team, Lynea and Jim Gillen, in a rural school in Oregon in 2000, Yoga Calm is now practiced in schools worldwide (Yoga Calm, n.d.). The Yoga Calm program encompassed yoga, mindfulness, and social-emotional learning for children and teens. Alisa, Lauren, Denise, Laneya, Jamison, and Sharon received training and developed a
practice of Yoga Calm in their schools. Additionally, Brenda used the Yoga Calm cards with her students. The Yoga Calm program was widely used in the Twin Cities area of Minnesota because Kathy Flaminio (2019), owner of 1000 Petals, worked to train schools and hospitals in the area. According to the 1000 Petals website, “Yoga Calm trainings teach adults how to creatively integrate yoga-based movement, breathing techniques, mindfulness practices, and social-emotional skill development activities into their work with children and teens.”

Yoga Calm aimed to create calmer classrooms, develop more engaged students, and foster “emotional intelligence, resilience, confidence, and self-control” (Yoga Calm, n.d.). These objectives overlapped with other gateway programs like bullying prevention, and character education skills such as friendship skills and conflict resolution. It was a flexible program that could be used at home or in school with one-on-one or whole-group options.

While the program was widely used with young people, Sharon described Kathy’s philosophy that Yoga Calm desired to first serve the adults.

Kathy always says, always says, the practice starts with you … Activate, integrate, educate. You always have to start in the back of your brainstem, and activate your muscles, and your body, and then you can work your way around. But as teachers we walk around like “I’m gonna teach them, I’m gonna educate you.” And so, she always talks about how the yoga practice, the mindful practice, is for you. Because when you show up in a different way for the students, they have access to something else. Kathy Flaminio’s perspective suggested that if adults were to be effective in teaching mindfulness, they first needed to adopt a personal practice, which would in turn transform their students.
Training and implementation of the Yoga Calm curriculum demonstrated by interviewees encompassed various stages and options. Several participants indicated that they used Yoga Calm cards to begin introducing their students to poses. Social workers, Alisa and Denise, attended a Yoga Calm training and took their knowledge back to their schools to introduce administrators to this programming. Laneya completed the full range of training to become certified as a Yoga Calm instructor. Sharon and a colleague attended an initial workshop training in Yoga Calm and then persuaded their principal to do a school-wide implementation including funding for these two teachers to undergo the full range of training to provide for ongoing training of staff.

Year one of school-wide implementation of Yoga Calm, as described by Jamison and Sharon, included a May overview workshop, fall trainings (Wellness I), and a five-week residency with trainers visiting each classroom five times to serve as mentors and coaches. The residency time allowed the trainer to teach the students basic skills and techniques alongside the classroom teacher. Sharon, having almost completed the trainer certification process herself, maintained that there was still more for her colleagues to learn. They had completed Wellness I which used the brain and body to attack teaching in a different way, but she said Wellness II was still an essential component that would help teachers to, in a sense, diagnose the needs of a child. For example, if a child rolled around on the floor like a bug, big pressure point movements and planking could be a technique to help them regulate.

While Yoga Calm was popular in the area studied and commonly addressed by participants in this study, other curriculum options provided a different, more independent, avenue for instruction. I next discuss MindUP’s philosophy and focus.
**MindUP.** MindUP, founded by actress Goldie Hawn, aimed to help students, families, and teachers cope with aggression, anxiety, depression, and suicide (Goldie Hawn Foundation, n.d.). MindUP worked to engage students in the learning process and bring joy back into the classroom for both students and teachers. It gave students learning tools, particularly those to help them focus, manage stress, regulate their emotions, and cope with the issues they faced with a sense of hope. The curriculum included fifteen lessons designed for children ages 3 to 14. The lessons helped students build awareness and self-regulation, thus improving their social-emotional health and their ability to learn (Goldie Hawn Foundation, n.d.).

Neuroscience was foundational for the MindUP program, with students first learning specifically about the brain and its connection to learning. Other key components of the program included Brain Breaks to regulate stress and draw calm into the classroom and an emphasis on gratitude and connecting to others (Goldie Hawn Foundation, n.d.). The lessons began by providing background knowledge of the brain, then moved to mindfulness practices (i.e., mindful seeing, smelling, and tasting), and concluded with lessons on optimism, gratitude, and kindness. Curriculum authors wrote the lessons in such a way that they could be embedded in different subject areas such as art, math, language arts, or science (Washoe Schools, n.d.).

MindUP transformed the learning environment by teaching students how to focus their attention. It taught them about choosing a perspective and the physiological benefits of happiness in their lives. It had the ability to shape a learning environment by teaching kindness, gratitude, and appreciation of others (Washoe Schools, n.d.). Laneya, a Yoga Calm instructor and special education teacher in School EB, chose to use MindUP and she shared that in addition to the lessons focusing on the senses, she added a culminating project for her students to develop a greater sense of how to impact their communities.
**Second Step.** Second Step presented an early learner through eighth grade holistic approach to social-emotional learning to transform schools into supportive, successful environments. Like MindUP, Second Step’s aim was to create empathy in students and society by providing resources for school staff, families, and the wider community (Committee for Children, n.d.). Second Step could be used as a stand-alone or utilized with a bullying prevention component. Unlike MindUP, this program focused on social-emotional learning and development rather than the brain-body connection. The program even included a toolkit for principals to assist with implementation.

Second Step broke the curriculum into developmental levels for early learners, elementary school learners, and middle school learners. The early learning and K-5 program offered variations on six primary themes. They included skills for learning, empathy, emotion management, friendship skills and problem solving, and transitioning to kindergarten. Middle school lessons focused on mindsets and goals; values and friendships; thoughts, emotions, and decisions; and serious peer conflicts. Accompanying bullying units were recommended especially for the elementary students. The curriculum offered a comprehensive option with more than 20 lessons at each grade level (Committee for Children, n.d.).

**Learning to Breathe.** The book, *Learning to Breathe: A Mindfulness Curriculum for Adolescents to Cultivate Emotion Regulation, Attention, and Performance*, written by Patricia Broderick (2013), introduced the Learning to Breathe curriculum which was an adaptation of Kabat-Zinn’s (2001) secular mindfulness program, mindfulness-based stress reduction (MBSR) that worked specifically to address adolescent needs. Shorter lessons and a website provided teachers with resources that helped students understand and manage their feelings and emotions. Learning to Breathe was designed for teachers who needed help coping with students who
disrupted classes and struggled to manage their emotions. Learning to Breathe included six themes that could be arranged in six long lessons or 18 shorter ones. The themes, using the acronym BREATHE, address body, reflection, emotions, attention, tenderness, and healthy mind habits.

Lauren, a school psychologist in a middle school setting, chose to combine Learning to Breathe techniques along with Yoga Calm. She desired to create a balance between movement and mindful activities, having discovered through her own dissertation research that some students struggled with the vulnerability required in yoga practice which I addressed as one of the obstacles to implementation.

**Change to Chill.** The Change to Chill program, sponsored by Allina Health (n.d.), designed by teens for teens, desired to help them understand stress, its causes, and the ways it could be managed. Change to Chill provided resources for teens in written and video formats to help them recognize sources of stress (use of phones, lack of sleep, lack of exercise) and develop coping strategies (Allina Health, n.d.).

Denise described the implementation of Change to Chill in her school. They received a grant from Allina Health to set up a Change to Chill room in her high school setting. Using suggestions from the website and other self-regulation tools, Denise created a unique space to offer students a place to relax and de-stress during and after the school day. She designed the room for student use with beanbags, a soft rug, a waterfall machine, lamp, a weighted blanket, coloring tools, fidgets, and stress balls.

In addition to the specialized room and tools, the Change to Chill program worked closely with students to understand their needs in order to meet them. Students applied for internship positions that gave them the opportunity to connect with other teens, give feedback,
and develop further programming. Schools encouraged students to use online Change to Chill resources and links for videos. Their website offered a stress test/survey along with meditation, guided imagery, and relaxation videos (Allina Health, n.d.). Now, having addressed formal packaged materials that some teachers chose to use, I next address the resources that teachers put together to create their own mindfulness-based practice and instruction.

**Teacher-Created Curriculum**

While standardized curriculum options obviously exist, some teachers in this study opted to create their own mindfulness curriculum. These tools took a variety of forms and were rarely used in isolation. Rather, teachers chose to use tools in combination such as videos and apps, or a chime and an app such as Headspace or Mind Yeti. In the next section I explore the techniques and applications identified through interviews and observations.

**Video resources.** Brenda, Karen, and Emily each identified the processes that they chose to implement which largely included online video resources. Karen, a middle school science teacher, started incorporating “mindful minutes” into her classroom for a graduate-level course project. Initially she established a focus for each day of the week which included breathing activities, nature videos, stretches, and Brain Gym (Brain Gym International, n.d.) programming. Brenda, a high school American Sign Language (ASL) teacher, adopted similar programming to give her students another tool to help with sleeping and avoid blow-ups. Additionally, she chose to include gratitude as a weekly activity.

In the second year of implementation, programming changed slightly for both teachers. Karen decided to alter her format to focus specifically on nature videos, having found through her own student survey that students found them most beneficial. At the time of our interview,
she shared that she created a collection of about 100 YouTube 4K high resolution videos to use with her classes.

Brenda gave a lot of ownership to her high school students, permitting them to sign up on a calendar to lead the daily activity. That meant finding video resources and sending them to Brenda for previewing before class use. Each of the teachers utilized a three-to-six-minute window to incorporate mindfulness activities at the beginning of their classes.

Several participants also indicated their use of the online resource GoNoodle. Alisa shared that her school received GoNoodle training about six years ago. These videos gave students a chance to pause from academic work and helped develop a controlled classroom movement. During my observations in District E, classroom teachers used GoNoodle as a practice after lunch to help the students settle back into the classroom. The schools in this district developed their own mindfulness instruction methodology, so programs like GoNoodle provided an important resource bank.

**Books and movement cards.** Whether using Yoga Calm or developing one’s own mindfulness curriculum, use of movement cards provided an oft-used format. In School EB, Cora and others in her building began the process when their physical education teacher wrote a grant for activity cards and books for all the teachers in their building. Brielle, a second-grade teacher in School EB, used her movement cards in the morning during circle time and GoNoodle in the afternoon. Summer, a special education paraprofessional and member of the District E Wellness Council, led the charge in developing mindfulness boxes for each classroom. These boxes contained self-regulation tools like breathing balls, calming cards, and stress balls.

A simple Google search indicated that the range of literature and resources available for teachers was incredible, but participants indicated that they frequently used flip card books with
activities rather than traditional texts for resources. The exception to this was Denise, who shared an important book called *Mindfulness for Teen Anxiety* (Willard, 2014) that she used with a small group of girls who met in her office on a regular basis. As a high school social worker in School District M, she had limited opportunities to work with students, and she opted to use this resource. Chapters in the book focused on what anxiety looked like, coping strategies, grounding techniques, the body scan, and breathing with a breathing ball.

**Digital apps.** In conducting observations, schools introduced me to other technology options that teachers chose to enlist in their mindfulness practice. The Headspace app focused on a meditative form of mindfulness. By purchasing a subscription, individuals of all ages could learn about meditation and mindfulness and use short meditations to help with anything from sleep to stress.

Karen began using Headspace personally and felt the positive effects before bringing it into her middle school. I also observed a kindergarten teacher using the Headspace application in School ME with her class. The teacher projected the animations on a SMART Board and the app guided the students through a two-to-three-minute mindfulness meditation. This transition activity prepared the students after lunch to move from a chaotic social setting to focused learning time.

Laney also mentioned teachers in her building using the Mind Yeti app. This application looked much like Headspace. It provided videos that helped children understand their brains and mindfulness and guided teachers and students through mindfulness techniques (Committee for Children, n.d.).

**Tools**
Each of the schools in this study indicated their use of several tools. These included, among others, the Hoberman Sphere or breathing ball, and chimes. Different schools also made resources available in mindfulness boxes or safe spots. These resources provided tools for classroom teachers such as calming cards as well as for students, like stress balls or fidgets. Readily available resources made mindfulness implementation more visible and concrete for students.

**Chime.** The chime (see Figure 7) was a widely-used tool that teachers used to help draw students into concentrated listening. Sometimes, it provided a lesson in itself where students were asked to listen for the sound and raise their hand when it stopped. At other times, it was used as an introduction or transition into the mindfulness activity of the day. Students are invited to close their eyes to deepen their level of concentration or to leave them open if that was more comfortable.

**Hoberman Sphere.** I also observed a second important tool, the Hoberman Sphere or breathing ball (see Figure 8). Mindfulness instructors used these tools in each of the schools I visited and Alisa demonstrated their use. This unique ball expanded from about six inches in diameter to two feet, and represented visually the expanding of the diaphragm when one takes a

![Chime](image.png)

*Figure 7. Chime. A tool used to focus and draw attention during mindfulness practice.*

![Hoberman Sphere](image.png)

*Hoberman Sphere. A tool used to focus and draw attention during mindfulness practice.*
breath. Alisa used this with her students to enable them to lead the class in a deep breath introductory activity. As the students took a deep breath, the student leader expanded the ball, and as they exhaled, he or she decreased the size of the ball. Teachers described use of deep breathing techniques throughout the day as needed. While used frequently during formal practice, the breathing balls also provided a versatile tool for any time of the day.

Figure 8

*Hoberman Sphere or Breathing Ball*

*Figure 8. Hoberman Sphere or breathing ball. The breathing ball expands and provides a visual for the breath during mindfulness practice. Retrieved from [http://www.hoberman.com/fold/Sphere/sphere.htm](http://www.hoberman.com/fold/Sphere/sphere.htm)*

**Children’s Literature.** Children’s books provided another tool for instruction. School EC had a specialized room for self-regulation practice and instruction. This room included a whole bookshelf full of resources for instruction with small groups of students. In the traditional classroom setting, Sharon described how her use of books about feelings from the movie *Inside*
Out helped her first graders articulate both their feelings and their needs (i.e., a hug, a walk, something to soothe). She explained,

And so this mindfulness practice opened the opportunity for those kids to learn, and talk about it, and try different things to see what would happen ... And they still cried a lot. A lot ... But I watched the progression over the year, as they learned, “okay here it comes, I’m having a big feeling. Okay now I’m going to try to advocate for myself.” I mean, as much as any six-year-old can.

Sharon also shared “the magic” of compassionate students who recognized that their classmates were struggling and in need of a coping tool. During my visit, I saw a handful of children get up and get a tool during the course of Sharon’s lesson. They simply knew what they personally needed and got up to get it before returning to their seats. They also demonstrated compassion in giving others the tools when they were crying.

**Impact of Implementation of Mindfulness Programs**

Participants pinpointed several outcomes from mindfulness practices on school climate, in many cases linked to the motivation for implementation. Five areas of impact were identified by the 13 participants in this study. For some students, mindfulness provided an opportunity to “just be” in an often over-stimulating world. It allowed some teachers to manage student behavior and prepare them to learn. Mindfulness assisted in self-regulation, allowing students to take ownership of their body, their emotions, and develop coping skills. For one school, it created a significant school culture shift. And finally, it impacted the teachers themselves and their ability to cope with the overwhelming demands of their personal and professional lives. In the next section, I begin with the ways mindfulness allowed students to “just be.”

**Disconnect**
Five participants discussed the impact of technology on the mental health of their students. They shared how few young people in today’s society maintain a time “to just be.” Denise appeared particularly concerned about students’ use of technology. She shared an initiative she attempted with her junior high students called “Tech Free Tuesday” during lunch that year. She said emphatically, “You’d think we were killing them or something.” Cora told a story of an above average, well-adjusted girl who looked forward to the quiet break each day. In a world of constant busyness and schools with one-to-one devices, students needed the quiet.

Alisa described a similar freedom for her elementary students to forget about everything around them. She described mindfulness as a new kind of tool.

I think it's really allowed them to think of something that they've never thought about before … Being able to turn their brain off and we talk about, I'll say, how many of you really had a hard time today? And I have my hand up. I know I couldn't really focus on that time. I was thinking about something else today because they usually start off with talking about how many of you lay in bed at night and just can't fall asleep. Sad. It's like the bulk of the class. And I talk about how this is one tool to just to really be okay with just turning your brain off and everything that's happening around us. So, I feel like it … it allows kids to think about, “oh my gosh, like I can actually do that.”

Alisa found the tool of mindfulness gave her students an avenue to tune out the rest of the world for a while. While not tested, she hoped this would lead to improved sleep patterns for her students. An additional benefit of helping students turn off their often-chaotic minds rested in the ability to take in new information and learn.
Preparing Students to Learn

Four participants in this study found that mindfulness practices led to increased on-task behavior and calmer classrooms. Brielle noted the “busy hum” that had become common versus the highs and lows of the past.

I think there's always a busy hum in the classroom. It gets away from the crazy highs, you know where they're just chatty, chatty, chatty and off task and bugging each other. There's just an overall calm. A lot of people who are … like substitute teachers or people who come through … that's one of the things they always comment about is that there's just kind of a busy hum.

Cora found the on-task behavior increased with her particularly challenging third-grade group. She shared:

You look at okay, this is going to take five, ten minutes. It's not a long period of time but I know that for ten minutes in I will get at least an hour back of focused kids on task.

That's a pretty good ratio. Rather than banging my head on the wall which has not been real productive … I had some great success with that crew of kids last year … We actually managed to get learning done, which was great.

Creating calm classrooms where students are ready to learn was a typical a goal of all teachers. Lauren, a school psychologist who worked with teachers, discussed what she observed in her setting.

And just generally like after, I would see a little bit of chaos as I was coming into a setting. And it did seem more relaxed. The tone and feel of the classroom felt more settled. But I think that that can be accomplished with a variety of different activities. Grounding activities, just written reflection, it doesn't necessarily have to be yoga or any
of those but doing something to kind of bring you present into the room, I think, from what I’ve seen is one of the most helpful things.

In Emily’s role as an interventionist in School EC, a primary responsibility included helping teachers who struggled with diverse needs in the classroom to develop methods to enable students to settle into learning time. Emily collected data on a first-grade intervention that demonstrated the efficacy in mindfulness techniques in getting students ready to learn. She described an intervention she established in School EC:

For her particular class we decided to start the class with mindfulness activities. So, we started a slideshow with 10 different mindfulness activities. We're going to do one for five days at a time. So, basically she had 50 days of mindfulness activities. The students got used to them. Start each class with that and have that routine and also then use a timer to have them come in and sit down before starting the mindfulness activities. There was a five minute timer for bathroom break, gathering your pencil, everything you needed to do to prepare for class. Once the timer went off, they would start the mindfulness activity and do that to lead into class. She said it was strikingly different. I actually videotaped. The difference was amazing. I think I had the data. It was maybe three kids that were actually seated and ready to learn at the beginning, and then by the end it was all but one.

This intervention demonstrated a significant method of growth when using just a two to five minute mindfulness intervention in the form of a video.

Providing an atmosphere where kids were prepared to learn led to positive outcomes. Cora and Emily specifically found significantly increased on-task behavior and Cora noted, "Particularly, last year, we had quite a bit of increased learning."
Self-regulation

Self-regulation encompassed several areas including students with special behavioral needs to those dealing with anxiety or stress. Alisa, a social worker in School ME, described how use of mindfulness practices allowed her students with unique needs to be a part of the class. “I look at some of our really kind of tough behavior kids, most of them can stay in their room and participate in some of them [mindfulness practices]. They eat this up.” Denise addressed this aspect as an ongoing goal—to help all students be a part of regular education settings, and help the teachers see these programs as beneficial for all students.

While use of mindfulness outside of classroom participation provided a challenge to validate, Laneya talked about the times she witnessed students using the techniques.

I think something that's been really cool are those times when you see a student actually using it, so when you see a student take that deep breath or you see them do a move that they have found that calms them, so that it's not just me saying, “Take a deep breath with me.” When I see them independently using it, it's like, “Wow, that's something that they'll take with them for their life hopefully. I didn't find that until I was an adult.”

Similarly, Lauren also described the students taking ownership of mindfulness techniques in explaining them to their friends.

I think that it really empowers kids to be able to do something on their own. It's not something that they have to ask someone permission to do. It's something they can sit and do right wherever they are. Honestly, some of the coolest things I've seen or heard about is when kids try to explain it to other kids. They're like, “Oh you just gotta do this volcano breath and then you'll feel better.” At all different ages. And it's just, I hadn't really thought about this until just now with you asking that. But it's like, the student
empowerment piece is just really cool. Like if they buy into it and they believe this is something that is helping them, then they do it. That's their own. That's their own practice.

In addition to students using and modeling the skills for others, Lauren identified the important element of empowerment for her students. The tools became something that students took ownership of and could use when the need arose down the road.

School Culture Shift

In Sharon and Jamison’s school (School BS) which completed a school-wide training and implementation, they felt they addressed the impact in still another way. They established a big goal of getting everyone in the school on board and participating in the techniques. Having put substantial financial and professional development resources into the training and implementation, Sharon, in particular, shared her concerns over the success of creating buy-in from all staff members. After implementing a Drop Everything and Move initiative, she presented a hopeful picture.

What I discovered in the Drop Everything and Move in March, was they were doing Yoga Calm in the nurse’s office, and I had no idea. And they were doing Yoga Calm in the window wells when they needed a break. I mean, they were just doing it all over the building, and I just didn't know. And so that was just really fun, to see … it get in all the different settings. So we want to keep that going …

Sharon’s hopeful experience and desire to see staff participating mirrored the successes she hoped for her students dealing with trauma.

Jamison, principal of School BS, described a rough picture of School BS when he took the job as principal. The community shared very negative views of the school, no one wanted to
serve as substitute teachers due to the high-level of behavior issues, he coped with five to six office referrals per day, and he said the school was flagged at the state level. Following implementation, Jamison reported that they had “nearly eliminated office referrals” (now at 0.6 per day), substitute teachers chose School BS over the others in the district because the environment of the building was different, and the community view of School BS had shifted. School BS represented the school with the highest level of implementation in this study, so their goals looked different than the other schools. In addition to practicing the techniques to regulate behavior in the class and help students coping with trauma, Jamison identified a primary goal of transferring the techniques to the students’ home lives.

Sharon, also representing School BS, gained a sense of the impact Yoga Calm had on her students during parent-teacher conferences. She recounted how she gave each family a printout of the routine her class completed each day after recess to get regulated for afternoon learning. During those meetings, over half of the parents said, “Oh yeah, my child is doing that. I’ll find her teaching her sister how to do tree (pose),” or “I was wondering what this plank (pose) thing was.” She identified just one parent of 20 who asked, “Why are you doing this?” and once she understood it, she accepted it readily.

Parent nights also presented an opportunity for School BS to transfer the mindfulness programs into the homes. Sharon and Jamison both described the success of the two family events held this year. Sharon reported:

It was really fun, because we had pizza, and there were prizes, and all the normal things to get families in. But then it was really beautiful to watch mother son, or father son, doing the movements together. And thinking about it. And so that's when it really was just solidified, like okay, this is good, it's good work, it's going home with the kids, the
parents are starting to get it. And you know, maybe they will have some different tools.

So I don't know that we'll ever really know the full impact. I mean, I'd love to say the
month of March our behavioral referrals were way down, and it was like fairyland, and
perfect, but it wasn't. You know? It wasn't. But the culture and the climate of the school
has shifted, and it's palpable, you can feel it. And that's pretty beautiful.

Jamison addressed the same event and shared that in the fall in their school of about 450
students, 50 families attended the family event. He received “no negative comments,” and he felt
hopeful that the techniques could and were transferred into the home.

Summer, with School EC, also addressed the change in climate in a simple manner, “I
think the climate here is, in general, even though things are … it's a lot of work. I think it's been
a positive impact.” School EC did not implement training to the same extent as School BS, but
still felt the positive impact. Next, I examine the impact of mindfulness on the participants
themselves as well as their colleagues.

**Adult Practice**

Again and again, participants shared the ways mindfulness impacted their lives as
professionals. Nine of the 13 participants shared the ways they used mindfulness and/or yoga
practices and the ways their professional practice evolved as a result. Laneya explained her
history, “Yeah, I definitely found that [personal practice] for myself probably about five years
ago, and then as I saw how much it was helping me, and I heard about this yoga calm training, I
decided to go down that path.” She further shared about her current practice, “I practice yoga
myself outside of school, so that's kind of one of the things that keeps me fit both mentally and
physically.” Lauren confirmed that she felt less anxious presently than she did five years ago,
even with a practice that would ebb and flow.
To the contrary, Sharon did not begin with a personal practice but learned initially about regulation strategies from an occupational therapist working with her son. This ultimately led to her training in Yoga Calm and development of mindfulness training in her classroom and school. She described how the programs helped her as a Yoga Calm instructor in her classroom, “I model a lot. So, like when I get upset, or feel nervous, or whatever, then I dialogue out loud.” She continued with an explanation of the high-level of needs in her classroom and how mindfulness helped her cope.

As a teacher, I feel like, “oh great, they're crying again, now what am I supposed to do?” You know? Or like, okay … you know, and I didn't … I just didn't feel stopped by it. It was like, “okay, we're crying. It's okay to cry. When you're ready, come back, because our job is to learn.” And so I think because I didn't get so freaked out about it, because I was being mindful, that gave them more space to kinda have the feeling, and not let it ruin a whole day. But I had, there was so much trauma. There was so much going on in that little room, like INS came and took someone's dad on their way to school. I mean, there's one family living in a hotel, and one family that lives domestic violence, and there's so much, so much that these little ones are doing, that they were dealing with. And that's just even what I knew. I'm sure there was more.

I also observed in Sharon’s classroom and identified clearly the “criers” in the room who struggled to participate. Jamison used the term “compassion fatigue” to describe the high-level of stress that teachers faced due to the needs of the students in their building, School BS, and I too observed the high-level of need and concern for teacher burn-out that Jamison described.

Like Jamison, Emily, serving School EC, pointed to the stressors teachers faced in her setting and the need for mental health support for adults.
There's been a huge push … in the last couple of years around teacher self-care. Last year in February I did a self-love bingo where teachers had the whole month of February to get a bingo, and they got different various rewards for filling out two lines or the entire chart just on doing things that were self-care related or mindful related. I think that there have been a lot of sessions around self-care. I think that that is a deficit though for teachers, and I think that's part of being in the business, that they are always willing to do kids first and someone else first. They are kind of servants unto themselves. I think that that is a deficit that goes with the territory but is something that could definitely be built up better and supported better.

Brielle shared a similar story and struggle faced by her principal, Judy, at School EB when a personal tragedy led to decreased staff and additional stress for Judy. She realized how much that added extra stress really had on her personally. She's a very strong woman, able to tackle anything, leap tall buildings but it really made her realize when we talk about teacher burn-out and we're stressed and have anxiety that when she really lived it knowing that, okay I need to do something for my teachers.

Brielle shared that, as a result of Judy’s personal experience, she understood the value in and need for professional development to assist teachers, and she included a workshop day geared especially toward mindfulness for teachers—not students.

Alisa and Denise, both social workers in District M, shared their frustration that mindfulness practice among staff members had not yet reached the level they would like. Alisa described the challenge in getting classroom teachers in her building to buy-in. Alisa, serving in the elementary building, visited each classroom one time per week for a semester, with a goal of modeling mindfulness practices for both teachers and students. She shared that, with the
exception of one, rather than participating in the mindfulness lesson, the teachers continued working and sometimes even made distracting noise during these classroom lessons. Alisa explained why she would like to engage teachers further, “I think the carry over, if you're truly engaged in my lesson, then you will tie that in any way you can in your week. Even if it's just some common language, engagement would be so much better.”

Denise shared a similar frustration with some teachers showing enthusiasm after training but not necessarily bringing it into the classroom fully. She explained, “I would have loved to have teachers do more of the mindfulness stuff in the classroom, but it hasn't happened yet. But baby steps, just kind of planting the seeds.” Sharon also maintained a hopeful outlook in the face of struggling to lead implementation. She explained the impact of mindfulness in her personal and professional life with conviction. For Sharon, the practices of mindfulness stretched beyond her classroom to her adult life, and she shared how this changed her outlook as an adult.

That's what the practice has brought for me. Like, “okay, look, you're gonna have these feelings forever, they're a normal part of humanity, there's nothing wrong with feeling anxious, or feeling angry, or feeling whatever. That's normal. That's part of being a human. But don't unpack your bags and stay there forever.”

Part of mindfulness leads one to accept the present, even revel in the struggle, without losing hope. Each of those struggling recognized and shared their hope for better things ahead.

**Summary**

Telling themes emerged during the 13 interviews conducted in this grounded theory, multi-case study. Administrators and passionate teacher leaders played a powerful role in implementation and ongoing retention of programming. Obstacles existed in the implementation process including notions of religiosity and personal background of the instructors. Participants
detailed gateway programs like PBIS or zones of regulation that fostered a school climate of welcome for mindfulness programs. And finally, schools identified the motivating factors and impact the participants found in their practice of mindfulness in the schools. Participants shared stories of both students and adults, both in regular education and those with special needs, who used the techniques and found some benefit. Cora said it concisely, “Every child was affected differently but every child was affected in some way.” Each participant spoke with similar conviction of the power of mindfulness to alter classroom climate if implemented with intentionality. In the next chapter, I examine reasons for these findings.
CHAPTER FIVE: DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

Dysregulated students, teachers, and students coping with anxiety and forms of trauma, and high rates of stressed teachers and students prompted this multi-case research study of K-12 teachers and school staff. To alleviate some of the stressors faced by students and staff in regular education classrooms, schools were using mindfulness techniques. Using the following research questions, I set out to understand what teachers did, why they chose specific techniques, how they carried out implementation, and the impact felt by students and schools:

1. How do K-12 teachers and professional staff implement mindfulness techniques to facilitate learning and promote social-emotional health and wellness in their students?
2. What, if any, impact does this implementation have on school climate, students, and staff as identified by school personnel?

Using grounded theory and case study methodologies under a constructivist-interpretivist paradigm, I conducted 13 interviews with school staff at various levels, locations, and positions in Minnesota who implemented mindfulness practices in their classrooms and schools. The interview participants included school social workers, educational assistants, classroom teachers, and administrators.

Following a multiple case study (Yin, 2018) and grounded theory (Charmaz, 2006) research design, I triangulated my data collection through use of interviews, classroom observations, and analysis of curriculum materials. Where possible, interviewees shared data they collected previously as well. I examined the methods each instructor chose to enlist, the reasons they made those decisions, and their beliefs about the efficacy of such procedures.

I visited schools and observed classroom activities, writing field notes to be analyzed later. I took careful note of specialized rooms and classroom materials designed to foster social
and emotional health. Each interview presented unique perspectives, but common themes developed as I collected and analyzed data using line-by-line coding of transcripts, memos, matrices development, axial coding, and reflection.

Mindfulness practices took on a variety of forms including mindful movement, Yoga Calm, online videos, and digital apps like Go Noodle or Headspace. Participants identified various curriculum options as well, including Mind Up and Second Step. Some schools chose not to implement a specific curriculum but instead utilized online tools and resources. Through the analysis of data, I recognized a three-phase process of implementation widely identified in the schools in this study. These included elements of initiation, the implementation processes, and the resulting impact on students, staff, and schools. During implementation, participants identified the motivational experiences and influential people who inspired and accelerated implementation. During the process of mindfulness implementation, schools identified the specific types of programs they chose to implement, the obstacles they faced, and the gateway programs that paved the way for support of a mindful philosophy of instruction. Finally, one research question included an exploration of the impact felt on students and schools through mindfulness implementation. This lengthy list included a channel for disconnecting from current stressors, preparing students to learn, self-regulation, the transformation of students and a school culture shift, and adult wellness.

These phases included initiation, implementation, and impact. Within each phase, subtopics emerged including motivational experiences, powerful people, obstacles to implementation, gateway programs, types of mindfulness programs, and a variety of measures of impact. I made connections to theory based on these findings, using leader-member exchange
theory (LMX), holistic learning theory, contemplative pedagogy, and spiritual and faith development theory.

I organized this chapter into three sections. In the first section, I examine the findings reflected in the three phases of implementation and align them with previous research and theory. I connect the role of powerful people with LMX theory. In the next phase, I connect the obstacles stakeholders experienced, particularly in terms of religion, to spiritual development theory. And finally, I use contemplative pedagogy and holistic learning theory to explain the impact mindfulness techniques had on students, staff, and schools. The second section of Chapter Five reflects the grounded theory I developed from this study suggesting a method for mindfulness implementation for classrooms and schools. I follow the discussion of grounded theory with the implications of my study and recommendations for future work in the area of mindfulness. I begin by connecting the findings detailed in Chapter Four to current theory.

**Findings and Theory**

**Phase One: Initiation**

As schools, teachers, and administrators began the process of introducing mindfulness programs in their schools, they shared with me the motivations behind their passion for this kind of programming as well as the influential people who made implementation possible. The motivations will be discussed further in the analysis of phase three (impact) of this chapter. In this first section, I explore the connection between these powerful people and leader-member exchange theory (LMX).

**Influence of Administration and Teacher Leaders**

The participants in this study in many ways represented a group of passionate teacher leaders and administrators. They each explained, in detail, their role and the role of
administration in the initiation phase. The role of administrators, in particular, provided an important finding in this study. It became apparent that administrators carried significant weight when implementing this new program and I noticed a connection between the level of administrative involvement, as described by the staff of individual schools, and the level of impact. I developed a continuum that reflects the various schools and roles of school staff. I compared School ME and other lone rangers, to School EB and School BS (see Figure 9).

One significant demonstration of administration’s value seemed to lie in the appropriation of funds. Using Figure 9, notice that in School ME, the lone social worker in the building initiated and carried out programming. Minimal support came from administration in terms of grant writing and some professional development. Mindfulness programming became part of the social worker’s role and she made the decision to exchange mindfulness programming with character education curriculum. At the time of our final interview, implementation occurred in some classrooms, and it appeared that a few classroom teachers enlisted the techniques while others relied solely on Alisa to do the student training.

Principal Judy’s level of implementation and commitment to programming in School EB reflected a slightly more passionate approach, and the outcomes described reflected an arguably greater level of impact. Judy provided several professional development trainings in the practice of mindfulness, including some for the benefit of the staff themselves. As an administrator, she used her power differently than Alisa and put her budget funds into hiring staff to train and support classroom teachers in the process of mindfulness implementation. Judy and two of her staff members shared the ways that the mindfulness programs affected classroom climate and helped students to learn more effectively.
At School BS, principal Jamison demonstrated a still greater level of commitment to mindfulness work through the implementation of Yoga Calm. He opted to make implementation school-wide and used Title I funding, paid for training of two of his staff members to become certified Yoga Calm instructors to ensure sustainability, and engaged demonstratively in whole-school programming during practice sessions. Each element of Jamison’s use of power demonstrated his commitment to the success of the program. Ultimately, this school described a shift in culture unmatched by any of the others in this study.

In School EB, teachers shared the level of success they experienced in using mindfulness techniques at a classroom level, where Jamison and Sharon described a school-wide impact on
School BS. I would argue that the level of impact lies on a continuum where school-wide implementation produces a school-wide result. A lone ranger approach, as in Alisa’s case, appears to benefit just individuals or a single class of students.

This indicates then, that, like most things in life, you get out of a program what you put into it. If you put all your resources in one method, and with consistency and a sustainable program conduct your implementation, you can expect to reap great rewards. With a high-level of involvement of staff, a high-level of impact is to be expected. School BS indeed described that high-level of impact.

**Leader-Member Exchange Theory**

Leader-member exchange theory (LMX) appears at play particularly in Jamison and Judy’s schools. Because these two buildings demonstrated the highest levels of impact, I examined the leadership styles of the administrators and their level of efficacy. Leaders and staff demonstrated several tenets of LMX theory including in-group dynamics, a dyadic leadership process, and positive organizational outcomes (Northouse, 2007). The lack of LMX application may also provide an indication of why School ME demonstrated a lower level of impact when compared to the other schools. Other participants described as lone rangers (i.e., Karen, Brenda) shared a similar classroom-level impact.

LMX theory outlines in-group and out-group dynamics where leaders, whether consciously or unconsciously, develop strong relationships of respect for those in the in-group. These relationships stem from subordinates who take initiative and accept responsibility willingly. This leads to a greater feeling of trust and a willingness for the leader to give the in-group member more control and even further responsibility. Naturally those in the out-group
experience the opposite. They choose not to step up and out and simply maintain the status quo (Northouse, 2007)

I found strong positions of LMX theory particularly at School BS. Principal Jamison worked closely with Sharon and another teacher to develop mindfulness programming. After encouragement from those two teachers and backing from the building leadership team, identified here as the in-group, Jamison implemented the program at a very high level. He then used the personnel resources in Sharon and others to develop a highly successful program.

A second tenet of LMX theory addresses the dyadic leadership process which “underscores that effective leadership is contingent on effective leader-member exchanges” (Northouse, 2007, p. 159). While Schools BS and EB appeared to have those meaningful relationships and leader-member exchanges, the exchange appeared to be lacking in other schools/districts. District M and other lone rangers failed to demonstrate this high-level of cooperation between teachers and administration which I argue may be the reason that mindfulness programming failed to take off and prevented the great transformation described in other schools. In this study, I found that more people appeared to fall in the out-group category and thus lacked the administrative backing to move forward in a more substantive manner.

Finally, according to Northouse (2007), LMX theory generally demonstrates positive organizational outcomes. The strong connections between administrators and their subordinates and the team approach to tackling new initiatives leads to a balance in workload, stronger communication, and ultimately greater success for the organization. The level of success in this study mirrors the level of LMX theory applied. Schools with little collaboration between administration and teachers moved lethargically, while those with a team approach moved quickly and demonstrated a more transformative outcome.
School EB appeared to lack the high-level of success described in LMX theory because, though they shared a similar interest in implementation, they described and demonstrated their commitment in perhaps a less passionate manner than that of School BS. They valued mindfulness programming, but they chose not to put the same level of funding toward training and sustainability efforts as described in School BS. They chose to learn techniques without use of a specific curriculum, thus putting the work of learning and instructing primarily in the hands of the classroom teachers. I argue that when push comes to shove, this type of curriculum will likely be pushed to the wayside when time constraints force the teachers to focus only on core curriculum. Finding lessons and making time to incorporate them will likely be too much and teachers will lose momentum.

A similar scenario presented itself in School ME and other areas where lone ranger methods appeared at play. Teachers who tried to do this on their own faced an uphill battle and ultimately found a minimal impact. The students, as individuals, may have felt impacted, but transforming a classroom, much less creating a school-wide shift, presented a challenge. Lone rangers lacked not only the funding, but also the support of colleagues to share ideas and continuity for students across the span of grade levels and classroom situations. This suggested to students that the programming held less value and decreased their level of motivation. With little support, funding and otherwise, these teachers found themselves making an impact on only those students with whom they worked. The impact felt never reached a school-wide, climate-altering status.

I surmise then that if you want a short-term impact, be a lone ranger. Do the work yourself, passionately share the work where you can, but know that the impact will likely just reach individual students. That is reasonable and commendable. But a greater impact may be felt
by introducing programing and then allowing teachers to use it as they wish with additional supports provided, much like School EB. This may help a classroom to make strides in self-regulation and preparing students to focus and learn. A still greater impact may be felt through a full-force implementation where putting funding, training, and sustainability measures in place takes priority. This type of programming suggests true commitment to a program and getting results.

In an ongoing way, and throughout the interviews, I asked study participants to articulate if schools utilized more of a top-down or a bottom-up approach to implementation. I recognize now the remarkable influence of administration because they controlled both the purse strings and the programming itself. But we dare not overlook the passionate teacher leaders in a “bottom-up” methodology who inspired programming and helped sustain it. Ultimately, schools that utilized both methods achieved the most positive results. The exchange between leaders and subordinates brought about both the power and passion to effectively make change (Figure 10).

Principal Judy demonstrated some success in her role, but she functioned primarily from a position of power. Teacher Alisa demonstrated a passion perspective. She found value in the programming and moved toward implementation, but without the full, demonstrative support of administration, she did not evidence the same powerful change in the overall population as experienced in other schools. Principal Jamison demonstrated a member-exchange type of leadership where he capitalized on the passion of his staff and used his power as an administrator to make decisions about the programming (financial and otherwise), but he also utilized his personal power to draw subordinates in and allow them to share the power. This type of leader-member exchange significantly impacted the outcome for School BS, much more than those scenarios described by other participants. The role of administrators then may be present either
in a positive or negative light depending on the level of involvement and willingness to distribute power.

Figure 10

*Leader-Member Exchange Theory in Practice*

I now move to the implementation phase of my findings. This phase expands on the processes that hindered implementation and those that facilitated it. I explain the connection to spiritual development theory and the religious roadblocks before moving to holistic learning theory and the success of some schools due to previously established social-emotional development programs.
Phase Two Implementation: Obstacles Faced by Stakeholders & Gateway Programs

During the implementation phase, schools described both roadblocks and gateways. The roadblocks or obstacles to implementation fell in two primary categories: religion and trauma. But for every obstacle to be faced, a gateway program fueled mindfulness instruction and practice. I begin with a discussion of the primary obstacles participants described.

Obstacles

Interview participants identified several roadblocks to their process of implementation, including religion and anxiety and trauma, with the most common response relating to religion. I therefore begin with a discussion of the impact of religion and argue that mindfulness has a spiritual, rather than religious, role in our schools today, as reflected in spiritual development theory.

Religion. The perception of religiosity and its connection to yoga and mindfulness presented problems for me during my research journey as well as for some of the schools in this study. While Kabat Zinn (1994) and others created secular programing, the religious connotation persists and conflicts with personal beliefs of stakeholders in many institutions. In the methods section of this study, I described the roadblock I encountered while using the term “spirituality,” and while I argued that spirituality need not necessarily equate with religion, the perception to the contrary presented such an obstacle that ultimately some schools chose not to participate in my study. I worked through this struggle by altering my terminology to “mindfulness” which enabled me to find six different schools who willingly participated. The experience gave me a unique perspective in what administrators face. Both Judy and Jamison carefully chose terminology to solidify the secular nature of their programming to facilitate stakeholder buy-in.
Kathy Flaminio, a Yoga Calm instructor, also addressed the importance of using secular terminology to prevent religious bias from creeping in and creating stakeholder resistance.

During the data gathering part of this study, I chose to fully separate the spiritual nature of the activities and focus on the practices themselves without consideration of spirituality. But now, in the analysis stage, having found that schools demonstrated resistance to implementation for religious reasons, I believe consideration of the spiritual nature of such practices is warranted.

I suggest that ignoring the spiritual nature and terminology is inappropriate, and I instead consider the benefits of spirituality through education of stakeholders in the differences between spirituality and religion. I place the focus not on religion but encourage a deeper understanding of the nature of the whole child—physical, emotional, and spiritual. Roehlkepartain et al. (2006) in their work with spiritual development theory “hypothesize that spiritual development is a dimension of human life and experience as significant as cognitive development, emotional development, or social development. All of these dimensions of development are interrelated” (p. 9). While the subject of spirituality is taboo in US society today, these authors and others suggest that institutions would do well to better understand and incorporate that spiritual dimension of learning. Studies in the United Kingdom indicate a shift toward a more holistic perspective than that of educational practices in the United States, a subject, I would argue, worth examining (Adams, Monahan, & Wills, 2015; Gillard, 2018)

I consider the verbiage of public policy to be a primary concern in US education today. The Anti-Defamation League (ADL) detailed the laws pertaining to religion in the schools. The ways that the laws are written understandably present a challenge for public school administration. Since one of the primary goals of mindfulness is to allow students to cultivate silence in their noisy world, I found the demands of the law particularly challenging.
The U. S. Supreme Court struck down a statute requiring a moment of silence which students could use for silent prayer or meditation because it was enacted for the purpose of advancing religion. Similarly, one Federal Appeals Court struck down a moment of silence statute because it had a religious purpose. More recently, however, four other Federal Courts of Appeals upheld moment or minute of silence statutes. In those cases, the courts found that statutes in question and their legislative histories did not have a religious purpose or the effect of advancing religion. Based on the Supreme Court decision and these Federal Courts of Appeals decisions, if the language or legislative history of a moment of silence law or policy has a religious purpose, advances religious, or is entangled with religion, it is unconstitutional. Furthermore, a moment of silence law or policy—regardless of whether its language and legislative history reflect a secular purpose and effect—will be unconstitutional if the statute is implemented in any way that encourages or discourages students to pray or engage in other religious activity (Anti-Defamation League, 2012, pp. 1-2).

The language of the laws understandably strikes a note of caution into the hearts of those who serve in a role of authority.

Because teachers hold such a special status in the school and are viewed as government officials speaking to a group that is both a captive audience and extremely impressionable, religious speech by teachers or other school personnel will be seen as a state endorsement of religion. The Supreme Court has said that “the interest of the State in avoiding an Establishment Clause violation “may be [a] compelling” one justifying an abridgement of free speech otherwise protected by the First Amendment …” It is also
impermissible for a teacher to read the Bible in front of students during a daily silent
reading period. (Anti-Defamation League, 2012, p. 3)

Overall, teachers and administrators play the role of both rule enforcers and rule followers. The
policies specifically forbid any form of prayer or religious participation. While understandable in
our secular schools because of current law, I suggest a new dynamic grounded in the true nature
of spirituality. I suggest we educate families, teachers, and communities to develop an
understanding of the importance and value of silent, secular moments. Better education and
reconsideration of current laws may lead to further opportunities to practice mindfulness for the
benefit of both students and teachers.

I feel the problem rests largely in the education of the adults involved. If the general
population, including teachers and parents, understood the value of such practices and their
secular nature, greater opportunities for mindfulness practice may be presented. If preservice
teachers developed a better understanding of how to meet the spiritual needs of their students
while respecting the legislation on separation of Church and State, we may improve the mental
health of our young people.

The world we live in is different than 100 or even 50 years ago. At that time, schools
made religion, not spirituality, a specific part of the school day. Teachers established time for
quiet or community prayer. Today, in working with the participants in this study, it appears
obvious that our students still need a time for quiet, but they rarely find it—at home or at school.
The struggle to get through the curriculum, meet standards, and make academic progress has
gotten in the way of children’s mental health. Couple these issues with unlimited screens,
overwhelming schedules, and traumatic life experiences, and the outlook for many looks
hopeless. Roehlkepartain et al. (2006) argued, “Without accounting for the spiritual dimension,
human development builds theories, research endeavors, and, by extension, practices on an incomplete understanding of our humanness” (p. 11). Perhaps society has moved us beyond our humanness to automatons, focused primarily on productivity.

There are also those who do not yet realize the detriment in lack of quiet. We do not yet realize the lasting effect of the two-year old in the shopping cart with a parent’s phone. The study of the addictive nature of cellular phones is in its infancy and the impact long-term has yet to be determined. In the meantime, parents and teachers alike need to create a balance between effective technology use and human-to-human socialization. Simon Sinek (Team Fearless, 2018) addressed the needs of young people today, partly stemming from the use of technology and social media and the rush of dopamine one receives when given feedback through social media platforms. He suggested that addiction to technology was a primary problem facing millennials today, paralleling some of my study participants’ feelings.

In addition to a need for quiet and distance from technology, the participants in this study discussed the way that heart enters the classroom. Separation of Church and State, while desiring to exclude religion from the classroom, forces teachers to draw away from all forms of spirituality. I found in the interviews described in this study, though, that the spiritual connection of teachers and students exists. Separation of heart from teaching and learning presents a near impossibility and attempts to do so have arguably been a detriment to the students. Now, more than ever, students experiencing forms of trauma like homelessness or abuse need to feel connected to someone.

In Sharon’s classroom I noticed several signs posted in the room indicating this room represented a “Safe Zone.” In a world where homes feel unsafe to six-year-olds, the hearts of teachers and students need to be engaged in the classroom. They need to experience a feeling of
safety if they are to truly engage in the learning process. I next take a deeper dive into the role of mindfulness in cases of anxiety and trauma.

**Anxiety and trauma.** Anxiety and trauma represent another obstacle to mindfulness implementation. Two interviewees identified conditions under which teachers resisted implementing mindfulness practices due to their experiences of trauma. As a trainer, Flaminio (2019) stated that one in four people today cope with some form of anxiety. Lauren shared that her personal study of mindfulness began because of the mental health concerns she faced in her own life. She learned through personal practice and research that teachers sometimes reject mindfulness practices because they fear their own baggage coming to light during the practice. Teachers demonstrated their concern that their personal anxiety would be manifested in front of students. Alisa addressed another common obstacle, “For some teachers, [mindfulness instruction] is really out of their comfort zone.” The question of why continues to elude us, but perhaps traumatic experiences play a role.

Closely connected to this issue, Lauren and others indicated a resistance to the quiet, contemplative nature of the activities. Lauren suggested that sometimes mindfulness feels stressful to students, and even teachers, because they have personal trauma that they fear may come to the fore. In these cases, some choose not to participate and thus fail to benefit from the positive impact contemplative theory professes.

Yoga’s ancient Buddhist roots are hard to escape in the public realm today, and trainers need to be well-versed in language that reflects secular mindfulness practices. Kabat-Zinn (1994) was a forerunner in the establishment of non-religious training in these types of practices, but without proper education and communication, parents and community members call this “religious practice” into question. Again, educating stakeholders in the difference between
religion and spirituality, and underscoring the value in spiritual practices, could potentially make the difference.

While each participant found some level of resistance or obstacles to mindfulness implementation, they also had much to say about programs that built the groundwork for mindfulness. Because of the social-emotional nature of programs like PBIS or the zones of regulation, they foster further regulation through mindfulness practice. I describe these as gateway programs in the next section and explore their link to holistic learning theory.

**Influence of Gateway Programs and Existing School Climate**

I found in this study that gateway programs greatly influenced the implementation and impact of mindfulness program success. Through my conversations with participants and classroom observations, I uncovered three types of gateway programs used by schools including self-regulation programs like PBIS or zones of regulation, school-wide wellness committees and their initiatives, and relationship-building programs. By their very nature, these strategies fostered a connection to holistic learning theory, which Miller et al. (2005) described as an attempt “to nurture the development of the whole person” (chapter 1, section 2, para. 1).

The element of spirituality sets holistic education apart from traditional education. As previously discussed, spirituality differs greatly from religion. While current educational methods actively employ the academic, physical, social, and emotional elements of students, the spiritual dimension is left untouched. Holistic learning theory makes a case for its inclusion, which interview participants described in their respective schools. Miller et al. (2005) described the three basic tenets of holistic education as connectedness, inclusion, and balance.

**Connectedness.** The value of connectedness attempts to develop and recognize connections between different types of learning and learning levels. Each of the schools
represented in this study appeared to understand the value of creating connections in a program of this type. Alisa described how character education became a gateway for mindfulness instruction. She started out as a volunteer in the school and eventually the school hired her full-time. At the time of our interview, more than a decade had passed since the district committed to teaching character education—a testament to the value placed on such programming.

Cora, Suzi, and Brielle all represented District E but worked in different school facilities, and they described the influence of the district’s wellness team in leading the charge for mindfulness in their district. This wellness team helped to provide leadership in adopting new programs in social and emotional health. Summer, a paraprofessional in the district, became an influential wellness team member and brought in mindfulness totes with tools for student use. These remained in classrooms and served to enhance the subsequent mindfulness programming.

Each of the schools represented in this study recognized in one way or another the needs of their students beyond simply academic deficits, as holistic learning theory suggests is necessary. The complementary programs exemplified the school or district’s philosophy in educating the heart as well as the mind. These schools demonstrated the value of building universal programming that complemented mindfulness exercises. A belief in educating the whole person seemed to resonate through the complex and multi-level programs in place. I next look at how schools demonstrated this whole-child philosophy through inclusion programs and techniques.

Inclusion. There are more students today who need mental health support than ever before. Alisa, like other study participants, described how her students who received special education services benefitted from mindfulness programs because they could remain in the regular education setting and participate alongside their peers. Denise added that part of the
reason she felt motivated to use mindfulness practices was because the self-regulation activities were good for everyone—students in both special education and regular education settings. She suggested a need for wider practice in her high school setting for the benefit of all, not just those in special education with whom she initiated the activities. Programs like this allowed special education and regular education to stand on common ground, a very strong part of holistic learning (Miller et al., 2005).

Students who receive special education services often desire to take part in the normalcy of the classroom, and programs for inclusion reflect that. In this study, schools demonstrated mindfulness’s self-regulation strategies helped those students whose special needs fell in the behavioral realm. These students, often instructed in the techniques in small group settings, could also take part in the regular education setting. This built their confidence in use of prior knowledge of the techniques as well as allowed them to benefit from the self-regulation and focusing objectives teachers established for mindfulness programs. Interview participants indicated their belief that less students would need behavioral management pull-out programs if mindfulness techniques became a part of the regular education classroom and all students used them. Continuing in the same vein regarding holistic learning theory, I next explore how balance is needed in mindfulness programs.

**Balance.** Holistic learning theory advises teachers today to work with the yin and yang energies of the classroom, focusing not only on the rational but also on the intuitive and cooperative forces (Miller, 2005). Several schools, as noted by Alisa, Cora, Laura, and Brielle used the zones of regulation prior to and alongside mindfulness implementation. This method of helping students tune in to their bodies and feelings aligns well with mindfulness practices that
teach students to look inward, and in so doing, identify feelings and seek the root of personal behavior.

Several teachers described their personal practice of mindfulness, and while not everyone used a formal practice, many credited mindfulness practices for helping them to think inward and react differently when under duress. In the high-stress academic environment, teachers addressed the need for instruction to stretch beyond simply reading, writing, and arithmetic. Working together, developing trust, and helping students to understand themselves appear to be equally valuable elements of education in the 21st century. Again, holistic learning theory (Miller, 2005) provides a rationale for stretching beyond academics to meet the social-emotional needs of our students—a balanced approach to education.

While these three elements give us a framework for understanding holistic education philosophy, Miller et al. (2005) reminded us that,

holistic education cannot be reduced to a set of techniques or ideologies. Ultimately holistic education rests in the hearts and minds of the teachers and students. Education has tended to focus on the head to the exclusion of the rest of our being. Holistic education attempts to provide learning that are much more broadly conceived. (Location 3163)

The schools in this study reflected an effort to bring holistic education to the fore. They demonstrated, powerfully, the benefits of creating an environment based on relationships and validated the relationship-building process, suggesting it be continued with greater intentionality.

Having addressed both the initiation and implementation phases of my findings, I now move to the impact stage. Participants developed a lengthy list of areas of impact which I connect to contemplative pedagogy and holistic learning theory in the next section.
Phase Three: Impact

I asked each interview participant to identify their motivation for incorporating mindfulness practices in their schools and the resulting impact. Schools shared three key motivators in the implementation of mindfulness practices. These included helping students to self-regulate in order to be ready to learn, providing an opportunity for students to disconnect, and developing coping tools for stress and trauma. These motivational factors ultimately connected to the impact described by the study participants. Key elements of impact included the three areas of motivation as well as the importance of adult practice for personal wellness.

Self-regulation and Preparing Students to Learn

Brielle called it “a busy hum.” Karen felt her programs brought a calmness to her middle school students as they transitioned from the chaotic hallway to the classroom. Denise used mindfulness and specifically her Change to Chill room to help students regroup. Each interview participant spoke of the impact mindfulness practices had on their students and classroom atmosphere. The motivation behind implementation came from a desire to see a change in behavior and to give students the tools to get themselves in a frame of mind for learning. Different schools, particularly depending on age and developmental level, chose mindfulness implementation to combat some student-focused issue. They sought a type of self-regulation transformation.

Lemko (2005) spoke of the element of self-transformation that these teachers seemed to be seeking in holistic learning theory.

Self-transformation can't occur without the exertion of our higher faculties—our ties—our intuitive, aesthetic, unitive, spiritual faculties. These components of ours include reason and the physical senses but transcend them. The reductionists, the rationalists, the
relativists among us could not hope to transform their behavior and their values without reclaiming or awakening to their higher faculties. In reality, all of us will have to develop a stronger sense of our unity beyond all differences. (chapter 2, section1, para. 17

A common thread permeated the discussions of motivation for the teachers and school staff in my study—they wanted students to be able to self-regulate. They wanted to see the students use their “higher faculties” and internalize their actions and the effects of their actions. And as they reflected on the impact, I heard the descriptions of productive environments from Cora and Brielle. I heard about students who could remind their neighbors to breathe in order to cope with stress from Laneya and Jamison. The students developed the capacity to pay attention to their own bodies and regulate themselves into a place of productivity and peace.

Several of the participants in my study indicated the value of self-regulation which led to greater focus. Cora identified the growth in her students’ attention spans. Her primary goal of implementation was to help her students to gain focus time during a lengthy “theme” block each afternoon. She said that 10 minutes of mindfulness would allow for 50 minutes of learning time, and the trade-off of “giving up” 10 minutes of teaching time for mindfulness was worth it.

Contemplative pedagogy theory (“Contemplative Pedagogy,” n.d.) as described by Columbia University’s Center for Teaching and Learning, explains the impact on focus and attention building through the use of contemplative practices. Contemplative practices, such as mindfulness activities, movement, or guided imagery processes, provide students with an opportunity to experience a state of quiet. Sometimes the quiet involved clearing the mind, and at other times it prompted one to focus inward on one’s body. See Figure 11 for sample contemplative practices, some of which (visualization, meditation, Yoga) overlapped with mindfulness practices described by the teachers and school staff in this study.
Opportunities to Disconnect

A second goal for teachers in the implementation of mindfulness included an opportunity for students to disconnect, closely related to contemplative theory. Teachers in this study used practices such as quieting the mind, meditation (sometimes called “reflection”), music and movement, and yoga. These contemplative strategies gave students a chance to experience quiet after busy, noisy activities, particularly recess and lunch. I observed several schools using mindfulness activities on a routine basis following the chaos and noise of lunch and recess break to prepare students for focused learning time in the afternoon. Contemplative practices like these centered the students in the present moment, challenged them to leave the arguments of the playground behind, and cleared their minds for new learning. Cora described one student who came in each day and planted herself on the rug for their time of mindfulness. She described the girl as a normal, well-adjusted child. She simply seemed to enjoy the time to “just be.”

Reflecting on the lives of students today, particularly in schools with one-to-one devices like Cora’s, participants addressed concerns regarding the amount of time students used screens. Further study is needed in this area as well as the impact of high-stakes tests and over-scheduled kids. The time to “just be,” whether labeled contemplative practice or not, demonstrated value for the students.

Coping with Anxiety, Trauma, and Stress

Closely linked with the need for disconnection time, teachers felt that mindfulness provided a support for students coping with anxiety, trauma, and stress. Contemplative pedagogy theory (“Contemplative Pedagogy,” n.d.) suggests that contemplative practices provided a method for helping students deal with distractions or anxiousness they experience. I considered
this an important finding as 80% of the participants cited anxiety as one motivator for mindfulness implementation. Cora, working in a second and third grade multi-age classroom, said that she felt concerned about the level of test anxiety exhibited by her students. The pressure to do well on the state exams added stress to teachers and
students alike, and she desired to find a way to help her seven- to nine-year-olds cope with this additional layer of stress.

Denise, a high school social worker, dealt with a very different kind of anxiety with her students.

I truly believe that it should be in the curriculum … like mental health or how to deal with stress because that’s a skill that people are gonna use lifelong … Mental health has just increased so much and I think it's just because kids are not taught how to deal with stress. And that often leads … to anxiety, depression, different things like that.

Additionally, Denise found that her students struggled due to the heavy use of devices. Some wanted to use their phones for “emotional support” while she felt strongly that the phones presented the source of many of their problems. She and her intern also noted the isolation many of these students experienced. When asked what they did over the weekend, students often responded, “Nothing. Just stayed in my room,” or “I played video games.” Denise identified the isolation and preoccupation with digital media as a motivation for implementing mindfulness programming.

Anxiety and depression’s links may find hope in the use of contemplative pedagogy which encourages a connection to others. This lack of a connection concerned Denise, as she explained how the seventh-grade students she supervised at lunch would text their friends who sat right across the table from them, rather than converse. Contemplative pedagogy has the potential to give these students the tools they need to re-engage with the world and the people around them. Practices like meditation, beholding, and contemplative reading or writing are recommended to help students become more focused on the present (“Contemplative Pedagogy,”
A final valuable finding discussed in the impact phase of mindfulness implementation was the value in adult practice which I discuss in detail in the next section.

**Adult Practice**

Teachers and administrators need not only buy in to mindfulness education; they need to participate in the process for the greatest effect. In Jamison’s school, where data demonstrate a substantial decrease in office referrals, his role proved invaluable. He described the process of implementation in his school which began with two passionate teacher leaders. But when they involved Principal Jamison, the school went full force into implementation. Under his leadership and passion for this type of programming, School BS found the funding, obtained the training, and enacted sustainability measures. His involvement and passion for making a difference suggested a deep-seated belief in holistic education theory. Miller et al. (2005) stated:

> Ultimately holistic education rests in the hearts and minds of the teachers and students.

> Education has tended to focus on the head to the exclusion of the rest of our being.

> Holistic education attempts to provide learnings that are much more broadly conceived.

(introduction, section 2, para. 5)

The importance of the role of the teacher cannot be understated. Education needs to permeate the heart, not only for the students, but also for true efficacy, into the hearts of the teachers. Jamison discussed his role as an administrator as “leading the charge,” helping staff especially, to see that if he could do it, so could they.

Participants in this study identified both the value in adult personal practice as well as the obstacles. They suggested that personal anxiety or trauma experienced by the teacher could prevent them from participating for the same reasons children sometimes reject participation. They feared going to a place of quiet. Because mindfulness reflects a form of contemplative
pedagogy (“Contemplative Pedagogy,” n.d.) those practicing it need to go inward and reflect. For those who have experienced trauma or anxiety, this inward examination calls them to a place of distress. They thus reject using these types of programs. Developing teacher training and practice outside of the classroom could give adults coping strategies for their personal lives and help develop buy-in for classroom application.

Additionally, Jamison shared a concern about the anxiety and stress that students brought to school each day. He recognized the need for the staff to discover and develop a practice to cope with “compassion fatigue” in his school with its high-diversity, high-needs, low socio-economic status population. The teachers in many ways helped to shoulder their students’ burdens, growing the level of what he called compassion fatigue. A goal for him was to develop a way to continue working to help his teachers cope with this issue and avoid burn-out. Once again, this approach puts the heart back in the classroom and challenges adults to use their higher faculties.

The three-phase process of implementation brought out several key findings in this study. These reflected the powerful people needed for initiation, the struggles and gateways in implementation, and the different forms of impact like self-regulation, opportunities to disconnect, and adult wellness. Leader-member exchange theory explained well the importance of administration and the need for in-groups to use their power to effect change. Holistic learning theory represented key ideas and connected well with the findings in the areas of gateway programs, self-regulation, and adult wellness, building on the understanding that children need to have their spiritual, as well as academic and physical, needs met. Finally, contemplative and spiritual development theory helped to explain some of the obstacles schools faced and developed a case for bringing quiet back into the lives of our young people.
Using these findings as groundwork, I next move into my grounded theory of mindfulness development and practice. I consider the findings, and using faith development theory, propose this theory and suggest a model for those considering implementation of mindfulness practices in traditional K-12 settings.

**Grounded Theory Development**

Following the modified grounded theory methodology of Charmaz (2006), using interviews, observations, and curriculum review triangulation, I examined mindfulness programs from many angles. I studied a variety of program material options, looked at many different age ranges, considered the role of school staff, and enlisted the feedback from six different Minnesota school districts. I used a detailed and organized process with several layers of coding and analysis that led to theory development.

In the analysis of this study’s findings, working from the constructivist-interpretivist paradigm, I observed two key areas to be addressed theoretically. First, I found a distinct connection between the level of implementation and the level of impact. Participants described striking programmatic moves undertaken to implement mindfulness. This exploration led to a deeper sense of the strategies the teachers themselves put in place to address the students’ developmental levels. I suggest a somewhat sequential deepening occurs as students age and grow in their level of spirituality. I outlined this deepening of programming in my model for mindfulness implementation and connected it to Fowler and Dell’s (2006) faith development theory. In the next section, I begin with a discussion of the findings related to the process of implementation and its impact on the students in this study.
**Mindfulness Implementation**

Each of the schools and/or teachers in this study represented a unique case with tremendous value in itself. No one situation established a clear-cut, step-by-step path for mindfulness implementation, but they demonstrated patterns of success that permit me to now develop a model for implementation. I recognized a correlation between the level of impact, the involvement of administration, and the transformative ability of mindfulness programming. I then developed a continuum reflecting the depth of implementation in the various school settings and the corresponding levels of impact evidenced (see Figure 12).

The continuum of implementation included several stages, with each stage lasting months or even years. Schools generally began with a lone ranger who developed an interest and began

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**Figure 12**

*Mindfulness Implementation Progression*

<table>
<thead>
<tr>
<th>“Lone Ranger”</th>
<th>Rally Administrative Support</th>
<th>School-wide PD</th>
<th>All-staff/Full implementation</th>
<th>Family Understanding</th>
<th>Transference to home</th>
</tr>
</thead>
</table>

*Figure 12. Mindfulness Implementation Progression. This figure details the process of mindfulness observed in the schools in this study, beginning with a lone ranger teacher who garners support and moves through the subsequent steps (Kramer, 2020).*
independent programming. At the time of interviews, several participants functioned in that capacity. Following initial experimentation, lone rangers’ natural excitement and enthusiasm for mindfulness programming fostered “buddy” development with colleagues who became interested in learning more. Brielle exemplified this well, sharing that she learned about mindfulness from Cora and that Cora’s natural enthusiasm prompted Brielle to implement the techniques in her classroom as well. Finding comfort in numbers, buddies then approached administrators to gain support.

Administrators played a powerful role in whether or not, and how, programming continued from the buddy stage. An administrator could give a program credence in such a way that either a “full out” implementation occurred, or they could deter extended programming, forcing teachers to continue working in the lone ranger capacity. In most schools, the next step included some form of training. When passionate teachers stepped forward, administrators often welcomed them to share their findings in local professional development forums and as interest developed, they provided more notable curricula and professional development opportunities.

In schools that demonstrated high levels of success, school-wide implementation and buy-in represented the next phase. In School BS, where all staff participated in training and implementation, buy-in happened organically. This then led to family involvement and participation. The final step, not fully realized in any school in this study at present, indicated the goal of ongoing practice both in and outside of school by students, staff, and families.

Participants explained their processes of implementation which ultimately led to the formation of the Implementation and Impact Correlation (Figure 13).

The Implementation and Impact Correlation model (Figure 13) demonstrates the way participants described mindfulness implementation as a progression of stages. I connected these
stages or levels of implementation to the outcomes described by participants. On one end of the continuum, I found teachers like Karen or Brenda who described their lone ranger experience. They found value in implementing mindfulness programs for their high school students, but because they introduced the programs largely in isolation, the resulting impact appeared minimal. On the opposite end of the spectrum, I found those like Jamison and Sharon who implemented the programs under the programming power of principal Jamison. This “full out” implementation included all school staff -- from the classroom teachers to the custodians. The resulting impact indicated that programming carried over into the homes with parents demonstrating a willingness to learn more by joining in on the family events.

Perhaps not surprisingly, this scenario seemed to reflect the idea that where we enlist strong effort, attention, and funding, we feel the greatest level of impact. Using this seesaw model (see Figure 13) as a metaphor, one sees that those schools/staff closest to the edge of the seesaw carry the most weight and influence. The result is the highest movement or change. On the other hand, those near the fulcrum carry little weight and make only minimal social movement and change.

While the opposing endpoints create a telltale visual, we must also consider those who represent the middle of the spectrum (see Figure 13). Schools EB and EC, both part of District E demonstrated valiant efforts to develop mindfulness programming in their school settings. They enlisted PD training methods and chose to spend their funds on personnel to guide implementation rather than bring in an outside trainer like that of School BS. But in some ways, the staff members hired to serve as trainers functioned as lone rangers. While passionate about the mindfulness programs, they developed curricula themselves and introduced techniques using a case-by-case methodology rather than a “full out” implementation. While these schools
Figure 13. Implementation and Impact Correlation. This figure demonstrates the connection between the level of implementation and the level of impact as described by study participants (Kramer, 2020).

demonstrated greater impact than the lone ranger schools, the situation represented a tremendous challenge for implementation of school- or district-wide programming, but the financial commitment of administration in hiring personnel went a step further than the lone rangers. For this reason, the impact appeared greater in District E.

District M also fell in the ranks above the lone ranger level. In these schools, programming began with some support from the school principals through training and grant writing, but the two social workers described an ongoing struggle to develop buy-in and practice
with the classroom teachers. Therefore, the level of impact largely stayed near the middle with individual students and just a few classrooms using the techniques.

The schools in this study demonstrated well the different methods of implementation and different levels of impact (see Figure 14). Where lone rangers appeared to only affect individuals or classrooms, full-force implementation had the ability to transform a school culture. Both the progression of implementation and levels of implementation proved telling.

I now move into a deeper analysis of these findings and their connection to spirituality. In this study, school staff demonstrated use of specific mindfulness techniques at the various levels, indicating an intuitive method of adopting mindfulness practices. In the next section, I explore the spiritual nature of children as it relates to faith development theory (Fowler & Dell, 2006), the sequence that helped me to identify the stages of mindfulness development, and the suggested practices for use with K-12 students.

**Faith Development Theory**

As previously described, during the initial stages of this research journey, I explored spirituality and examined faith development theory as a result. Although the focus of my study shifted slightly to mindfulness, I ultimately returned to Fowler and Dell’s (2006) faith development theory. Closely linked to contemplative theory, but with a more specific timeline of development, I found that Fowler and Dell’s work aligned with practices I observed and that participants described. I suggest that applying the stages of faith development theory to mindfulness practices provides a roadmap for the techniques that provide the highest level of benefit for various developmental levels.

An important consideration in the implementation of mindfulness programming must be the element of timing. Fowler and Dell’s (2006) stages of spiritual development and Arthur
Zajonc’s (2016) discussion of contemplative education suggest a need to consider human developmental levels alongside the stages of mindfulness implementation.

Fowler and Dell (2006) described the stages of faith development which I apply to spirituality rather than religious formation. Stage one, primal faith, runs from birth through the first two years of life. Attachment bonds and development of trust with caregivers are key at this stage so use of sensory elements like touch, sound, and sight appear particularly relevant. Although school-age children are much beyond the two-year-old stage, the formation of attachment bonds appears necessary nonetheless. In some cases, as in School BS where trauma
makes itself apparent regularly, there appears a need for time to develop these bonds between students and caregivers or teachers. At this stage, schools must concern themselves with providing an environment of safety and security. The gateway programs described previously that establish relationships and supportive environments foster the level of trust required at this first or primal stage.

Intuitive-projective faith explains the second stage described by Fowler and Dell (2006). Children begin to develop a sense of independence during this stage, and while learning language, story development and play grow in importance. Children at this stage may be unable to separate fantasy from fact, and play includes the development of good versus evil. In terms of mindfulness instruction, use of visualization techniques may prove beneficial as they align with the make-believe elements present in this stage of development. According to Fowler and Dell (2006) symbols may be used to mirror positive feelings like love and companionship. Negative feelings such as terror and guilt may develop at this stage, so consideration of students’ experiences and the need for positive associations appears important. This stage may be a time for use of visualization techniques that engage students in story-making.

Fowler and Dell (2006) described the third stage in faith development theory as a mystic-literal faith. This stage includes the period of middle childhood and beyond. At this stage young people have not yet attained the capacity to construct the feelings, attitudes, and internal guiding processes for themselves or others. Rather, they learn to realize and interpret feelings at this stage. They develop a sense of reward and punishment based on behavior.

Through mindfulness training, children at this level may begin to experience the positive effect of the practices, even if they lack the ability to articulate what has occurred. Use of the techniques during middle childhood may give children options that help them to cope with
stressors and simply calm their bodies to prepare for learning. At this basic level, mindfulness meets a physical need. I observed the effect of these techniques in Cora’s classroom where the students used the mindfulness practices to regroup, refocus, and set them on a course of action for the subsequent period of learning. It required no in-depth understanding or discussion but provided a physical outlet that reset their bodies and minds. Physical movement techniques such as Yoga Calm may provide just such an outlet.

The literal stage suggests that children may begin to identify interior feelings. Programs like positive behavior intervention strategies (PBIS) and the self-regulation goals of mindfulness may come to fruition. With the recognition of their personal response and the logical consequences connected to a particular behavior, children may be motivated to make more positive choices. At this stage children cannot construct their feelings, but with training and practice, they begin to see that actions have consequences.

The next phase, synthetic-conventional faith, takes place in adolescence and beyond and represents the junior high and high school participants in this study (Fowler & Dell, 2006). At this level, adolescents maintain the capacity to appreciate abstract concepts because they have developed stronger formal operational thought processes. Using reason to articulate their thoughts, adolescents may share their perspectives and demonstrate their personalities with significant people in their lives. Fowler and Dell (2006) indicate the inability of youth at this stage to take a third person perspective. This means that adolescents lack the ability to hold themselves off and examine a situation from another frame. The result is a desire to seek confirmation about their identity from significant others, suggesting they are heavily influenced by other people in both positive and negative ways.
At this stage, as described by middle and high school participants in this study, mindfulness practices may find stumbling blocks. Students may resist participation as they struggle with the yoga movements and concerns about what others think. Programs like those Karen developed that focus more on contemplative practices rather than yoga movements give students at this level a greater sense of control and establish a level of comfort in the practice. Establishing an environment of choice also gives these students ownership and a willingness to enter the practice with openness rather than resistance.

The final stages of faith development occur later in life, outside the range of this study, but call for critical reflection and greater development of self-identity (Fowler & Dell, 2006). Those in this stage maintain the capacity to create a greater sense of balance of the tensions of life and the ability to reflect on what matters most. Adult mindfulness practice speaks to this need for balance.

Growing mindfulness practices at the adult level, most notably developed by Kabat-Zinn (1994), demonstrate the desire for adults to reach a higher level of awareness and understanding of purpose. Even within a secular society, mindfulness allows adults to move to a higher state of being, a more self-aware and balanced approach to daily existence. While not necessarily a focus in this study, the contemplative practice and theory appears to align well with these higher levels of faith development which apply to adults (Zajonc, 2016).

In the next section, I argue for a more intentional method of presenting concepts and teaching methods that reflect the child’s developmental level and need for spiritual development even in secular schools. I present a model for mindfulness implementation that considers all these factors.
Mindfulness Development Model

In my initial analysis, I found that administrators played a key role in establishing strong mindfulness programs that ultimately resulted in changing the way students, classrooms, and school systems functioned. Schools with a high-level of involvement from their administrators in the implementation resulted in a more far-reaching impact (see Figure 13). Those schools that had a lower level of involvement of school administrators and a lower set of standards of implementation had less of an impact on the school. This study indicated a series of levels of impact, where a localized level that affected individual students occurred when a lone ranger implemented the programs, and an all-school implementation resulted in the impact stretching beyond the school and into the home.

In schools or systems where districts provided universal training and curriculum implementation, and even hired personnel dedicated to this initiative, a greater impact was felt, particularly reflected at the classroom level. Groups of students benefited from the practices and potentially carried their learning from one setting to the next. In the one school that demonstrated what they described as a school culture shift, implementation included schoolwide training and leadership from the administration in a very practical way. They also put sustainability measures in place and created family-centered events to transfer the learning to the home. This high-level of implementation created a high-level of impact, indeed a far-reaching level of impact. This then begs the question, what makes mindfulness programming different than any other school initiative?

The answer: mindfulness is harder. It brings a different set of connotations and obstacles that a new reading series or a classroom management program does not. Mindfulness faces the struggle of religion and confronts issues with personal trauma. It asks teachers and students alike
to stretch outside of their physical and emotional comfort zones. This suggests a costly price tag for people, too costly for some school systems who would rather not open that can of spiritual worms, even to the point of opting out this study.

The schools that did choose to participate in this study ran the gamut of lone rangers to full-out implementation models. Those on the extreme end of full implementation seemed to understand the importance of educating stakeholders. By sharing the processes at conference time like Sharon described, or hosting family events that brought parents and students together and allowed the students to be the teachers, education of stakeholders became key. Throughout the work and searching in this study, holistic learning theory remained in the back of my mind.

We see students in the United States today as empty receptacles awaiting adults to pour in knowledge. In some rare cases, though, schools have stretched a bit beyond that stage to develop an understanding of the need to fill hearts as well. Some teachers are deepening their understanding of the emotional needs that students bring to the classroom and find ways to meet those demands. But faith development theory and holistic learning theory suggest yet another level—the spiritual nature of children.

As any educational theorist could tell us, developmental levels for academics exist and manifest themselves in our students. Therefore, the same must be true for spiritual development. Faith development theory provides a bit of a framework, but I still feel compelled to separate spirituality from religion and recognize that the concept of “faith development” may cause a regression to the question of religion versus spirituality. I therefore introduce a new model (see Figure 15) that develops the stages of mindfulness as they relate to children’s developmental needs. I further suggest techniques used by teachers in this study that confirm strategic methods for instruction and impact. I aim to provide a balanced approach that respectfully separates
Figure 15

Mindfulness Development Model

<table>
<thead>
<tr>
<th>Stage</th>
<th>Developmental Level</th>
<th>Implications for Instruction</th>
<th>Recommended Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play</td>
<td>Primary-level Students</td>
<td>Structured modeling. Use of interactive videos with music and movement. Teacher models.</td>
<td>Mindfulness tools available as needed. YouTube GoNoodle Yoga Calm Breathing Ball</td>
</tr>
<tr>
<td>Calm and Control</td>
<td>Intermediate-level Students</td>
<td>Model and report personal feelings. Use caution with students’ personal trauma and anxiety needs and establish choice. Curriculum options help explain brain-body connections. Use mindfulness to help students meet physical movement needs. Train students in what they can do independently.</td>
<td>Zones of Regulation Go Noodle Yoga Calm Breathing and calming tools that students can use independently Mindfulness cards Breathing Ball</td>
</tr>
<tr>
<td>Quiet</td>
<td>Middle and High School</td>
<td>Students struggle with body image so yoga may prove challenging. Establish environment of choice. Give students ownership and opportunities to find and share resources. Provide opportunities for silence.</td>
<td>Nature videos Gratitude reflections Meditation Reflection techniques Choice in participation. Connect to sports and extra-curriculars Silence Breathing techniques</td>
</tr>
</tbody>
</table>

Figure 15. Mindfulness Development Model. This figure suggests a series of stages in the development of mindfulness practices for K-12 students including developmentally appropriate activities and recommendations (Kramer, 2020).
Church and State while still meeting the spiritual needs of children and fostering development of the whole child.

**Stage One: Establish Environment**

The first stage of mindfulness development is the establishment of an environment of safety and trust. Just as young children develop a connection to and dependence on their parents, in a classroom setting a similar level of trust must be fostered between the teacher and students. Students need to feel comfortable and safe, particularly if they have come from a place of anxiety or trauma. Development of buy-in requires an established environment of welcome and safety. Yoga Calm, while widely used in schools in this study, requires a level of personal comfort with body movement, making the establishment of a supportive environment at all levels essential. Students in every classroom every year need to again grasp that level of comfort and security for the highest level of impact.

This first step places the teacher at center stage. The teacher serves as the model and foundational source of trust and security. Therefore, training and practice by the classroom teachers are not only beneficial for the mental health of adults themselves, they are necessary for helping students develop a practice.

**Stage Two: Play**

Play provides the next stage of mindfulness development. At this point, which connects with Piaget’s preoperational stage of development, children think and work symbolically (McLeod, 2018). During this stage, children demonstrate natural curiosity born from exploration and play. They benefit greatly from the use of videos and interactive materials that allow them to develop confidence in the movements while engaged with physical play. During observations, teachers used online resources (YouTube and GoNoodle) and applications such as Headspace. The
interactive websites and apps gave students opportunities to watch the screen and move, almost in a storytelling fashion. The use of the large screen SMART Boards engaged the students and put mindfulness in a type of play setting.

Teachers used a form of structured modeling in this case. They demonstrated breathing techniques to add to the students’ repertoire of tools or they used digital resources to guide students through activities. In either case, teacher modeling and participation demonstrated to the students that these practices held value for adults as well.

**Stage Three: Calm and Control**

The calm and control stage comes next and generally falls in the middle childhood range. Students at this level are growing in knowledge and skills. They begin to develop some level of autonomy and attempt to find social acceptance and develop self-esteem. I found that this stage benefited students’ self-regulatory behaviors because of the physical movements. The use of Yoga Calm or other physical movement helped the students begin to develop body awareness and calm themselves. They received instruction in the mind-body connection and could begin to tune in to their breath and body. Students at this stage remained largely literal and concrete, so I suggest that the use of continued physical movement would provide the most benefit. Students and teachers demonstrated the physicality of mindfulness in different settings that helped students to calm their bodies and minds to prepare for learning. I surmise this came from the physical movement at this stage, not from a truly deep reflective mode.

**Stage Four: Quiet**

As children reach the adolescent stage, we see a tremendous amount of physical development which directly affects emotional and spiritual development. At this, what I labeled the quiet stage, young people obtain the ability to appreciate abstract concepts and self-reflect.
They develop a preoccupation with how the outside views them as individuals and they become especially concerned with personal identity as it reflects what others believe. Karen spoke to this struggle in working with her middle school students and the need for student choice in programming. She tried a variety of techniques and ultimately settled on the use of nature videos which allowed the students to transition from the chaotic hallway to the present learning situation within the classroom. She moved away from use of yoga techniques because the students felt self-conscious with the movements.

At the middle and high school levels, I found the element of choice to be key. Students must be permitted to choose to participate or decline participation, and furthermore may benefit from taking ownership to find and share their own mindfulness tools. Karen and Brenda, both described as lone rangers in this study, began their implementation using a variety of techniques and even permitting students to offer suggestions and introduce new videos or apps. This allowed them to take ownership and make decisions about the methods they found most beneficial. Students in the middle and high school range generally carry the necessary tools to communicate in a self-reflective manner what “works for me.”

Denise too utilized a specialized room that allowed for choice in activities for her high school students. The space provided students with a variety of tools, from fidgets to coloring sheets, in a calming environment. Students maintained the flexibility to use the room as needed during and after the school day.

The stages of mindfulness development provide a starting point for teachers and schools who recognize the value in developing the whole child. This framework suggests the patterns of the participants in this study and demonstrates the techniques that may provide the highest level of benefit for students at their specific developmental levels. Mindfulness, in whatever form,
gives young people an avenue for feeling and experiencing life on a different level and helps children maintain balance and connection in an often-chaotic world.

Next I review the most striking findings in this study, their implications for the world of education, and my recommendations for future study and practice.

**Implications**

Considering the data collected in the interviews, the review of literature, curriculum review, and classroom observations, I now consider the future of mindfulness programming. I share my overriding beliefs, concerns, and recommendations for future work in education and mindfulness instruction. The following is structured as a summary of key findings and implications.

**Mindfulness Works**

Each of the participants in this study demonstrated in some way that mindfulness works. They addressed key motivations for implementation such as dysregulation, stress and anxiety, or a need to break from technology and just be. Whatever the motivation, schools shared their stories of success. They described mindfulness techniques as helpful tools for both teachers and students in self-regulation, creating calm minds and bodies, and improving focus.

**Gateway Programs Lay the Groundwork**

Gateway programs demonstrated a particular level of influence because they paved the way for the support of a philosophy of instruction supportive of mindfulness. Programs like character education or zones of regulation suggested a belief in holistic learning theory (Miller et al., 2005), or development of the whole child in mind, body, and spirit. Schools that implemented these gateway programs prior to mindfulness instruction had already developed some level of buy-in with staff, students, and families. Mindfulness techniques then became a
welcome extension of previous learning. Administrators and school districts may benefit from using resources of this nature for efficacy in implementation of a more structured approach to mindfulness.

**High Levels of Implementation Yield High Levels of Impact**

I also found that the more concerted the implementation, the more noteworthy the outcome. Low-level implementation and involvement of administration generally resulted in a low level of impact, reflected in individual students. The study revealed the opposite to also be true. A high-level of implementation and involvement by administrators led to a high-level or school-wide impact, even in some cases, stretching to home life.

**Administrators Mastermind High Levels of Implementation**

The role of administrators and passionate teacher leaders presented a key finding. Each of the interviews described the implementation of mindfulness strategies beginning as largely a grassroots approach, with arguably the most effective school ultimately working with administration for school-wide implementation. The collective effort between teachers who had the passion for new learning and administrators with the power to implement school- or district-wide initiatives exemplified leader member exchange theory. The most successful school developed this cohesive model of passionate teachers, willing administrators, and school-wide training and integration that ultimately moved beyond the schools and into the homes.

**Implementation Comes with Challenges**

Even with strong leaders, implementation of mindfulness programs did not come without struggles. The concern of religiosity and anxiety or trauma sometimes surfaced and prevented implementation. With growing diversity and strong religious views, schools have developed alternative language to describe mindfulness techniques to avoid religious connotations, yet for
some families, words like “yoga” still imply a form of religion and thus families reject the strategies. For trainers, teachers, and administrators, use of alternate terminology may allow for greater buy-in.

Teachers’ anxiety and trauma presented an additional obstacle identified in this study. Because mindfulness reflects contemplative pedagogy (Contemplative Pedagogy, n.d.), those practicing it need to go inward and reflect. For those who have experienced trauma or anxiety, this inward examination calls them to a place of distress. They thus reject using these types of programs. Developing teacher training and practice outside of the classroom could give adults coping strategies for their personal lives and help develop buy-in for classroom application.

**Mindfulness Addresses the Spiritual Needs of Students**

Although a stumbling block for some, this study demonstrated that mindfulness helps children develop an inner connection to self through body awareness and control. This enables students to develop perspective and separate the stressors they face from the present moment. As students grow in maturity, mindfulness connects them to the wider world and provides an avenue for creating balance in chaotic worlds.

**Mindfulness Provides Balance and Quiet in Chaotic Schools and Lives**

Schools with high levels of implementation identified the transformation in their students and school culture, taking the form of decreased office referrals or a quiet hum in the classroom. Teachers used mindfulness techniques to calm and refocus a classroom as well as to help struggling students cope with anxiety and trauma. Sharon described how she needed strategies to help her first grade students who had varied social-emotional needs and shared that mindfulness worked with triune brain theory (Maclean, 1973) in moving her students from a place of fight-flight-freeze to one where they could feel safe and develop cognitively. This study suggested that
these practices may help address social-emotional needs so that students can learn more and better.

**The Power in Adult Practice**

This study indicated that adults have an obligation to model mindfulness practices, and that they may find that the practice benefits the teachers themselves as much as their students. Several participants addressed the level of stress teachers cope with both from their own lives as well as the compassion fatigue they experience in caring for the needs of their students. Mindfulness may provide a tool for coping with many different types of stress—both in and outside of the classroom.

**Mindfulness Benefits All Students**

The review of literature indicated the progression of mindfulness practices from adult practice, to specialized youth practice, to special education, to the regular education classroom. I found that while students with special needs and those with anxiety, sensory processing disorders, or autism spend time outside of the classroom learning mindfulness techniques, a newer approach involves keeping those students in the classroom and incorporating mindfulness techniques that are beneficial to students in the special education and regular education settings alike. Students with behavioral needs find success in self-regulation and gain confidence in their ability to work alongside their peers.

**Recommendations**

In this next section, I detail recommendations based on the data collected in my study. The recommendation list appears lengthy as mindfulness work in regular education classrooms is in its infancy. I pursue the questions of where to go next and the best path for doing so.
recommend further exploration of implementation techniques, data collection, and education for stakeholders, beginning with a look at how to work with adults.

**Build Buy-in**

In this study, I noted the importance of creating teacher buy-in for effective implementation of mindfulness practices. Some instructors, like Lauren and Karen, found the effects of yoga or mindfulness beneficial to them personally before they ever thought to bring the techniques into the classroom. Others were introduced to mindfulness as adults as a technique for working with students and made it a part of their personal life. Still, others saw the value of using the techniques for their students but did not have a consistent personal practice. I found that even if adults do not recognize the value of mindfulness for themselves, they must understand the benefit for their students if they are to integrate it into the classroom. Without teachers seeing the techniques as valuable, full implementation and the positive effects of the implementation, may never be realized.

Based on my findings, I would recommend implementation from the top down, as long as there are passionate teacher-leaders who will model and make connections with the rest of the staff. This model allows for full implementation and integration, all-staff training, and a recognition that mindfulness is good for everyone’s mental health—not just the students’. Furthermore, developing buy in requires that staff members have some time to develop personal practice in order to experience the value for themselves.

**Consider the Needs of the Adults and How Mindfulness May Be Beneficial**

Several interviews addressed teacher self-care and the need for schools to meet the needs of teachers who bear the burden of stressed students. Jamison used the term compassion fatigue as a phenomenon where teachers become weighed down by the stressors their students bring to
the classroom. This requires school systems to put measures in place that address the mental health needs of staff as well as students.

**Develop Programming Based on Specific Needs**

Administrators must consider the needs of the school and develop programming accordingly. Using the seesaw model (see Figure 13), I demonstrated that schools chose varied levels of implementation. I surmise that some students and schools may not feel a high-level of implementation is necessary. Others, however, with a high-needs, high-risk, high-trauma population may require a substantial investment to change the school climate. Administrators and teacher leaders must use their joint power to make decisions based on the specific needs of the school setting.

Exploration of the correlation of impact with perceived need may be something to explore in future studies. District M chose a low-level implementation track, while School BS chose to implement at a high-level, arguably for good reason. Because the students at School BS demonstrated a higher level of need, they may have benefited more. Perhaps the opposite is true as evidenced by District M. With different demographics, perhaps District M did not warrant a high-level of implementation.

**Consider the Low-cost Option of Meeting the Needs of Many Students Simultaneously**

In this study, I utilized a snowball effect to gain participants. This led me to see that mindfulness programming is largely being implemented at the elementary level. I also found, through interviews and observations, that more programming occurred for students with special education labels than in the regular education classrooms. The Pyramid Model for Promoting Social and Emotional Competence in Infants and Young Children reflects low levels of care for
the majority of students and high levels of care for a small number of students (see Figure 16). In looking at students today, it seems the reverse is true. The number of students who require support for mental health including anxiety, depression, and trauma is growing (Mental Health America, 2018).

I argue that a reverse model should be put in place. Instead of targeting small groups of students with behavioral needs, why not address dysregulation needs and introduce new techniques to all students in the classroom? Mindfulness practices have the capacity to meet the mental health needs of a great number of students simultaneously, thus providing a low-cost option and lightening the load of over-burdened special education departments.

**Collect Further Data**

The caveat in this brings me to a fifth recommendation. There remains a distinct lack of data to clearly suggest that this methodology indeed benefits students’ long-term mental health. Each of the participants in this study shared the perceived qualitative benefits of the use of mindfulness techniques, but few had statistical data to validate their views. I therefore recommend that further studies be conducted in regular education classrooms with specific data collection measures in place. These measures may include behavior interventions, office referrals, and standardized test results. While qualitative studies provide solid backing for such programs, I recommend more long-term, intensive studies, perhaps even quantitative in nature, to validate implementation for skeptics.

**Educate Stakeholders**

Perhaps my strongest recommendation lies in this last one. From the beginning, I felt the resistance of mindfulness and spirituality programs due to the language used. Kathy Flaminio, the principals, and several teachers pinpointed religiosity as a considerable obstacle. I disagree
Figure 16

*The Pyramid Model for Promoting Social and Emotional Competence in Infants and Young Children.*

Figure 16. The Pyramid Model for Promoting Social and Emotional Competence in Infants and Young Children. This figure demonstrates the system of supports to assist in meeting the social and emotional needs of children. Retrieved from

[https://challengingbehavior.cbcs.usf.edu/Pyramid/overview/index.html](https://challengingbehavior.cbcs.usf.edu/Pyramid/overview/index.html)

with the recommendation to simply change terminology and downplay spirituality. Rather, let us set out to inform the public that religion and spirituality present unique concepts and need not overlap. Let us make a case for school systems to make room for development of the spiritual nature of children. Rather than change terminology, I suggest we move to change mindsets through education of stakeholders. This includes school staff, parents, and even preservice teachers. Adams et al. (2015) described how the United Kingdom utilizes holistic learning theory
by emphasizing the value of developing the whole child as established by their national standards:

The aforementioned National Curriculum had two aims. One was to prepare pupils for the opportunities, responsibilities and experiences of adult life, and the other was to promote the spiritual, moral, cultural, mental and physical development of pupils at the school and of society. (HMSO, 1988, s1, 2a)

Development of national standards that include spiritual development presents a level of controversy in the United States, which was underscored in my research journey. Holistic learning theory requires a higher level of education and understanding of terminology in order to gain acceptance in the United States. Like any worthwhile initiative, I believe that this too begins with passionate teachers and leaders who set out to build understanding first. While speaking with conviction in sharing the feedback from my study participants, I also consider the limitations of the study in the next section.

**Limitations**

This mindfulness research study has some notable limitations. First, my personal and professional constraints allowed for only Minnesota teachers and school staff to be included. The Midwest region is perhaps less progressive in educational reform, so I consider this to be a limiting factor. Larger school systems, particularly on the west coast, may provide further opportunities for exploration.

My research journey took twists and turns, and what started out as a study of adolescents morphed into a K-12 study. Because of time constraints and the snowball method I enlisted for gaining participants, I only interviewed three staff members at the 7-12 level. I would have preferred to gain a more balanced K-12 range, but I theorize that fewer teachers utilize
mindfulness practices at the high school level, particularly in the regular education setting. The gradual shift from special education implementation to the regular education classroom still occurs organically with few high schools developing programming currently.

This study demonstrated the short-term benefits of the implementation of mindfulness practices through multi-case study methodology. Teachers and school staff spoke with conviction of the efficacy and importance of implementing this type of programing to help students not only self-regulate and gain greater focus in the classroom, but also to cope with ongoing conditions such as anxiety and trauma. Additionally, the impact felt by those interviewed indicated a great need for adults to develop practices that help them deal with their personal stressors in addition to the ones brought on by compassion for others.

The missing piece, in my opinion, rests in long-range studies that demonstrate the benefits of such practices. As principal Jamison indicated, it will take years before the impact of this programming becomes evident in standardized test scores. Furthermore, principal Judy recognized the varied programs implemented in educational settings today and described the challenge in pinpointing the exact catalyst for the change we identify.

Conclusion

I set out to understand how and why teachers today use mindfulness practices and to what extent they felt an impact. Ultimately, I learned that the practices took a variety of paths—from yoga, to specific curriculum models, to deep breathing, to online videos and apps. It looked different in every classroom in every school and represented both informal and formal methodologies. The common thread was a belief in mindfulness’ ability to help children self-regulate and refocus. The question remains exactly how mindfulness affects students long-term and how to build buy-in from stakeholders who get caught up in religion versus spirituality. But I
believe that children encompass more than minds ready to be filled. They have hearts and spirits, and mindfulness presents an initial step in meeting a great need in our young people today. One participant wondered aloud if this was just another educational fad or if we were on to something bigger. I think there remains something much, much bigger inside those little bodies. May we continue to dig deep to find it.
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APPENDIX

Appendix A: Flexible List of Interview Questions

• Briefly tell me about yourself as a person and as an educator.
• Tell me about the meditative/mindfulness/gratitude practices that could be observed in your classroom?
• Share specific examples of lessons/activities you have used.
• Why did you choose to make this a part of your teaching methodology?
• Who taught you about these practices?
• Where did you learn about these practices?
• What has been the impact, from your perspective, of these practices on your students? On the classroom climate? What, if any, value have you witnessed in incorporating these practices into your classroom.
• What kinds of information did you or the school collect about efficacy of this program?
• What did you find out? How did participation in these exercises affect the students?
• What affect, if any, did it have on you?
• Are there others in your school system who incorporate these practices in their classes? What can you tell me about what they do?
• Suppose I was in your classroom during meditation experience. What would I see happening?
• What objectives did you have in implementing these techniques?
• Do you have any people you would recommend I contact to learn more?
• Are there further pieces of information you think I should know and include in my study?
Appendix B: Sample Email to Participants

Dear

[Introductory comments specific to school/contact.]

I am interested in learning more about the meditation and mindfulness practices that you utilize in your school setting. I am a teacher by profession and currently serve as principal in Litchfield at the School of St. Philip. In addition, I am in a doctoral program with the University of St. Thomas and am just beginning to do some preliminary work on my dissertation writing. I plan to study "spiritual practices in schools" which loosely encompasses various methods of meditation, gratitude, yoga, and mindfulness. I would like to interview teachers and school staff who utilize these practices in their classrooms and schools. At this time I am wondering if you would be willing to sit down and talk with me for an hour. This would be fairly informal as I am still just learning the process of research interviews. If at some point you were willing to let me observe your classroom work, that would also be helpful, but for now an interview would be great. If this is possible, I would be most happy to visit your office or meet at a location of your choosing. I have some flexibility with my job and can often get away on Wednesdays or Fridays.

Thank you for considering participating in my learning. It sounds like I have much to learn from you!

Kind regards,

Michelle Kramer
Appendix C: Curriculum Review Notes

Primary Objectives

Procedures

Timeline for Implementation

Training/Role of Instructor

Age Range

Lesson Structure
Appendix D: Classroom Observation Form

Physical Classroom Set-up/Structure

Number of Students/Placement

Description of Processes:

Student  Instructor/Teacher

Observed Description of Student Behaviors Pre- and Post-Intervention