Exploring the Influence of Mindfulness on Elementary-Aged Students Through the Lens of the Classroom Teacher: A Case Study

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Exploring the Influence of Mindfulness on Elementary-Aged Students

Through the Lens of the Classroom Teacher: A Case Study

By Angela Penna-Wilkos

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Submitted in partial fulfillment of the requirements for the degree
Executive Ed.D. in Education Leadership, Management and Policy
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COLLEGE OF EDUCATION AND HUMAN SERVICES
OFFICE OF GRADUATE STUDIES

APPROVAL FOR SUCCESSFUL DEFENSE

Angela Penna-Wilkos, has successfully defended and made the required modifications
to the text of the doctoral dissertation for the Ed.D. during this Fall Semester 2018.

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form to the Office of Graduate Studies, where it will be placed in the candidate’s file and
submit a copy with your final dissertation to be bound as page number two.
ABSTRACT

The purpose of this research study is to explore schoolteachers’ perceptions and experiences regarding the implementation of mindfulness practices with school-aged elementary students. The concept of mindfulness involves three interrelated mental skills and dispositions: (a) concentrating attention intentionally on the here and now; (b) perceiving the present moment in a calm, clear, and receptive manner; and (c) experiencing each moment just as it is without bias or judgment (Kostanski & Hassed, 2008). As mental health education gains greater priority in schools, interest has increased in the utility of mindfulness practices as one of the key approaches of addressing student well-being.

Interview questions for the teachers focused on the following areas: (a) benefits of mindfulness in teachers’ personal lives, (b) teachers’ goals for implementing mindfulness practices in their classrooms, (c) mindfulness practices teachers implement in pursuit of their defined goals, and (d) teacher assessment of the effectiveness of mindfulness in achieving cognitive performance and social relationship benefits. Qualitative analyses of the ten semi-structured interviews revealed that all teachers felt mindfulness would benefit the emotional regulation of their students and would contribute to students’ abilities to achieve relaxation and to strengthen cognitive skills such as listening and focus. However, the challenges of utilizing mindfulness in the classroom included the limited time for mindfulness implementation within the academic day and student behavioral interruptions. Despite these challenges, the teachers believed that their school’s mindfulness initiative benefited students by increasing their attention skills, self- regulation skills, and social-emotional ability.

Keywords: mindfulness, self-regulation, attention, focus
DEDICATION

This work is dedicated to my loving family and friends.

In Memory of

Angela Pesce and Thomas Anthony Wilkos
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I would like to thank my family for always supporting me in my educational endeavor and always showing interest, enthusiasm, and encouragement when I needed it most. I am especially grateful to my husband, Thomas Wilkos, who lovingly and patiently offered support and encouragement throughout this research study. I want to thank my sister, Robin Baskinger, for joining me in this journey and keeping me motivated. I am very appreciative to my incredible dissertation committee: Dr. Elaine Walker, Dr. David Reid, Dr. Rhoda Dr. Howard Walker, and Shore. Thank you for your invaluable feedback and support through this process. Lastly, I wish to acknowledge and thank the ten teacher participants who took part in this study and kindly shared their thoughts and experiences using mindfulness in their classrooms.
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CHAPTER 1

INTRODUCTION

Over the last few decades, research on mindfulness has increased. A simple definition of mindfulness is the practice of uninterrupted, non-judgmental conscious awareness of the present moment (Kabat-Zinn, 2003). Mindfulness draws from the ancient Buddhist practices of meditation, but is generally understood as an overall wellness technique used to help foster a happier, less stressful life (Burke, 2010). Research has shown that when people are mindful they are not distracted by external or internal stimuli, and they are better able to pay attention to tasks (Napoli, Krech, & Holley, 2005). The practice of mindfulness also enables individuals to regulate negative emotions in stressful situations (Beddoe & Murphy, 2004). Additionally, people who are mindful are believed to have an increase in cognitive ability and concentration under pressure (Chambers, Gullone, & Allen, 2008).

Until recently, mindfulness programs exclusively focused on adult health and well-being. However, interest has recently increased in the utility of mindfulness practices for children (Napoli et al., 2005; Zelazo & Lyon, 2012). Many children experience difficulties in a variety of domains, including academic, psychological, and cognitive. Cognitive function is often related to self-regulation and the capacity an individual has to control impulses. For example, lack of concentration, self-regulation, and the ability to maintain focus often leads to learning disabilities that can affect language, reading, writing, spelling, and math (Vickery & Dorjee, 2016). The child may develop anxiety due to lack of knowledge on how to change the undesirable behavior (Moilanen, 2007). Anxiety may also occur when the child does not know how to behave or cope with emotional pressure.
Furthermore, the pressure created by academic, psychological, and cognitive difficulties may lead to anger, violent behavior, and conduct disorders, all of which can negatively impact students' school performance. The mindfulness-based program is one tool that is currently being implemented in classrooms throughout the United States and other countries to address such problems (Rabiner, Murray, Schmid, & Malone, 2004).

Mindfulness, when practiced with teachers and school-aged children, has been found to not only reduce stress, but also improve attention, self-regulation, classroom behavior, optimism, compassion, increased feeling of acceptance, critical thinking skills, and an increase in identity (Black & Fredando, 2014; Burke & Hawkins, 2012; Viafora, Mathiesen, & Unsworth, 2015; Zimmerman, 2013). In her 2015 study, Lisa Flook, a scientist at the University of Wisconsin who studies mindfulness in schools, found that mindfulness training appears to work with children as young as four years old. Preschoolers who received twelve weeks of kindness and mindfulness class earned better grades and were more likely to share than counterparts in a control group (Flook, 2015).

Interest in mindfulness in the classroom has increased because in addition to teachers’ responsibility for students' academic development, they are increasingly expected to be more aware of their students' social emotional development and to have effective methods for dealing with social-emotional challenges (Ritchart & Perkins, 2000). Given the increased awareness in mindfulness practices in elementary schools, teachers’ experiences with these programs and how they aid in student development may add to the understanding of the effectiveness of mindfulness practices. Therefore, the objective of this research is to discover how teachers describe the effectiveness of their school's mindfulness-based interventions, their experiences in
incorporating mindfulness in the classroom, and their assessments regarding the benefits of these programs for their students.

The focus of most research is on areas other than elementary-aged school children and the benefits of mindfulness. Previous research showed promising results in the outcomes of mindfulness based programs in clinical settings, and studies have since included a range of populations from health care practitioners (Shapiro, Astin, Bishop, & Cordova, 2005) to prisoners (Samuelson, Carmody, Kabat-Zinn, & Bratt, 2007) to individuals looking to improve their overall well-being (Shapiro, Oman, Thoresen, Plante, & Flinders, 2008). For example, Tang et al. (2007) found that five days of meditation training led to increased conflict monitoring, or an increased ability to prioritize among competing tasks and responses, which suggests superior executive attentional abilities.

As the number of studies reporting the benefits of mindfulness-based programs for adults increase, interest in exploring how mindfulness-based programs can also benefit adolescents and children has grown. Although the focus of most studies within the last decade has been on age-appropriate mindfulness-based programs delivered to adolescents and children in clinical settings (see Burke, 2010), the implementation of mindfulness-based programs in educational settings is steadily increasing (Greenberg & Harris, 2012; Meiklejohn et al., 2012; Willis & Dinehart, 2014; Zelazo & Lyons, 2011). Despite the proliferation of studies, fully experimental research that examines the effects of integrating mindfulness practices into the class curriculum is limited. Few researchers have examined the outcomes of mindfulness practice on improving general attention-to-task behaviors and social relations.

Researchers examining outcomes of mindfulness-based programs for children have adapted the format for programs designed for adults to accommodate to the developmental level
and needs of young children in the classroom receiving the program (Greenberg & Harris, 2012; Meiklejohn et al., 2012; Zelazo & Lyons, 2012). Due to the nature of children’s developing cognitive abilities, mindfulness-based programs for children require adaptations to both the delivery of mindfulness-based program sessions and to the nature of the mindful awareness practices to ensure that they are age-appropriate (Burke, 2010; Davis, 2012; Hooker & Fodor, 2008; Semple, Reid, & Miller, 2005; Thompson & Gauntlett-Gilbert, 2008).

**Historical Background**

Mindfulness practice as evolved from its beginning in Buddhist teachings to its expansion into the secular world. Mindfulness has been used across disciplines including medicine, clinical work, and intervention programs. The practice of mindfulness is emerging as a method to teach social and emotional learning. Research on the neurobiology of mindfulness in adults suggests that sustained mindfulness practice can enhance attentional and emotional self-regulation and promote flexibility, thus pointing toward significant potential benefits for both teachers and students (Meiklejohn et al., 2012). Many different cultures and religions around the world from the Middle Ages to the present have found value in mindfulness: Hindus, Buddhists, Muslims, Christians. The depth and span of human experience with mindfulness techniques in itself argues very powerfully for their intrinsic worth in solving problems in inner experience.

Mindfulness draws from the ancient Buddhist practices of meditation, but today it is understood as an overall wellness technique used to help foster a happier, less stressful life (Burke, 2010). Meditation is one of the three dimensions of the Eightfold Path to enlightenment, which is compromised of eight fundamental teachings Buddhists use in their everyday lives. Viewed as the high road to enlightenment, the ultimate goal in Buddhism, the practice of meditation can transform practitioners into what they wish to be (Keown, 1996). Meditation is
the formal practice of mindfulness described as an “altered state of consciousness” (Keown, 1996). The objective of meditation is to be present, fully conscious and aware (Keown, 1996, p. 91). The distinction between mindfulness and meditation is that one tries to be mindful in every situation, while one sets aside time to meditate and practice being mindful (Carmody & Baer, 2008).

Over the last 30 years, mindfulness has become secularized and simplified to suit Western cultures. In the 1970s, anecdotal research findings about the ability of meditation to reduce unhealthy psychological symptoms triggered interest in mindfulness as a healthcare intervention. Jon Kabat-Zinn at the Medical Center at the University of Massachusetts introduced the first eight-week structured mindfulness skills training program which gave considerable psychological, and some physical relief, to patients experiencing intractable severe pain and distress from a wide range of chronic physical health conditions. This came to be known as Mindfulness-Based Stress Reduction (MBSR).

Kabat-Zinn designed the MBSR program to teach patients how to manage their various medical and psychological symptoms through practicing a series of mindful awareness practices (Kabat-Zinn, 1982; Miller, Fletcher, & Kabat-Zinn, 1995). Results from studies on the outcomes of MBSR programs in clinical settings showed promising results, and studies have since included a range of populations from health care practitioners (Shapiro et al., 2005) to prisoners (Samuelson et al., 2007) to individuals looking to improve their overall well-being (Shapiro et al., 2008).

This field of study has grown because of the increased interest in the benefits of mindfulness on well-being. Shapiro (2009) wrote that two decades of empirical research have generated considerable evidence supporting the efficacy of mindfulness-based interventions
across a wide range of both clinical and non-clinical populations. From its initial applications in medicine, mindfulness training has spread into several fields including education. Mindfulness-based programs designed specifically for classrooms are beginning to emerge (see Meiklejohn et al. (2012) for a review).

Attention on the promotion of children’s social and emotional competence in schools has increased in the past decade, and in psychology, a paradigm shift from preoccupation with repairing weaknesses to enhancing positive qualities and preventing or heading off problems before they arise has been occurring in recent years (Csikszentimihalyi, 2000). Implicit in this trend is the assumption that educational interventions can be designed to foster children’s strengths and resilience (Huebner, Gilman, & Furlong, 2009). Research on the usefulness of mindfulness programs has demonstrated that their implementation into classrooms is associated with various positive outcomes such as better self-regulation (Flook et al., 2010; Razza, Bergen-Cico, & Raymond, 2013) and improved social and emotional skills (Schonert-Reicel & Lawlor, 2010).

**Statement of the Problem**

In this study, the conflicting demands between the high academic standards required by today’s elementary students and the academic needs for school-aged children with attention challenges are addressed. Students with challenges in attention, including inattention, executive functioning, hyperactivity/impulsivity, and social immaturity are not being taught the appropriate skills yet are expected to demonstrate higher rates of attention-to-task behaviors and social cooperation. Self-regulating skills are important for young children in order for them to avoid difficulties in school and help them have healthy relationships with peers (Hair, Jager, & Garrett, 2001; Shonkoff & Phillips, 2000).
Attention skills such as the ability to maintain focus in distracting environments have shown to be related to the overall cognitive performance and especially academic performance in the classroom (Brown, 2009). According to research published in *Cognitive Science*, elementary school students spend as much as 29 percent of their time “off-task” during the school day. The researchers found that the amount of time varies depending on the type of instructional activity in which students are engaged (Godwin, Petroccia, Fisher, Almeda, & Baker, 2013).

Interest in the utility of mindfulness practices for children has increased (Napoli et al., 2005; Zelazo & Lyon, 2012). In an effort to support academic success in students, educators are attempting to teach students how to learn, study, compete, be responsible, and strive for self-discipline beyond many of their students’ levels of developmental maturation and capability. Mindfulness training—teaching children to focus, relax, and reflect—has been shown to increase attention skills in elementary students, resulting in more on-task behaviors (Harrison, Manocha, & Rubia, 2004; Peck, Kehle, Bray, & Theodore, 2005; Rabiner, 2011).

In two notable studies, Rabiner (2011) researched mindfulness infused with yoga as an intervention for students with attention challenges, as measured by on-task behaviors. The results of these studies show that yoga postures, deep breathing, and relaxation exercises significantly increased on-task behaviors. Other studies using a variety of mindfulness trainings, some including yoga techniques, have shown significantly decreased anxiety, increased attention skills and memory, and an improved general sense of well-being as a result of mindfulness training and meditation from various models of practice (Biegel, Brown, Shapiro, & Schubert, 2009; Erisman & Roemer, 2011; Flook et al., 2010; Harrison, Manocha, & Rubia, 2004; Jain et al., 2007; Moretti-Altuna, 1987; Van Vugt & Jha, 2011).

While some studies have shown that children benefit from mindfulness practices, few
studies incorporate teacher observations on the use of mindfulness with elementary-aged students. Furthermore, the focus of these investigations is narrow and does not capture the full experience of teachers’ assessments of students receiving mindfulness training. Therefore, a need exists in the literature to explore mindfulness more completely and evaluate the extent to which teachers’ perceptions can aid in constructing a complete understanding of the implementation of mindfulness with school-aged children in classrooms.

**Purpose of the Study**

The purpose of this qualitative study is to examine elementary school teachers’ experiences regarding the implementation of mindfulness-based interventions in their classrooms. Due to the nature of this study, the researcher focused on teachers’ descriptions of the effectiveness of mindfulness practices on improving and maintaining student attention and focus and improving academic performance and social relationships with peers. For example, the researcher interviewed teachers to discover their beliefs on whether their school mindfulness practices helped students improve in these areas without using extensive instructional time in the process.

With improved behavior, the student can learn and produce more in the classroom setting, and the teacher should have fewer disciplinary problems involving off-task behaviors and social conflict. To date, few studies include teachers’ perceptions of mindfulness in an educational setting, and those studies contain recommendations that further studies be conducted to give voice to teachers. A need exists for an in-depth exploration of teachers’ views of the connections or lack of such connections between mindfulness training and elementary-aged student behavior.
Research Questions

The overarching research question is the following: For teachers who practice mindfulness in the classroom, what are their perceptions of its influence on early elementary students’ cognitive performance and social relationships? This overarching question is divided into four sub-questions:

1. How do teachers describe the benefits of mindfulness in their personal lives?
2. How do teachers describe their goals for using mindfulness in the classroom?
3. What mindfulness practices do teachers implement in pursuit of their defined goals?
4. How do teachers assess the effectiveness of mindfulness in achieving cognitive performance and social relationship benefits?

Chapter 3 contains the interview questions related to each of the following research questions.

Significance of the Study

This study contributes to the current research on how to help children learn more effectively in the classroom. The goal of this study is to explore whether or not mindfulness is beneficial to young children by providing a detailed report of the influence mindfulness-based practices have in elementary school classrooms. To meet the increasing demands for improved academic performance, schools need programs that can help students improve their attention-to-task skills, reduce hyperactive/impulsive behaviors, and improve social interactive skills without using extensive instructional time in the process. Students with improved skills in these areas are able to learn and produce in the classroom setting and have fewer problems with discipline and off task behaviors.
While academic standards escalate to meet federal and parental expectations, elementary schools are struggling to meet the academic needs of students suffering from attention challenges. Over the past ten years, the educational system in the United States has demanded progressively higher academic expectations in elementary schools, requiring increased sustained attention from students in kindergarten through fifth grades (Hooper & Chang, 1998). A one-size-fits-all curriculum is not always compatible with the diverse skills of elementary students. With up to 30 students in a class, an academically demanding standard curriculum places unreasonable expectations on teachers (Napoli et al., 2005), requiring them to modify the curriculum for students showing up to three years difference in achievement. Regular practice of mindfulness exercises strengthens students’ capacity to self-regulate attention by developing attention control through repeated and intentional focusing, sustaining, and shifting of attention.

Understanding the observations made by teachers and learning about their experiences with a school-based mindfulness program promotes further understanding of how the mindfulness interventions are implemented and their potential benefits and challenges for students and teachers. Mindfulness interventions in schools are a growing movement that has reported benefits for many students and their teachers. Evidence from the research shows improved measures of attention following mindfulness training with children (Napoli et al., 2005), adolescents (Zylowska et al., 2008), and adults (Jha, Krompinger, & Baime, 2007). Greenland (2010) proposed that teachers' personal beliefs about children's learning influence their teaching practices and interaction with children. She also noted that teachers' beliefs and perceptions regarding their role in the classroom are significant to implementation of mindfulness practices.
In increasingly challenging learning environments, in and out of the elementary classroom, teachers must find ways to support students in maintaining their focus, being aware of themselves, and being fully cognitively present so that students can actively participate in their education. Brown (2009) referred to cognitive function as the ability to maintain focus and shift one’s attention from task to task. The inability to focus and sustain attention often leads to incomplete tasks. Insufficiencies in the ability to change attention may lead to repetitive behaviors in children. Children need consistent routines in their lives (Gioia, Isquith, Guy, & Kenworthy 2000). Students struggle to meet the demands of standardized testing and stressful expectations from schools to perform better. For many children, routine school activities like sitting for long periods of time or moving through transitions can be potentially stressful and anxiety producing (Semple, Reid, & Miller 2005).

This study is significant in that it adds to the current research on the effects of mindfulness in children. Focusing on overall attention-to-task behaviors, including inattention and executive functioning, hyperactivity/impulsivity, and social relations together, is valuable for overall academic success in elementary-aged children. Teachers can use an effective mindfulness program to support students’ skills in attending to task, socializing with others, and students’ academic growth in a healthy, functional manner. Mindfulness practices that do not require extensive time away from instruction enable the teacher to teach and maintain the practices without sacrificing his or her academic program. In this way, the teacher could continue helping students cultivate mindfulness, enabling them to continue to improve or maintain attention-to-task behaviors, and social relations over time.
Theoretical Framework

The principles and theories of meditation indicate that it can be a tool to relieve stress and anxiety (Kabat-Zinn, 2003). Research has not determined whether meditation can positively influence the learning experience of the classroom so that students can increase their focus during learning situations. The application of mindfulness has been theorized to involve three interrelated mental skills and dispositions. Kostanski and Hassed (2008) described these skills and dispositions as the following: (a) the ability to focus attention, (b) the ability to perceive the present moment calmly and clearly, and (c) the skill of experiencing each moment without bias or judgment.

Mindfulness meditation appears to reshape the neural pathways, increasing the density and complexity of connections in areas associated with both cognitive abilities such as attention, self-awareness and introspection, and emotional areas connected with kindness, compassion and rationality, while decreasing activity and growth in those areas involved in anxiety, hostility, worry, and impulsivity (Davidson et al., 2003; Davidson & Lutz, 2008; Hölzel et al., 2011). One important theoretical framework for recent research on mindfulness is the positive psychology framework. Mindfulness and positive psychology encourage the focus of attention more closely on the positive aspects of situations, ones' own self and others, which ultimately leads to a happier, more meaningful and fulfilling life. This framework of positive psychology brings into focus human virtues such as kindness, compassion, and resilience. Fredrickson (1998) emphasized the importance of mindfulness and positive emotions in building individuals' personal resources.

In order for mindfulness practices, such as meditation to be successful, the implementation of mindfulness training is a key factor in its positive outcomes and benefits.
Implementation of a program involves three aspects: (1) the monitoring of control/comparison conditions, which involves describing the nature and amount of services received by members of these groups; (2) program reach (participation rates), which refers to the rate of involvement and representativeness of program participants; and (3) adaptation, which refers to changes made in the original program during implementation (Durlak & DuPre, 2008). Research suggests that a variety of mindfulness-based implementations and interventions are effective with children and youth (Abrams, 2007; Galantino, Galbavy, & Quinn, 2008; Mendelson et al., 2010). These approaches include yoga, body scan, meditation, breathing exercises, and Tai Chi, all of which may increase an individual’s capacity for attention and awareness (Abrams, 2007; Mendelson et al., 2010).

Mindfulness theory makes several claims about the benefits of regular mindfulness practices. First, the mindfulness skill of redirecting the focus of attention can potentially eliminate or minimize physical discomforts such as chronic pain and stress (Kabat-Zinn, 2003). The mindfulness-based stress reduction (MBSR) program uses specific mindfulness exercises such as breath awareness and body scan yoga for treatment of physical ailments and stress symptoms. Second, mindfulness researchers and theorists claim that mindfulness training increases attention skills and executive functions including the ability to control and easily switch the focus of attention (Hamilton, Kitzmen, & Guyotte, 2006). These executive functions involve the individual's coordination of reasoning, working memory, and self-control (Heeren, Broeck, & Philippot, 2006). Third, mindfulness researchers and theorists claim that mindfulness training increases social-emotional well-being by promoting the capacity to develop and sustain positive relationships with peers and the ability to regulate and communicate emotions (Cohen, 2006; Schonert-Reichl & Lawlor, 2010).
Limitations of the Study

This study is limited in several ways. One limitation to this study is the internal validity of the teachers’ responses. The purpose of this research is to discover teachers’ perceptions of how mindfulness meditation practices and teachings influence a student’s experience in an elementary classroom environment. Measuring responses can be susceptible to bias by the classroom teacher. Another limitation to this study is that the sample of teachers is small, and they represent two schools within the same school district in northern New Jersey. Therefore, the sample is limited to teachers who are experienced in mindfulness and who are very positive about their school’s mindfulness program.

Furthermore, the teachers interviewed teach grades kindergarten through fifth grade, and it is not clear whether similar teacher reports would be found if the study were conducted with teachers of higher grades. Additionally, interviewing was the only method used to study teachers’ experiences in school mindfulness programs. The limited scope of the research did not allow for additional methods such as classroom observations of teacher-student mindfulness sessions. The researcher cannot be certain the intervention of mindfulness alone caused any change; extraneous variables may have influenced and affected any possible outcomes.

The greatest limitations of mindfulness initiatives in education arise from the subjectivity of the mindfulness process. Due to the subjectivity of mindfulness interventions, evaluating mindfulness teachers presents challenges. Kabat-Zinn (2003) addressed this limitation, stating, “mindfulness, from our point of view, cannot be taught to others in an authentic way without the instructor’s practicing it in his or her own life” (p. 149). Little to no formal assessment of those
providing mindfulness treatment exists, and better ways to evaluate those who complete training programs are needed.

**Definition of Terms**

*Mindfulness* is a systematic approach of being attentive in an open, caring, and intentional way (Semple et al., 2010). *Mindfulness* is being able to purposefully pay attention to the present moment and remaining non-judgmental (Kabat-Zinn, 1994).

*Attention* is a state of focused awareness on a subset of the available perceptual information (Gerrig et al., 2002).

*Focus* is to direct one’s attention or efforts.

*Executive function* is the regulation of cognitive processes including attention, memory, and motor skills (Blair, 2010 Blair & Razza, 2007).

*Self-regulation* is the ability to control impulsive behavior (Demetriou, 2005; Moilanen, 2007).

*Cognitive Performance* is the mental action or process of acquiring knowledge through mental activities, including thinking, reasoning, understanding, learning, and remembering (Flook, Smalley, Kitil, Galla, Kaiser-Greenland, Locke, Ishijima, & Kasari, 2010).

*Cognitive self-regulation* is a child’s self-reflectiveness, planning, and thinking ahead. Children with these capabilities are in control of their thoughts, tend to monitor, evaluate, and adjust their own behavior and abilities when necessary (Bandy & Moore, 2010).

*Social-emotional self-regulation* is the ability to reframe from negative responses and delay gratification (Bandy & Moore, 2010).

**Expected Outcomes**

The underlying objective of this qualitative study determines whether or not teachers saw mindfulness as a tool for learning in the classroom so that future educators and schools could
integrate mindfulness into the curriculum as a beneficial support system for all learners. With this in mind, given the links between practicing mindfulness and self-regulation, the researcher assumes that the implementation of age-appropriate mindfulness-based practices is developmentally appropriate for school-aged classrooms. These mindfulness-based practices complement children’s experiences and effectively enhance the development of children’s self-regulation and academic achievement. The researcher also assumes those students who are affected by poor attention-to-task behaviors and weak social relations benefit from a mindfulness program training them how to improve their attention and increase their social skills.

**Summary**

Students sitting in elementary school classrooms are faced with a myriad of factors competing for their attention in the learning environment. Mindfulness in a classroom context teaches young people coping and calming techniques that can be used to help students alleviate stress, be more attentive, and aid in academic and social growth. Seligman, Ernst, Gillham, Reivich, and Linkins (2009) argued that schools and teachers play a major role in cultivating the kinds of mental habits and social-emotional dispositions that children in general will need to attain in order to lead productive, satisfying, and meaningful lives. The purpose of this research is to investigate the perceptions and beliefs of elementary school teachers who practice mindfulness in their classrooms. Understanding teachers’ perspectives and learning about their experiences with a school-based mindfulness program promotes further understanding of how these practices are implemented and what potential benefits and challenges they have for students and teachers.

Chapter one consists of a brief introduction and background of the problem, purpose, significance of the study, research questions, and proposition. Chapter two of the dissertation
presents the literature review related to the topic. In chapter three, the methodological approach
used in this study as well as the data collection and data analysis is discussed. Additionally, the
demographics, interview process, and the analysis used to draw analytical conclusions are
described in chapter three. Findings are reported in chapter four, which includes the data and
results of the interview process. Chapter five contains the summary and discussion of findings of
the study, conclusions, and recommendations for future research.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter discusses the current literature of observed studies on the effects of
mindfulness and meditative practices on school-aged children. The review of literature contains
primary, peer reviewed journal articles as well as dissertations within the Seton Hall University
Library database, ProQuest Research Library and Academic Research database, and ERIC
(Educational Researcher Information Center) database. Another method of searching for
literature was the researcher’s membership in Questia, a professional online service of research
articles and books. I started by defining mindfulness and terminology inclusive of the
relationship between mindfulness, self-regulation, attention-to-task, and mindfulness practices.
Established mindfulness practices for children are defined along with their effects.

Next, the researcher reviewed the educational and theoretical views shared by Kabat-
Zinn, Lisa Flook, Mark Greenberg, Patricia Jennings, Carolyn Webster-Stratton, and Charlotte
Vickery who emphasize the meaning and purpose of mindfulness and learning in relation to
children. From there, I examined mindfulness in education and analyzed the rise of mindfulness
programs offered to teachers and students. Finally, the relevance of this study, and the role of
teachers’ observations and the use of a mindfulness program or mindfulness training, is discussed, including potential limitations and recommendations for future improvements.

**Context and Terminology**

Within the research on mindfulness training, definitions vary regarding the meaning of attention and mindfulness (Jennings & Greenberg, M 2005). This specific research uses a concept of attention best defined by William James (1958) in his description of two types of attention, passive and voluntary. Passive attention is the spontaneous attention given to something of interest, while voluntary attention is more deliberate, a term James (1958) calls “attention with effort” (p. 77). James observed voluntary attention is not sustained. Lasting only seconds or minutes at a time, voluntary attention is momentary, requiring volitional recall and repeated attempts to bring one’s attention back to the original object of focus (James, 1958).

The teachers interviewed in this study use mindfulness within their classroom to address areas of weaknesses in voluntary attention. When a topic is without personal interest or significance to students, their minds lose focus, preferring the interfering thoughts of more personal import. However, when a subject is of personal interest, the mind is aroused, effortlessly returning to the topic with increased concentration. Dewey (1938) agreed with James (1958) regarding the need for meaning and purpose to maintain a student’s interest and focus. Information with purpose and meaning for the student can be learned with passive attention supporting any volitional attention required.

Voluntary, or effortful attention is dependent on executive functions, a collection of distinct, interrelated abilities (Gioia, Schultz, M., & Corley, K. G. (2000). Executive functions are subcomponents of attention and necessary for most academic attention-to-task behaviors (Flook, Smalley, Kitil, Galla, Kaiser-Greenland, Locke, Ishijima & Kasari (2010). Attention-to-
task is used to describe on-task, productive behaviors that are supported by the attention system of executive control. Posner and Petersen (2012) called the attention system of the frontal lobe an executive attentional system, as the frontal lobe is the programmer for the various executive functions in the attention system.

Executive functions include working memory, flexibility of thought and mental shifting, mental organization and planning, initiation and inhibition of behaviors, and metacognition (Gioia et al., 2001). Metacognition is the ability to monitor and evaluate one’s own behaviors, including emotional control. Strengthening metacognition has been found significant in young students’ ability to regulate their behaviors (Flook et al., 2010), increasing their ability to use voluntary attention and maintain functional social relationships (Shapiro et al., 2008). Executive functioning involves using skills to show “purposeful, goal-directed, problem-solving behavior” (Gioia et al., 2001, p. 3), as demonstrated in attention-to-task behaviors and building and maintaining social relationships.

Inattention is the lack of attention, and it is influenced by a combination of weaknesses, or deficits, in executive functioning. The degree of inattention depends on the number of executive functions affected and the degree to which they are affected. For example, a mild weakness in metacognition may slightly hamper a student’s ability to be aware of his or her behaviors; however, the inattention is not significantly harmful to the student’s work production, or attention-to-task, at school. On the other hand, a child with greater prefrontal lobe involvement demonstrating serious weaknesses in four executive functions is clinically inattentive, showing symptoms significant for ADHD, and suffering from poor academic work production in class because of weak attention-to-task behaviors.

Mindfulness is maintaining one’s full attention to the present, on a moment-to-moment
basis (Marlatt & Kristeller, 1999) in a non-evaluative and a non-defensive manner (Shapiro, Carlson, Astin, & Freedman, 2006). Mindfulness training for children involves teaching the young student to clear his or her mind, focus on one thought, and convert passive attention to voluntary attention. Mindfulness training consists of mindfulness and meditative practices. The mindfulness practices in this study were inclusive of Buddhist and Yoga-based meditative and mental awareness practices which guide the practitioner to become aware of his or her thoughts and body in order to clear the mind of all suffering and thoughts. Buddhist influenced mindfulness practices found in a variety of programs, including the Mindfulness Based Stress Reduction Program, MBSR (Kabat-Zinn, 19982, 1994, 2003), were used to help students relax, releasing stress from mind and body in order to become more aware of their thoughts and behaviors.

**Theory of Mindfulness**

The current concept of mindfulness originated with the meditation practices of the Eastern Buddhist tradition. Historically, mindfulness practices were used for the purpose of promoting individual awareness (Gogerly, 2007). Around 1960, Eastern meditation practices became popular in the Western world, when Nhat Hanh, a Vietnamese Monk, began leading retreats in the United States. Although techniques used in Buddhist meditation are considered spiritual practices, their main purpose is to allow the mind to become free of negative thinking. The objective of meditation is to be present, right where one stands, fully conscious and aware, similar to the definition of mindfulness (Keown, 1996, p. 91). The main distinction between mindfulness and meditation is: meditation is the formal practice of mindfulness. One tries to be mindful in every situation, while one sets aside time to meditate and practice being mindful (Carmody & Baer, 2008).
Mindfulness theory addresses awareness of context in the present moment, which stems from comparing experiences that stretch the understanding of a situation by keeping an open mind to alternative perspectives and categories (Carson & Langer, 2004). Mindfulness is defined as the awareness that emerges through paying attention on purpose, in the present moment and nonjudgmentally (Kabat-Zinn, 2003, p. 45). Attention is the process by which certain information is selected for further processing and other information is discarded (Ward, 2006, p. 130).

Mindfulness meditation has been directly connected with an increase in the brain’s gray matter and overall connectivity (Hölzel, Carmody, Vangel, Congleton, Yerramsetti, Gard, & Lazar, 2011). The structural changes in the gray matter in the brain occur in areas of the brain that control attention, memory, body awareness, and self- and auto-regulation (Esch, 2014). Gray matter increased in the hippocampus, which regulates emotions, after mindfulness meditation (Hölzel et al., 2011). The increase of gray matter in the hippocampus indicates an improved function of emotional regulation after mindfulness practice (Hölzel et al., 2011).

Brain imaging studies on adults have shown that mindfulness meditation reliably and profoundly alters the structure and function of the brain improving the quality of both thought and feeling. Mindfulness meditation also produces greater blood flow and thickens the cerebral cortex in areas associated with attention and emotional integration (Davidson & Kaszniak 2015). Mindfulness has been shown to impact intellectual skills, improving sustained attention, spatial memory, working memory, and concentration (Zeidan, Johnson, Diamond, David, & Goolkasian, 2010). Training programs for developing mindfulness generally include activities such as yoga-based physical exercises, breathing exercises, guided meditation, and journal-writing exercises (Mendelson et al., 2010).
Mindfulness allows people to be sensitive to an environment, supporting clearer thoughts and behaviors (Demick, 2000) as well as better performance, decision-making, and stress reduction (Ritchhart & Perkins, 2000; Sternberg, 2000). Furthermore, awareness, mindfulness, and context affect decision-making (Langer & Moldoveanu, 2000). Specifically, mindfulness includes components such as present-centered attention, nonjudgmental acceptance of experiences and events, clarity about one's internal states, and the ability to manage negative emotions (Coffey, Hartman, & Fredrickson, 2010).

**History of Mindfulness in Educational Setting**

The mechanism involved in practicing mindfulness is thought to be similar for both adults and children (Zelazo & Lyons, 2012). As a result, existing research studies examining outcomes of mindfulness-based programs for children have adapted the format for programs designed for adults to accommodate to the developmental level and needs of the particular age group of the children in the classroom receiving the program (Davidson et al., 2015 Greenberg & Harris, 2012; Meiklejohn et al., 2012; Zelazo & Lyons, 2012). Due to the nature of children’s developing cognitive abilities, mindfulness-based programs for children require adaptations to both the delivery of the sessions and to the nature of the mindful awareness practices to ensure that they are age-appropriate (Burke, 2010; Davis, 2012; Hooker & Fodor, 2008; Semple et al., 2005; Thompson & Gauntlett-Gilbert, 2008). For example, as children’s cognitive functioning develops, their thinking becomes more abstract.

However, younger children’s thinking is still focused on concrete, observable events (Mendelson, Greenberg, Dariotis, Gould, Rhoades, & Leaf 2010) recommended that exercises are “clear, concrete and descriptive in their instruction”. They also recommend that the delivery of lessons follow a progression in accordance with the concrete nature of children’s thinking by
starting the program with a focus on more concrete mindful awareness practices (such as focused attention on a particular sound) before moving to more abstract mindful awareness practices (such as focused attention to thoughts in the mind) (Hooker & Fodor, 2008). Additionally, formal mindful awareness practices must be adapted to account for children’s limited self-regulation skills (Burke, 2010; Zelazo & Lyons, 2012). For example, while adults in mindfulness-based programs are typically expected to practice formal mindful awareness practices such as mindful breathing meditation for up to 40 minutes per day (Kabat-Zinn, 1994, Saltzman and Goldin (2008) stated, “a general rule of thumb is that children usually can practice one minute per their age in years” (p. 142).

The first major effort to use mindfulness in schools began in the United Kingdom in 2007 with a series of fixed lesson plans delivered in classrooms across the country. Interest in the movement has increased since then. In July 2015, Oxford researchers announced plans to launch a large-scale, seven-year study on mindfulness in education starting in 2016. More than a dozen similar initiatives have been started in the United States. These popular programs generate their own mindfulness curriculum as well as provide training for teachers. The two largest are MindUP and Mindful Schools, a California-based nonprofit organization, which continues to spearhead the country’s steadily growing, mindfulness-in-education movement. Since its founding in 2010, Mindful Schools has trained thousands of teachers through its online programs, most of them in California, New York, and Washington, D.C., who are said to have a total reach of 300,000 students.

**Mindfulness and Elementary School-Age Children**

Until recently, mindfulness programs exclusively focused on adult health and well-being. However, interest has increased in the utility of mindfulness practices for children. In recent
years, the proportion of school aged children experiencing a myriad of social, emotional, and behavior problems that interfere with their interpersonal relationships, school success, and their potential to become competent adults and productive citizens has increased (Greenberg, 2001). Due to the rise in child and adolescent disorders such as anxiety, conduct disorder, and attention deficit hyperactivity disorder (ADHD), some elementary schools are now integrating mindfulness into educational programs (Singh et al., 2009).

Mindfulness can increase student resilience and defend against mental health issues. According to Gould, Dariotis, Mendelson, and Greenberg (2012), students who do not have the ability to regulate emotions are at a higher risk for social, emotional, and behavioral problems. However, with programs like mindfulness, where the intent is to strengthen emotional awareness, these risk factors are combated, creating more resilient individuals (Viafora et al., 2015). Huppert and Johnson (2010) found that students at risk for mental health issues actually respond better to a protective intervention, such as mindfulness. When protective measures are implemented, students receive more positive outcomes when it comes to their social and emotional health (Broderick & Metz, 2009). Mindfulness defends against mental health issues by making students more resilient and less susceptible to the risk factors associated with mental health, enabling them to better deal with challenges they face in their lives (Burke & Hawkins, 2012).

Additionally, school mindfulness programs address children's stress management. Abundant child development research now highlights the effects of stress upon whether children's lives get off to a promising or troubled start. The science of child development indicates that the brain develops over time and that excessive stress damages the architecture of the developing brain, making it vulnerable to lifelong learning, behavior, and overall health.
problems (National Scientific Council on Child Development, 2007). Stress has been shown to have a negative impact on children and may present in the form of complaints, anger, anxiety, depression, and the inability to focus and concentrate during classroom activities (Semple et al., 2005). School-aged children report having many stressors in their daily lives including homework, peer pressure, being teased, receiving poor grades, fear of the effects of war, standardized testing, and perceived parental pressure and isolation (McCallum & Price, 2010). Evidence supports the ability of school-aged children to cognitively appraise stressors, generate and evaluate coping strategies, and recognize feelings and thoughts associated with stress (Sharrer & Ryan-Wegner, 1991).

Cognitively, school-aged children are capable of setting goals, planning and modifying actions, and coordinating and evaluating progress, self-reflection, and self-awareness (Eccles, 2007). Children are able to recognize feelings associated with stress, focus attention for varying periods, and practice sitting meditation and yoga. Thompson (2008) suggested that children’s openness to experience, readiness to learn, and creativity make them more likely to benefit from mindfulness than adults. Most of the time, children and adolescents use their minds to manipulate ideas or concepts, to recall information from the past or from their storehouse of knowledge, to imagine future circumstances, to plan, to calculate, or to schedule. These are some of the important functions that improve as children age and are enhanced through education.

**Mindfulness Programs**

The predominant mindfulness-based approaches include MBSR, mindfulness-based cognitive therapy (MBCT), dialectic behavior therapy (DBT), and acceptance and commitment therapy (ACT). Fundamental to these approaches is a focus on developing mindfulness; however, the methods for teaching mindfulness skills vary. MBSR and MBCT use regular
mindfulness meditation practices to develop mindfulness skills whereas DBT teaches mindfulness techniques described as “psychological and behavioral versions of meditation skills” (Linehan 1993, p. 114). ACT teaches non-meditative component skills of mindfulness (Hayes & Shenk, 2004).

Kabat-Zinn introduced mindfulness as a resource into clinical research and practice through MBSR program. The MBSR program consists of 8 weekly sessions of 2½ hours a day of mindfulness. Mindfulness is practiced formally in sitting meditation through simple yoga movements and body-scan, which is a gradual sweeping of attention through the body. Mindfulness is also cultivated in daily activities as a resource in emotionally challenging situations. Schools are tasked providing a formal education, but also providing tools for preventing disorders and fostering personal development and well-being in children. These objectives have driven educators, teachers, and psychologists to seek methods to improve school-based learning and student’s social experience while in school.

Mindfulness-Based Interventions (MBI) in schools have been implemented to address these challenge, because prevention and education can be provided simultaneously, fulfilling a wide range of needs and encouraging students to reach their full potential. As a result, various mindfulness programs for schools have been developed and applied within the past few years. The goal of mindfulness programs in schools is to improve students' school readiness, academic performance, and mental health by teaching children the skill of mindfulness (www.mindfulschools.org). Several research institutes and associations, such as the Garrison Institute, are initiating workshops and conferences on Mindfulness in Education on a regular basis. Through organizations such as Mindfulness in Education Network (www.mindfulined.org) or the Association of Mindfulness in Education (www.mindfuleducation.org), clinicians,
educators, and researchers from all over the world share ideas, material, and experiences of mindfulness in schools.

The primary objective of an MBSR is for children to use mindfulness in their daily lives to respond rather than react abruptly to everyday events. This type of program usually has eight to thirty participants. The program is eight sessions (two the first week and one every week thereafter), which varies from forty to ninety minutes per class, depending on the setting and class size. Mindfulness training consists of both formal practice (including body scan, sitting, eating, and walking exercises) and informal practice (focusing attention, attending to the present moment, choosing responses to everyday events). Additional in-class exercises are used to enhance mindful awareness, artistic expression, and verbal communication. In addition to the weekly group sessions, participants are encouraged to engage in home practice to reinforce and deepen their in-class learning. Together the training and home practice involve exercises that focus on developing a familiarity with the application of mindfulness in daily life.

California doctors Amy Saltzman and Philippe Goldin have developed an eight-week MBSR program for children. Saltzman has expertise in mindfulness with children and their parents along, and Goldin has a background in mindfulness research. They developed a course based on Kabat-Zinn’s MBSR program but shortened the meditation sessions and incorporated mindful eating (Rempel, 2012). Through their collaborative efforts, they devised a curriculum called “Still Quiet Places.” The “quiet place” is something that everyone has: “The best thing about your ‘still quiet place’ is that it’s always inside you. And you can visit it whenever you like” (Saltzman & Goldin, 2008, p. 142). This program was designed for children 8 years old and up and lasts for eight weeks.
Cultivating Awareness and Resilience in Education (CARE) is another mindfulness-based program known to reduce stress and improve teachers’ performance. Furthermore, CARE is also recognized for the enhancement of teachers’ well-being and for increasing classroom efficacy while also reducing burnout and stress (Jennings, Lantieri, & Roeser, 2012). A team of educators and scientific advisors developed this program with the goal of helping teachers manage stress and strengthening their teaching. As teachers exercise this mindfulness-based program, they improve relationships with students, classroom management and social and emotional learning (Fullan, Hill, & Crevola, 2006).

In their 2009 pilot study, Patricia Broderick and Stacie Metz analyzed the Learning to BREATHE (L2B) mindfulness program in schools. L2B is a stress management program tailored to mindfulness-based approaches with students. These approaches include helping students understand their thoughts, feelings, and negative emotions (Broderick & Metz, 2009). The program consists of six lessons based on the BREATHE acronym: body, reflections, emotions, attend, tenderness, habits, and empowered. The goal of the study was to support emotional regulation skills in the students, specifically in a classroom setting.

**The Effects of Mindfulness on School-Aged Children**

The number of studies citing the positive effects of mindfulness on children and adolescents’ attentional functioning have increased. Mindfulness has the potential to be a useful component in prevention and treatment efforts because of its effectiveness in reducing emotional distress and promoting emotional balance, improving attention, and contributing to motivated learning. Mindfulness has also been shown to contribute directly to the development of cognitive and performance skills in school-age children. Researchers have found that young children pay more attention and improve the quality of their performance. They often become more focused,
more able to approach situations from a fresh perspective, use existing knowledge more effectively, and pay attention (Rempel 2012).

Recent studies suggest that age appropriate mindfulness practices help improve children and adolescents' attention, resilience, self-regulation, and social-emotional skills (Brown, Ryan, & Creswell, 2007). Therefore, studies grounded in developmental theory indicate that mindfulness practices are associated with beneficial outcomes for children and youth. Kabat-Zinn (2003) suggested that mindfulness training teaches children to pay attention in the classroom, enhances their impulse control, reduces student and teacher stress, and consequently reduces behavior problems in the classroom.

Mindfulness increases both a student’s ability to pay attention and improves academic success. In mindfulness programs, students are taught how to anchor their attention resulting in students who have better control over their attention (Burke, 2010). Viafora et al. (2015) discovered both an increase in students’ attention as well as their academic achievement after being exposed to a mindfulness program. Through mindfulness practice, a student becomes more aware of the world around them and their own personal view about that world. When students have a better grasp of how they feel about the world, they can more easily make connections to the material presented in school. Students who can readily make connections with the material are more likely to retain that information (Kaltwasser, Sauer, & Kohls, 2014).

According to Kaltwasser et al. (2014), students exposed to a mindfulness program are likely to develop a growth mindset along with better emotional and attention control. In a growth mindset, people believe that their most basic abilities can be developed through dedication and hard work. This view creates a love of learning and a resilience that is essential for great accomplishment. A growth mindset in students leads to an increased likelihood of sustained
effort in school, working hard for academic achievement and the ability to adapt in their learning (Dweck, 2010). Welford and Langmead (2015) also discovered a direct correlation between mindfulness programs and an improvement in a student’s motivation and productivity in school.

Mindfulness training is connected to social-emotional benefits. Root and Denham (2010) argued that emotions play an essential role in a multitude of areas of young children's development, including the development of positive peer relationships. Furthermore, Webster-Stratton and Reid (2004) proposed that social skills such as problem solving, empathy, effective communication, and anger management are essential for student success and academic persistence. Research shows that, similar to the benefits adults’ experience, mindfulness training is a valuable tool for increasing children's attention and self-regulation skills as well as improving their executive functions. Developments in these areas play a significant role in supporting academic competence.

Several studies have shown the benefits of mindfulness training for children. Napoli et al. (2005) studied 225 children with high anxiety between the ages of 5 and 8 who participated in the “Attention Academy Program” in a school context. The intervention consisted of twelve 45 minute sessions. The results show that the children’s test anxiety and ADHD behaviors significantly decreased and their ability to pay attention increased. In a small study, Wall (2005) described an effort program to teach MBSR and Tai Chi in a mainstream school to 11 to 13 year-old students in the United States, which showed perceived benefits such as improved well-being, calmness, relaxation, improved sleep, less reactivity, increased self-care, self-awareness, and a sense of connection with nature.

Broderick and Mertz (2009) evaluated the “Learning to BREATHE” curriculum, an MBSR-derived mindfulness program. They conducted their study over a year with a group of 15
to 19 year-old students in a United State independent girls’ school. They found a decrease in negative affectivity an increase in calmness, relaxation, self-acceptance, emotional regulation, awareness and clarity. Huppert and Johnson (2010) reported the outcomes of the Mindfulness in Schools Project’s pilot mindfulness program for four weeks with 14 to 15 year-old students in an American independent boys’ school. They reported significant effects of mindfulness and well-being among students who regularly did 10 minutes of home practice a day and smaller changes among those who did not. Semple (2005) assessed the impact of a 12-week group program based on MBCT in 9 to 13 year-old students who were struggling academically. Semple found significant improvements on measures of attention and reductions in anxiety and behavior problems compared to those who had not yet had the program.

Viafora et al.’s (2014) research highlighted the lack of mindfulness scholarship conducted on middle school students and homeless youth. Their research observed The Meditation Initiative (TMI), a collaborative organization teaches seventh and eighth grade students’ mindfulness techniques. The total study involved sixty-three participants. The first group involved students who were currently living or had lived in a homeless shelter; the second and third groups were from traditional classrooms, and the fourth group functioned as a control group in the study and did not receive mindfulness training (Viafora et al., 2014). The results show that middle school homeless youth could practice mindfulness in their daily lives more compared to non-homeless youth, suggesting that mindfulness was embraced by youth struggling with not only social and emotional anxieties, but also economic and geographic anxieties.

Amy Saltzman and Philippe Goldin designed the eight-week program “Still Quiet Places” for children eight years-old and older. After observing the program for a year, they found that children and parents developed an increased ability to focus attention, generate greater positive
emotions, self-judgment and self-compassion. However, they also found that cognitive control, which is linked to academic success, was the last variable to reach maturity throughout the program. These results suggest that not only are social-emotional improvements obtainable with mindfulness but that academic learning can be improved with persistent intervention. Throughout the study, the children’s view of themselves remained unchanged. Additionally, the children worked better in the classroom with formal practice, which is aligned with Semple’s recommendation that mindfulness must be repetitive and structured for children to make meaningful progress (Saltzman & Goldin 2008, p. 156).

**The Effects of Mindfulness on Teachers**

K-12 teachers experience an array of stressors yet are provided with few resources to alleviate them. Surveys indicate that K-12 teachers report experiencing a moderate to high level of stress and ample evidence documents the causes and consequences of stress in teaching (Montgomery & Rupp, 2005). Programs for teachers are limited but include activities such as venting and engagement in community activities. According to a new study conducted by the University of Wisconsin’s Center for Investigating Healthy Minds (CIHM), the practice of mindfulness can help teachers develop their social-emotional skills, not only to guard against long-term burnout but also to help them deal with stressful events while they are happening.

More people are practicing mindfulness, and it is receiving mainstream acceptance around the world. More people recognize that mindfulness practice enhances the well-being and reduces stress for both students and teachers (Black, Milam, & Sussman, 2009). Some teachers also found that they gained a holistic view of the curriculum and could impart key concepts to children – rather than feeling overwhelmed by the large number of expected learning outcomes.
As mindfulness practices are used in the school setting, literature suggests that this practice will become increasingly more progressive and pertinent in reducing teachers’ stress in their profession. The process of mindfulness enables students and teachers to better understand themselves and others and live a more fulfilling, blissful life (Gause & Coholic, 2010). The stress and burnout associated with teaching has resulted in global retention and attrition issues. More than 41% of teachers leave the profession within five years of starting, and teacher attrition has risen significantly over the last two decades (Ingersoll, Merrill, and Stuckey, 2014). (McCallum & Price, 2010). The research shows that before teachers can effectively teach mindfulness to their students, they must embody and practice mindfulness in their own lives. As teachers understand the importance of the embodiment of mindfulness, increased repetition results in various progressive changes for each individual.

Gold et al. (2010) investigated the effects of teaching an MBSR course to primary school teachers as a means to reduce stress. Eleven participants, all identifying themselves as experiencing stress, elected to participate in an eight week course. The results of the study show substantial reduction in the stress levels of most participants. The results show that for teachers an MBSR program could effectively reduce job related stress and burnout. Embich (2001) conducted a study involving 300 teachers who were experiencing high levels of stress in their profession. The researcher found many factors contributed to the increased stress and burnout rates: emotional exhaustion, poor working conditions, and salary. The results of this study show that after implementing mindfulness practice with the 300 teachers they developed more effective coping skills for themselves, reduced stress levels, and increased focus within the classroom.
As the research indicates, a fully engaged teacher, attuned to their students, positively impacts the academic engagement and success of the student (Skaalvik & Skaalvik, 2008; Geving, 2007; Furrer & Skinner, 2003; Jennings & Greenberg, 2009; Pas, Bradshaw, Hershfeldt, & Leaf, 2010). A group of researchers from the Center for Investigating Healthy Minds, led by Lisa Flook, conducted a pilot study to test the impact of an eight-week mindfulness course adapted specifically for teachers. The researchers also examined the participants’ classroom performance, such as their behavior management skills and their emotional and instructional support of students. The practice of mindfulness made them more effective teachers, and in turn, these educators used the practice of mindfulness with their own students. Their dedication to this practice was a key factor in the students’ beliefs in the use of mindfulness. Mindfulness is more effective when both educators and teachers have the same interest and beliefs.

**Teacher Perceptions**

Not only are teachers important to the effectiveness of mindfulness training, but also mindfulness practices are instrumental in helping teachers reduce stress and increase the pleasure of teaching. Schools around the world have implemented various mindfulness programs and practices that inspire and nurture teachers in addition to students (Schoeberlein, Koffler, & Jha, 2005; Tregenza, 2008). Furthermore, teachers develop the attention, emotion control, and regulatory control needed to create and maintain a supportive classroom climate in which all students are engaged in learning. Additionally, relationships between teachers and students may become more positive. Albrecht, Albrecht, & Cohen (2012) argued that although teachers may have many classroom concerns such as stress and students' inappropriate behavior mindfulness seems to restore hope in teachers and build confidence in their classroom performance.
Teachers perceive the goal of mindfulness programs as improving students' school readiness, academic performance, and mental health by teaching children the skill of mindfulness. Teachers have reported that they use mindfulness in the classroom to reduce children's disruptive behaviors. According to Singh et al. (2009), regular mindfulness exercises enhance awareness and self-control in children and adolescents. Teachers use mindfulness training within the classroom as a tool for increasing children's attention and self-regulation skills as well as improving their executive functions.

Generally, teachers want their students to build long-term skills that enable them to make healthy choices, reduce stress, control anger, and resolve conflicts through the use of mindfulness. Teachers assess their school mindfulness programs and practices by evaluating behavioral regulation, focused attention in the present moment, learning responses, emotion control, and participation in academic activities.

In order to teach children mindfulness, teachers instruct their classroom to spend a short amount of time sitting quietly and observing their breath and the pitter-patter of their minds. Later, the teachers ask the children to share their observations with their classmates. Many mindfulness curriculums also include lessons on cultivating gratitude and appreciation. To continue the study, elementary school teacher experiences of training for and implementing mindfulness practices in their classroom were examined in the current research. The teachers’ perceptions of the benefits and challenges of mindfulness programs for their students and themselves was also explored.

Children may need more concrete explanations and examples of mindfulness (Chambers et al., 2008). Therefore, teachers need to implement concrete mindfulness exercises for children, such as focusing on the temperature in the classroom, a particular sound, or a smell. For
example, teachers may cultivate mindful awareness by giving each child a raisin and then talking about the raisin's smell, what it looks like, how it feels in the hand and in the mouth, and how it tastes. Additionally, more movement or bodily involvement may be included in the mindfulness exercises for elementary school children who may have difficulty sitting still at first. Children may be instructed to walk around the school in a mindful way or to be mindful of others during transitions in the school day.

Practicing teachers have noted that mindfulness training also must be adapted to children's attention spans. Initially, a mindfulness practice for elementary school children may begin with one or two minutes of just paying attention to the breath; then the length of time may be gradually increased. At the teachers' discretion, another component of the practice may be added such as paying attention and redirecting wandering thoughts.

Overall, teachers find that mindfulness training for children should involve fun and friendly exercises, songs, games and stories as well as certain other age-appropriate aspects such as language terms and reduction in the length of time sitting still. The components of mindfulness practices in schools have been age-appropriately simplified so that children can benefit from the practice. Zelazo and Lyons (2012) suggested that adolescents and children can better understand the goals of mindfulness by using age-appropriate props, words, and phrases. Additionally, teachers have found that they are important role models for helping children and adolescents to develop and understand the skill of the mindfulness technique and begin to appreciate the benefits of mindfulness.

In 2014, researchers from California State University, Sacramento explored elementary school teachers' perceptions and experiences regarding implementation of mindfulness practices in their classroom. In this study, the researchers conducted semi-structured interviews with eight
elementary school teachers in the Bay Area of Northern California. The results of a qualitative analyses of the eight interview transcripts show that the teachers emphasized the importance of the "whole-kids" approach to mindfulness, in which mindfulness is encouraged in every aspect of the students' day and across all academic subjects. The teachers believed that their school's mindfulness program was beneficial in increasing their students' attention skills, self-regulation skills, and social-emotional competence. They also believed that the program increased their enthusiasm for teaching and encouraged unity and collaboration among the teaching staff. Overall, the teachers had positive attitudes and perceptions regarding their school's mindfulness program.

**Necessary Components to a Mindfulness Program**

A successful program has a few requirements. Teachers must have a background in mindfulness before teaching it to their students. For a mindfulness program to be beneficial, the platform must be set for students first before they can successfully learn mindfulness practices. Working with students can be challenging as many students, especially adolescents, are reluctant to engage in new things, particularly things that may appear unusual to them. Mindfulness practice is different from how people live their lives and may require students to try a new activity which is outside of their comfort zone; therefore, motivation must be sparked within the students for the mindfulness program to work (Kaltwasser et al., 2014). This motivation can take the form of frontloading information about the connection between the body and the mind for students. (Mary Birchenough, Personal Communication, December 11, 2015).

Mindfulness requires sustained practice to be beneficial and successful. Students should be given a chance to practice their mindfulness skills daily and should sustain this practice for at least one year (Saltzman & Goldin 2008). Both teachers and administrators must support this
sustained practice (Jennings, Lantieri, & Roeser 2012). When mindfulness has the support of the whole school, more practice time will be available for students.

According to Slade (2003), mindfulness should be a preventative program to reduce negative emotions and behaviors, which is accessible to everyone, not a reactive program for those who may qualify. Mindfulness can be a part of a comprehensive plan that focuses on preventative measures to combat mental health problems in schools (Broderick & Metz, 2009). Since many students can benefit from mindfulness, the program should be accessible to everyone. All students would have access to a mindfulness program without having to be classified or diagnosed.

**Summary**

Mindfulness education is largely a result of the efforts of mindfulness organizations, parents, teachers, and administrators. The results of current research indicate that students should be given short, repetitive, and formal practices on a regular basis. Additionally, the results show that mindfulness training is a valuable tool for increasing children's attention, improving self-regulation skills, and improving executive functions. However, many of the studies shed light on some of the issues associated with mindfulness as a mental health approach in education. However, there is not consensus on the most effective ways to implement mindfulness in schools. In this review of the literature, the extent to which mindfulness training and programs have been implemented with young people with a focus on education and teacher perceptions has been explained. My research attempts to discover how mindfulness education is used in elementary schools and the teachers’ perceptions of the benefits and drawbacks of these programs.
CHAPTER 3

METHODOLOGY

In this chapter, I describe my research methodology, beginning with a review the approaches and procedures of my research and the importance of qualitative methodology to my study and decisions throughout the research process. I include the instruments of my data collection and elaborate on the participants of my study, including the sampling criteria and recruitment processes. I then proceed to outline data analysis and review procedures. In conclusion, I discuss the limitations of my methodological framework while also highlighting the strength of the research process.

Research Design

For this qualitative study, I used a narrative inquiry research method to gain a deeper understanding of 10 elementary school teachers' experiences and perceptions regarding the mindfulness practices used within their classrooms. In a narrative inquiry, participants’ stories are collected and retold by combining the participants’ views with the researcher’s experience to produce a collaborative narrative (Creswell, 2003). The teachers' perceptions of mindfulness training on students' social relationships and cognitive performance were examined. I based my research on the participating teachers interview responses. In this way, I questioned rather than measured data to find meaningful patterns descriptive of a phenomenon in order to develop a rich set of data.

Participants

Recruitment of Teachers

I recruited elementary school teachers through my personal contacts from the Mindful Schools website. Mindful Schools was founded in 2007 as a program of a single school in
Oakland CA. Today, it is a non-profit training organization with online and in-person courses, content, and a network of mindful educators throughout the United States. I contacted a Mindful Schools certified mindfulness instructor from Madison, New Jersey and sent her information about the proposed research project. The instructor was supportive of the research plan, and consequently provided a list of two elementary schools in which teachers implement mindfulness practices. I contacted the school district superintendent to ask permission to conduct this study with elementary teachers in the district. I was granted permission from the district superintendent and sent an email with a letter of solicitation to elementary teachers in both schools, explaining the purpose of the research, and requesting their voluntary participation in interviews (Appendix A).

Sample

Participants were selected based on criteria sampling. Each participant met four criteria: (a) taught in elementary school grades K-5, (b) had five years or more of teaching experience, (c) had training in a mindfulness based program, and (d) had used mindfulness in the classroom for at least two years. The study included a pool of approximately 15-20 participants ranging in teaching experience in grades K-5, mindfulness training and experience, and years of mindfulness practices used in the classroom. From the pool of possible participants, 13 expressed their interest to participate in this study. All 13 participants were notified in an informed consent letter, which requested consent, conveyed confidentiality, and provided them with information about the study (Appendix B). Three participants did not sign the consent form and decided not to participate in the study.

The resulting sample consisted of 10 schoolteachers; 5 teachers representing grade levels kindergarten through second grade; 5 teachers representing grade levels third through fifth.
Subjects were assigned a pseudonym during the interview and the write up. I identified the number of teachers in each grade level and their implementation of mindfulness practices within classrooms ranging in class size between 15 to 20 students in grades kindergarten through fifth grade. I also interviewed one mindfulness trainer from the Mindfulness Schools organization to learn and better understand the type of program training elementary teachers participated in.

Table 1 provides an overview of participant discipline, teaching experience, and years of mindfulness training used in the classroom.

**Table 1: Participant Profile**

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Discipline (Grade Level)</th>
<th>Years of Teaching Experience</th>
<th>Years of Mindfulness Practices in Classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maya</td>
<td>Kindergarten</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Julia</td>
<td>1st grade</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Caitlyn</td>
<td>1st grade</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Kelli</td>
<td>2nd grade</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Donna</td>
<td>2nd grade</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Jane</td>
<td>3rd grade</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Isabel</td>
<td>3rd grade</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Robyn</td>
<td>4th grade</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>Anne</td>
<td>4th grade</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Lauren</td>
<td>5th grade</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

**Setting**

The study was conducted in a school district in Northern New Jersey. The school district is in a moderately-sized suburban town consisting of approximately 2,500 students ranging in
grades from pre-kindergarten to twelfth grade. Participants were selected from the two elementary schools within the school district. According to The New Jersey Department of Education, a recent school performance report indicated enrollment in this district is composed of 67.3% White students, 2.5% African American students, 18.8% Hispanic students, and 8.9% Asian students. An average of 95% of the district population speaks English, 21% are students with disabilities, 8% are economically disadvantaged; 45% of students are female and 55% of students are male.

The school district is one of the few districts that have provided professional development to all teaching staff in MBSR courses. Participating teachers take a six-week course titled Mindful Educators Essentials during the summer months. The course was designed for mindful educators and used a research based K-12 Mindful Schools Curriculum created by the Mindful Schools organization. The curriculum provides teachers with 30 modules, including teacher manuals, classroom manual, parent manual, student workbooks, and program evaluation tools. According to Mindful Schools, the program is school-wide so that students, teachers, administrators, and parents benefit simultaneously, creating a school culture of calm, focus, and connection” Appendix C contains an overview of the mindfulness curriculum. Teachers observed the effects of teaching and integrating mindfulness practices into a classroom curriculum on students’ cognitive performance and social skills. The perceptions of each teacher on implementing the practices and observing the effects were studied.

**Human Subjects Protection**

All participants’ personal information was protected as well as the name of the school districts in which they are employed. Each participant was given an informed consent form, which included information about the purpose of the study, information about participating in the
study, and a request for permission to record the audio of the interview. In accordance with the Institutional Review Board, all participants and the school district involved in the study completed permission forms to protect personal information and district information. Additionally, pseudonyms as identification when reporting data and interview results were used to preserve confidentiality.

**Instrument**

Semi-structured interviews were conducted in order to explore teacher beliefs and attitudes about the mindfulness-based program as well as their strategies for implementing it in their classrooms. Using the research questions, I developed open-ended questions with follow-up questions to probe for deeper meaning. I used the interview guide to ask teachers to respond to questions that were divided into three sections. The focus of questions in the first section of the interview was on the teacher’s background and personal use of mindfulness, as well as and how he or she was introduced to and trained in mindfulness practices. Questions in the second section asked about the content, structure, and goals of mindfulness practices. The focus of the third section was on the teachers’ beliefs and feelings about the school’s implementation of mindfulness practices, their own use of mindfulness practices in the classroom, and the benefits and challenges of incorporating the practices in the classroom.

The interview protocol contains a greeting; description of the purpose of the research, research questions, and interview questions, and follow-up questions to each key research question (Appendix D). Additionally, I used space between follow-up questions for my notes and observations and space for reflective notes throughout the interview process for each participant. I conducted pilot interviews with two elementary school teachers to refine the interview protocol and to practice conducting face-to-face interviews.
Table 2 provides an overview of interview questions and sub-questions participants answered during the interview process.

**Table 2: Interview Questions**

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Interview Questions</th>
<th>Sub-Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do teachers describe the benefits of mindfulness in their personal lives?</td>
<td>How do you use mindfulness in your own personal life?</td>
<td>-Can you describe the benefits of mindfulness in your personal life?</td>
</tr>
<tr>
<td>How do teachers describe their goals for using mindfulness in the classroom?</td>
<td>What do you expect out of the mindfulness practices you implement in your classroom?</td>
<td>-What are you hoping to see?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-How have mindfulness practices changed your classroom environment?</td>
</tr>
<tr>
<td>What mindfulness practices do teachers implement in pursuit of their defined goals?</td>
<td>What specific mindfulness practices do you use on a daily basis with your students?</td>
<td>-Can you give examples?</td>
</tr>
<tr>
<td>How do teachers assess the effectiveness of mindfulness in achieving cognitive performance and social relationship benefits?</td>
<td>What aspect of mindfulness do you find the most positive/challenging to your practice as a teacher?</td>
<td>-Can you give examples?</td>
</tr>
<tr>
<td></td>
<td>What changes, if any, do you notice in student behavior?</td>
<td>-What changes are noticed in student cognitive development?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-What changes are noticed in student social relationships?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-What does focus/attention look like?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-What does self-regulation look like?</td>
</tr>
</tbody>
</table>

**Data Collection**

Prior to beginning the interviews, each teacher signed the informed consent form to assure the confidentiality of the interview. Interviews were conducted face-to-face in a semi-
structured format at an agreed upon time and location. This type of framework guides participants with prompts and allows for open-ended responses. I recorded the interviews with a digital voice recorder. Interviews unfolded as conversations with teachers allowing them to explore their philosophies regarding the mindfulness-based program they use in their classroom.

I initiated each interview by asking the participants about their background and followed up with perspectives and beliefs they hold about mindfulness, practices they use in their classroom, challenges that arise through classroom implementation, and their assessment of how effective mindfulness is in achieving cognitive performance and social relationships. Each interview lasted between forty and sixty minutes. I rephrased some questions and paused to allow time for the participant to think. During the interviewing process, I took notes in order to recall information that was not part of the recorded conversation.

The transcription process began after the first interview. To ensure transcript accuracy, the researcher reviewed each transcript while listening to the recording. The researcher transcribed all data and allowed each respondent to review the transcriptions to correct any errors or to add additional data. The researcher asked the participants to reflect more deeply upon the effectiveness of mindfulness within their classrooms using reflective journaling, which added insight into each participant’s perception of mindfulness. The researcher collected responses via e-mail. After member checking was completed for each participant the researcher will prepared all data for analysis.

Reliability and Validity

In the literature of methodology, four elements of judging the quality of any research are identified: credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). In my study, I describe mindfulness practices and the context in which they took place.
accurately, as they were seen through each participant’s eyes. I use robust language to present my data as visually as possible. In addition, I maintain meticulous records of all interviews and field notes, cataloguing them by date and pseudonym. During the interviews, I took copious notes that contained detailed, concrete descriptions of what had been discussed during the interview. Pages in my notebook were divided into two columns. The left column corresponded to recording my observations during the interview, while the right column was used to write any preliminary impressions, questions, and follow-up inquiries.

I wrote multiple reflective memos to examine my bias as a researcher and justified any decisions and thought processes as the study progressed. I also documented and reflected upon changes that occurred during the study: changes in interview protocol and probing questions and participant feedback and availability.

To provide validity to the participant interviews, all questions are in accordance with research, data, and theory. Reliability is based upon quality research that incorporates a series of effective steps in qualitative research (Creswell, 2003.) As suggested by Creswell, reliability can be insured through the use of pre-determined interview questions designed to elicit consistent participant responses. Questions prompted during interviews were based upon substantial research, literature, and the research questions of this dissertation. Participants answered interview questions consistently with that of other participants in the study.

A jury of experts, who have experience with the use of mindfulness in the elementary grades, reviewed the interview questions for reliability. Since participants were chosen based on specific criteria, the researcher verified years of teaching experience with the school principal as well as training and use of a mindfulness-based practices prior to the interviews. The audios of the interviews were recorded to ensure validity during re-examination and the research process.
Notes taken by the interviewer identified key areas discussed during interviews. The research achieved triangulation of data by including a sample representative of elementary school teachers across two schools, by using participant interviews, researcher field notes, audio recordings, interview transcripts, and mindfulness curriculum documents. This strategy, as defined by Merriam (2002), involves multiple sources of data collection methods to confirm findings. Therefore, the validity and reliability of this qualitative study is strengthened.

**Researcher Bias**

Researchers must consider their own biases, limitations, and views throughout data collection, analysis, interpretation, and the reporting phases of the process. The assumption underlying qualitative research is that the researcher’s biases and values impact the outcome of any study (Merriam, 2002). My personal enthusiasm for this study stems from my interest in mindfulness practices as an approach to teaching self-regulation skills. Having learned about a school-based mindfulness program implemented in a co-worker’s school district, I became intrigued and wanted to learn more about such programs. After contacting an administrator at one such school, I was given the opportunity to observe two mindfulness sessions, one in a first grade classroom and one session in a fourth grade classroom. After observing two sessions, I decided to research mindfulness practices for children for my dissertation, specifically the perception elementary school teachers’ have of this practice.

My strong philosophical beliefs result in certain biases towards teachers who do not eagerly accept mindfulness practice in the classroom. My role as a researcher required that I accept differences of opinion and maintain an awareness of them during the data collection and analysis. When participants were interviewed, I was very aware of any personal biases based on my own experiences and research conducted. This included my body language, word choice, and
Qualitative work requires reflection on the part of the researcher. I took reflective notes after each interview to decipher personal judgments or interpretations from the experiences and ideas shared by each of the participants. Additionally, critical friends and colleagues assisted me in exploring the participants’ preferences for certain kinds of evidence, interpretations and explanations and consider alternatives, locate blind spots and omissions, assess sampling procedures to highlight biases, and examine judgments. In compliance with IRB guidelines, all digital audio files of interviews, in-take screening questionnaire data, interview transcripts, and field notes were stored on a USB memory device in a locked file cabinet at my private residence. All data will be retained for at least three years. After it is determined that no further analysis is needed, the files will be destroyed.

**Data Analysis**

Qualitative analysis was conducted following the completion of semi-structured interviews. The research design of this study resulted in a large amount of narrative data. I organized it by pseudonyms, date, the approximate interview time, location, and background information on the respondents. I implemented data analysis procedures that involved transcribing the interviews and then categorizing and identifying common themes. The audio of all 10 interviews was recorded and transcribed by NVivo Qualitative Analysis Software and then coded by using field notes and corresponding memos. Transcribing the data after each interview allowed me to review them for emergent themes.

I employed a participant check-in and review process, which allowed participants to examine the transcribed material to ensure that their statements were not subjected to any improper interpretations and that the analysis reflects their true values and beliefs. A participant
check-in tool is an important part of the data analysis process as it facilitates objectivity, rigor, and ethical diligence (Creswell, 1998). By using the research questions to develop the interview questions, the data collected from interviews is analyzed and reported in Chapter 4. Data collected through interviews, field notes, and reflective journaling was organized to note common themes and research connections. Several steps were taken so that raw data was appropriately used to address the research questions.

First, the interview transcripts were analyzed to identify key themes regarding the content and structure of the mindfulness-based practices and teachers’ described goals for using mindfulness in the classroom. The focus of the second set of analyses was on shared themes regarding the specific mindfulness concepts and practices teachers implemented in pursuit of their defined goals. Third, I examined the transcripts for the teachers’ shared perceptions concerning how they assess the effectiveness of mindfulness in students achieving cognitive performance and social relationship.

I used both a priori codes (based on existing literature) and inductive codes (derived from new knowledge) throughout the analyses process. In the first stages of analyzing the interview data with field notes, I coded openly, line-by-line to generate categories from the language of the respondents. I then used predetermined codes derived from related literature on mindfulness practices. I created maps of major codes, categories, and any connections between them.

As I progressed through the study, data were organized by revisiting the interview transcripts. During the organizational data review, I used memos to clarify my research conclusions, reflect on any newly gained insight, emergent theory, code choice, and possible connections between the codes. After and during the data collection stage, I used raw data to support the conclusions I made, using quotations extracted from interviews and excerpts from
field notes that I took during the interviews as evidence. I did not report anything that did not have sufficient evidence.

**Summary**

In chapter three, the process for conducting qualitative research design was explained, both generally and in this study. This included a description of the population, sample, instruments, and methods used to obtain data. The data collection procedure and data analysis steps were described as well. Additionally, research bias and the protection of all human subjects were included to add validity to the study and its use of ethics. In chapter four, I report on the research findings, and in chapter five, I analyze these findings using purposeful data analysis techniques.
CHAPTER 4

RESEARCH FINDINGS

The goal of this study was to understand teacher perceptions on the use of mindfulness practices with elementary school-aged children. More specifically, the main purpose was to gain insight into teacher’s experiences of mindfulness and its effectiveness in achieving cognitive performance and social relationship benefits. I focused on how teachers use mindfulness in their personal lives as well as their perception of the impact of mindfulness on their students. The study was guided by one overarching research question and four sub-questions. The interview consisted of six main questions. Some questions included follow-up questions to assist in clarification.

Research Questions

The following overall research question and sub-questions guided this research. For teachers who practice mindfulness in the classroom, what are their perceptions of its influence on early elementary students’ cognitive performance and social relationships?

1. How do teachers describe the benefits of mindfulness in their personal lives?
2. How do teachers describe their goals for using mindfulness in the classroom?
3. What mindfulness practices do teachers implement in pursuit of their defined goals?
4. How do teachers assess the effectiveness of mindfulness in achieving cognitive performance and social relationship benefits?

In this chapter, findings from interviews conducted with 10 elementary school teachers relating to their perceptions of mindfulness from both their personal and professional perspectives are presented. At the time of this study, participants had taught for at least five years
in elementary school grades K-5 and had used mindfulness practices in their classroom. Data analysis of descriptive narratives obtained through semi-structured interviews describes the experiences regarding participants’ perceptions of the influence of mindfulness practices in their classroom. The findings have been organized by the theme and subthemes that arose from the coding process of each interview, which is explained per research question.

**Research Question 1: How do teachers describe the benefits of mindfulness in their personal lives?**

Participants in the study came to use mindfulness in their teaching after having incorporated it into their personal lives. Teacher narratives revealed the theme of self-regulation along with the following subthemes: anxiety and stress, attention and self-awareness, and yoga practice. Subsequently, seeing the benefits of mindfulness practices within their personal experiences, participants stated they initiated these practices as a way to provide students with tools to address their needs.

**Regulate Emotions**

The teachers interviewed for this study shared their own personal reasons for utilizing mindfulness as a regulation strategy. Experiences with stress and anxiety, the desire to be more self-aware, and the connection between yoga practice and becoming more mindful are the reasons participants incorporated mindfulness into their personal lives. As a result of their mindfulness practices, the teachers can better cope with everyday demands as well as daily teaching routines. According to Chambers, Gullone, & Allen, 2009, mindful emotion regulation represents the capacity to remain mindfully aware at all times, irrespective of the apparent valence or magnitude of any emotion that is experienced. Mindfulness meditation involves a systematic retraining of awareness and non-reactivity, allowing the individual to more
consciously choose those thoughts, emotions and sensations they will identify with, rather than habitually reacting to them. The majority of teachers in this study agreed that mindfulness would benefit the students in the same way that it benefited them.

Anxiety and Stress

Kelli’s interest in mindfulness initially stemmed out of her own desire to deal with personal anxiety and stress when she began her career as an educator: “I started having anxiety attacks but I didn’t actually know what they were. There are a lot of demands put on teachers and the more I think about all of my responsibilities, the more I would become anxious and stressed out.” After discovering how mindfulness could be used to counter her own anxiety levels, Kelli was able to channel that into her second grade classroom. Biklen's (2007) interview study with teachers revealed that new school programs significantly impact the workplace, the school's culture, organization, and cause anxiety and stress for teachers. Maya, a kindergarten teacher, suffers from anxiety attacks. She explained, “I first began mindfulness to cope with and reduce negative experiences, especially negative emotional experiences involving anxiety. It can be very difficult at times to handle depressing thoughts that enter my mind, but mindfulness has become a valuable practice. Adding mindfulness to my daily routine has decreased my anxiety levels.”

Robyn, a fourth-grade teacher, has experienced stress and anxiety due to her personal health. This was a major motive for her seeking out mindfulness in her life. “I sought out mindfulness as a way to lower stress in my life since it was damaging to my body, my relationships, and even to my career as an educator. Mindfulness has allowed me to regulate the stress I experience because of my health needs as well as my everyday life.” The usage of mindfulness to battle stress and its effect on her body has been helpful.
Mindfulness is related to several disciplines and practices, but most of the literature has focused on mindfulness that is developed through mindfulness meditation—self-regulation practices that focus on training attention and awareness in order to bring mental processes under greater voluntary control and thereby foster general mental well-being and development and/or specific capacities such as calmness, clarity, and concentration (Shapiro, 2006). Caitlyn, one of the first grade teachers, explained that her mindfulness practice began in college: “It grounds my entire life. I’ve meditated since I was 20 years old, almost every day. It has helped me through some difficult times in my life and aided in my emotional well-being.” Being objective to one’s emotional state and in tune with the body was critical for these participants.

Attention and Self-Awareness

A powerful aspect of mindfulness is the focusing of attention on the present moment instead of distracting participants from the present. Anne, a fourth grade teacher, and Lauren, a fifth grade teacher, became interested in the benefits of mindfulness and increased self-awareness after reading about a study in one of their graduate classes. Anne stated, “Mindfulness tells you to pay attention to how you are feeling and to your thoughts. It is a call for action and self-awareness.” Anne explained that she became more mindful in her eating habits after experiencing daily discomfort. Being mindful and paying more attention to her body allowed her to make healthy changes to her life.

To Lauren, being aware in the moment without judging is important. As she states, “We spend a lot of our day fighting the present moment, rather than accepting it. We miss out on experiencing the present moment when we spend our energy constantly judging it. With mindfulness, I accept whatever is present.” For both Anne and Lauren, mindfulness resulted in positive changes in both their lives.
Donna, one of the second grade teachers, described her use of mindfulness as a tool for enhancing aspects of her life, such as increased happiness and greater self-awareness. Not only does she use mindfulness with her students, but also with her son. She explained, “I have happier feelings and thoughts each day. I have introduced mindfulness meditation to my five year old. He loves it, and I am teaching him an important lesson on regulating emotions by learning to cope with his feelings and how to express himself.” Both participants have found a balance in their everyday emotions and feelings due to their practice.

**Yoga Practice**

I chose to present yoga as a separate subtheme when describing the personal benefits of mindfulness mentioned by the subjects. Yoga has many advantages as it offers a practice of mindfulness. Yoga mindfulness teachings provide tools to strengthen the present moment and awareness as a way to easily navigate life’s conflicts, confrontations, and distractions. Julia, a first-grade teacher, began her mindfulness practice through yoga, which then led her to obtain a yoga teaching certification. “Yoga has always been a large part of my life. When I practice yoga, I am more mindful, and I enjoy a happier, healthier, more successful life.” Jane, a third-grade teacher, first began her yoga practice when Julia invited her to one of her yoga classes. “Yoga, meditation, and mindfulness are proven to regulate the nervous system, and lead to being less reactive and more responsive. I find myself making better daily choices.” The influence of yoga for Julia and Jane strongly affected the ways in which they chose to approach mindfulness in their own lives and their classrooms.

Third grade teacher Isabel, implemented regular check-ins with herself to purposefully assess her emotional and physical state throughout the day: “…whether that be every 30 minutes or an hour. Just take a moment to breathe or do some simple yoga poses to bring awareness to
your body and mind.” For Isabel, mindfulness is about recognizing the tiredness felt throughout the day and taking necessary breaks, regularly evaluating mental and physical states, and holding meaningful pauses when feeling frustrated.

Research Question 2: How do teachers describe their goals for using mindfulness in the classroom?

Teacher narratives exposed the overall theme of using mindfulness practices in the classroom to foster skills that support student success in school and in their personal lives. Four subthemes emerged from the data: promoting student emotional regulation, addressing impulsive behaviors, encouraging student relaxation, and improving academics through student attention and focus. Teachers revealed that they implemented mindfulness as part of a school initiative through the Mindful Schools organization, as well as from their own personal practice, values, and goals. In 2009, the “Mindfulness in Schools Project,” a non-profit company established by schoolteachers and mindfulness practitioners in the United Kingdom indicated that most mindfulness initiatives tend to focus on the emotional well-being of students, cognitive effects on learning, and student mental health (Weare, 2012, p. 2). Participants find mindfulness as a way to equip students with tools to help regulate emotions, control impulsive behavior, promote relaxation, and improve overall attention and focus.

Fostering Skills to Build Student Success

According to the National Institutes of Mental Health, heightened academic pressure for children has increased and beings as early as kindergarten, causing an unprecedented amount of stress and anxiety. The American Academy of Pediatrics reported that such early stress levels could negatively impact student learning, memory, behavior, and both physical and mental health. To compound the increased stress and anxiety, the teachers interviewed agreed that
children today lack the ability to regulate their responses to stress, anxiety, and other daily challenges. Participants implemented mindfulness practices in the classroom to cultivate and strengthen student opportunities for successful educational careers. The purpose of mindful classrooms is to create a more positive learning environment in which students are better, prepared for life.

**Support Student Emotional Regulation**

One of the key variables associated with school success is students’ ability to self-regulate their behavior, emotions, and learning (Cameron & André 2005). Mindfulness, as an educational strategy, is largely based on the need to address student anxiety within school settings. Early child development research highlights the effects of stress upon whether children reach developmental milestones. The science of child development indicates that the brain develops over time and excessive stress damages the architecture of the developing brain leading to vulnerability to lifelong problems in learning, behavior, and overall health (National Scientific Council on Child Development, 2007).

Throughout the interview process, the concept of student anxiety resonated strongly with all teachers regardless of grade level. For example, Maya, a kindergarten teacher who suffers from anxiety in her own life stated, “Student anxiety levels have become more noticeable as each school year passes…the combination of school expectations, parent expectations, and standardized tests cause an increase in anxiety within younger children. We thought we would deal with the anxiety overall, rather than dealing with just students who are at risk.” Caitlyn, who is also a teacher in the primary grades, expressed her feelings and concern towards her students’ anxiety levels: “It saddens me to see my students so anxious over tests, assignments, or even working with other peers during group projects.” Increased pressure on kids to achieve better
grades, get higher test scores, and realize greater academic outcomes has resulted in an increase in childhood stress and anxiety.

Teaching self-regulation in early childhood is important to reduce the development of school related anxiety at an early age (Zelazo & Lyons, 2012). Anne, who teaches at the intermediate level, agreed with Maya’s observations. During the interview, she stated, “Our children are experiencing higher levels of anxiety. Just to lower the anxiety level overall is more the goal. Once anxiety is lowered and everybody is calmer, the students that have high needs are now in a calmer environment.” For these teachers, mindfulness is used as an attempt to acknowledge and prevent individual student anxiety and nervousness by compelling each of their students to take part in mindfulness learning.

Decrease Impulsive Behaviors

Impulsive behavior is related to a child’s inability to think through the ramifications of behavior before acting. Children are naturally impulsive because their cognitive abilities are still developing, and they cannot yet plan their actions effectively. A child exhibiting impulsive behaviors in class is a distraction to his classmates. First grade teacher Julia utilizes mindfulness to reduce impulsive behaviors in her classroom through a variety of activities and often took the opportunity to incorporate discussions about emotions and feelings during moments of behavioral tension in the class. Julia stated, “Students were getting into serious, repeated, daily conflicts with each other. Daily mindfulness practices are used to lower impulsive behaviors among my students.”

It is important for teachers to identify which students are prone to impulsivity and to intervene when it occurs. Second grade teacher Kelli indicated, “I hold class discussions about changes in mood when I notice students are behaving in a reckless manner, and with the use of
mindfulness, I teach my students to self-regulate their behaviors.” According to Julia and Kelli’s classroom observations, over the last few years, their students have acted out more and exhibited spontaneous behaviors frequently, which is why they use mindfulness techniques to build self-regulation skills.

**Promote Student Relaxation**

Teachers discussed the relationship between mindfulness and their goal of enhancing student mental health through relaxation. Mindfulness education supports stress-reduction by helping students work towards understanding their thoughts, feelings, and negative emotions (Broderick & Metz, 2009). Both Donna, a second grade teacher, and Lauren, a fifth grade teacher, felt it was important to maintain a high-functioning classroom. Donna described, “The students value quiet meditation time and settle into a relaxed state. Generally if the mindfulness practice ends with some relaxation techniques…it changes their energy somehow, it pulls them out of whatever they were coming in with.” Providing students with the opportunity to calm their minds during the day was something that these participants emphasized.

**Improve Student Attention and Focus**

Participants, as a method to improve student attention and focus, use mindfulness implementation. Jane, Isabel, and Robyn agreed that their main goal for using mindfulness practices in the classroom was to stimulate attention to task behaviors and develop stronger, successful academic outcomes for their students. Third grade teachers Jane and Isabel explained that the mindfulness practices used in the classroom “can contribute to a learning-ready classroom environment. The goal is to develop attentional control among students to boost learning for all types of students.” They made it known that mindfulness implementation impacts the emotional climate in the classroom and positively influences student learning.
Student focus is successful when mindfulness engages and requires student responsiveness. Robyn shared that students respond to mindfulness differently depending on the grade-level. She explained her fourth graders realize the value of their mindfulness practice by saying that “Mindfulness is a way of paying attention to the present moment without judgment. I think what’s neat with the older children is that they appreciate that there’s a purpose to it. Mindfulness is used to help students become more focused, attentive to each other, and engaged in the classroom to improve their academic abilities.” All participants agreed that although they had their own goals for implementing mindfulness, they were also looking to strengthen student cognitive and academic performance, emotions, behavior, and social relationships.

Research Question 3: What mindfulness practices do teachers implement in pursuit of their defined goals?

Participant interviews resulted in a theme of effective mindfulness practices with three subthemes: meditation-based practices, movement-based practices, and resting in stillness practices. After discussing with participants the importance of mindfulness implementation within educational settings, the implications of these strategies were addressed. Mindful awareness practices, including forms of meditation and yoga, are exercises intended to promote heightened attention to moment-to-moment experiences (Flook et al., 2010). During the interview process, teachers shared the mindfulness approaches most positively received by their students.

Effective Mindfulness Practices

Mindfulness can be specifically beneficial to students, and its practice has been incorporated into schools to teach young children how to stay mindful of their experience in the moment without judgment. The participants interviewed in this study revealed the various types
of mindfulness practices they perform with their students. Mindfulness and meditation can impact the parts of the brain, which regulate emotions, memory, and decision-making. Teachers in this study use different types of meditation with their students, including deep breathing, visualizations, listening, and guided meditations. In addition, teachers combine movement-based practices such as yoga poses with imagery, moving to music, and stories in motion. The last mindfulness strategy applied in the classroom is called resting in stillness using guided listening and visual meditations.

**Meditation-based Practices**

Meditation is an integral aspect to mindfulness and can be understood as the intentional self-regulation of attention from moment to moment (Kabat-Zinn, 1994). Therefore, mindfulness can be cultivated through meditation and has been directly linked to self-observation and meta-cognition (Hayes, 2004). Mindfulness can take on a formal or informal approach. Formal approaches to mindfulness are more traditional and involve attending to one’s thoughts, feelings, and body sensations that arise each moment. This type of mindfulness is conveyed through meditation and usually is performed sitting, standing, or lying down.

When I asked which implementation strategies worked best for students, Jane remarked, “Do you know what, they actually like quieting their mind.” Jane emphasized that her personal use of yoga techniques, such as meditation and deep breathing, have been popular with her third graders. “If I can actually get them to lie down, they love it. I can get them to meditate for twenty minutes.” Lauren also found implementing meditation practices to be most helpful when incorporating mindfulness in her fifth-grade classroom. “I find fifth graders are more open to the idea of mindfulness because it is an outlet for them when dealing with their stress.” Lauren did not associate age or maturity level with the ability to meditate effectively, but rather suggested
that effective meditation was related to how badly students wanted to develop stress-relieving strategies.

“Classrooms that set the stage for students to practice self-regulation skills could have lasting positive impacts on children’s school competence and achievement” (Singh et al., 2009). Given the connection between practicing mindfulness and self-regulation discussed earlier, the implementation of age-appropriate mindfulness techniques in developmentally appropriate classrooms complement children’s experiences and effectively enhance the development of children’s self-regulation. Maya noted that although her kindergarten students were often more hesitant to engage in meditation, when it was accompanied by listening or another imaginative element, they were often more responsive. She stated, “Sometimes I do meditation lying down, visualizing meditation, and listening meditation which the students like.”

Caitlyn uses many of the same strategies as Maya with her first-grade students. Finding the appropriate mindfulness strategy to implement with students takes time and patience. Caitlyn explained, “I think it is very important to differentiate learning during mindfulness meditation, particularly when it comes to younger students. I may use listening meditation one day or visualization meditation another day. Certain students need more guidance than others just like in any other aspect of the classroom.” Using meditation in more creative ways engages younger students in their mindfulness practice.

Kelli had similar experiences to share and introduced meditation with her students in more creative ways as well. She observed that her second graders furthered their mindfulness practice when visualizations and guided meditations were introduced. Kelli noted, “Often we incorporate stories and breathing exercises. I’m experimenting with meditation more and more. Music meditation and coloring, for example, give my students different experiences.” She also
ensured that her students were being directed while meditating and that they were not meditating alone.

Donna utilized mindfulness as a listening and focusing strategy with her second graders mainly for day-to-day student regulation. Due to the primary age level of her students, self-regulation was a key component of improving student success. She described, “My students enjoy listening meditations and it’s a way I can get them to sit. Also, at the end of each mindfulness practice, I do a sharing circle and the students love that.” The idea of sitting, listening, and then sharing was a common strategy that worked well in her classroom to facilitate student focus.

**Movement-based Practices**

In addition to meditation, participants also advocated for mindfulness practices incorporating movement-based activities. Teachers exposed their students to movement mindfulness practices such as yoga poses with deep breathing, moving to music, and stories in motion. Isabel and Julia incorporate movement-based approaches more often during their mindfulness practice. Isabel often found that helping her third-grade students stay focused required, “…making the class harder or doing things they have to physically focus on. This is possible through stories in motion where short stories include action words with prompt physical activity.” Providing students with challenging tasks strengthened student listening.

Movement mindfulness practices encourage constant awareness of children’s emotional state and surrounding environment. Isabel explained, “To improve learning, we must address the physical, mental, emotional and social well-being of students. By getting the students to focus and visualize on a difficult yoga pose or task I am intentionally engaging them in an activity that requires careful concentration.” Julia shared the same thoughts, “For my first-grade
students, imagery goes a long way while practicing mindful yoga. Saying descriptive phrases with younger students lets them visualize it and connect with it a little bit more. For example, I will ask students to ‘smell the flowers’ or ‘blow out the candle,’ rather than, ‘inhale through your nose, and exhale through your mouth,’ which is more effective.” These types of phrases allow younger students to visualize and connect with their practice, which allows them to focus on higher level thinking tasks within their learning.

Both Isabel and Julia also use dance while practicing mindfulness in their classrooms. Isabel commented, “My students have learned to realize the rhythmic qualities of their breathing when moving to mindful music. These children will grow up to be balanced in mind, body, and spirit.” Julia reiterated dance and movement used in conjunction with mindfulness allows students to learn how to anchor into the present moment. “My students love participating in mindfulness dance and yoga. They reap all of the rewards without feeling bored by the process. This is how we’re going to reach the children of today.” Young children are drawn to mindfulness because of the exciting and varied content that keeps them engaged.

**Resting in Stillness Practices**

Finally, participants disclosed that resting in stillness was also a successful practice in which students willingly participated. Teachers used the lying down pose frequently, which is often the final pose of a yoga sequence or a position for meditation. Robyn and Anne identified similar responses when it came to lying down exercises with their fourth graders. Robyn’s main observation was that once students were in the lying down pose, they really began to appreciate the exercise and enjoyed the time to slow down their day. She described, “Having the students lie on their backs with their hands flat, they love that. It’s a great way to get them to be quiet and
mindful and to cool down.” Being able to relax and reflect can be helpful to students who may feel overwhelmed about the activities or stressors of their day.

Anne noted the importance of the connection of lying down with a listening activity. Through her experience incorporating mindfulness, she observed how students were very responsive to guided listening or visual meditations when they were allowed to lie still. She stated, “The overall trend is that children just want to lie down and listen, it’s like a story.” Although these teachers perceived lying down meditations and activities as well received by students, the interviews failed to distinguish whether or not it was because students benefited from these practices and remained engaged or if students merely enjoyed the opportunity to lie down.

**Research Question 4: How do teachers assess the effectiveness of mindfulness in achieving cognitive performance and social relationship benefits?**

The analyses of the interview responses show the theme effectiveness of mindfulness based on teacher assessment with three subthemes: cognitive performance, social relationships, and challenging aspects of mindfulness. A mindfulness-based curriculum is one of the many ways in which mindfulness is being introduced into educational settings around the world. Meiklejohn et al. (2012) defined mindfulness-based curricula as, “age-appropriate mind–body practices that aim to increase focused attention, social competencies, and emotional self-regulation.” A teacher assessment of mindfulness-based curriculum practices is imperative to understanding the benefits of mindfulness for students.

**The Effectiveness of Mindfulness Practices Based on Teacher Assessment**

The school district in this study incorporated a mindfulness curriculum for their elementary students to improve focus, attention, cognitive performance, and social and emotional
regulation. Teachers' perceptions and endorsement of new school programs and classroom practices ultimately determine how beneficial and productive they will be (Brown, 2009). As mentioned earlier in this chapter, the way in which mindfulness practices are enacted varied based on individual teachers' beliefs, values, and perceptions. In this qualitative study, the ways in which elementary school teachers assess the effectiveness of mindfulness on elementary aged children’s cognitive and social development are highlighted.

**Strengthening Cognitive Performance**

Cognitive performance is the ability to perceive and react, process and understand, store and retrieve information, make decisions and produce appropriate responses. According to Harvard University’s Center for the Developing Child, mindfulness has been shown to contribute directly to the development of cognitive performance skills in young people. When children learn to be more present in the moment and less anxious, they often find they can pay attention better which improves the quality of their performance in the classroom. Robyn’s assessment of mindfulness is positive. She shared, “While incorporating mindfulness with my fourth graders, they often become more focused, more able to approach situations from a fresh perspective, more effectively use existing knowledge, and pay attention.” Mindfulness has the capacity to strengthen connectivity between areas of the brain that support attention and concentration, which results in improved learning.

Second grade teacher Kelli described the mindfulness training she received as eye opening. She stated, “During our training with Mindful Schools, the presenter shared that research shows cognitive benefits of meditation. Attention and memory are the underlying brain abilities that affect your day-to-day thinking, learning, and problem solving. These abilities translate to real world success, and so I incorporate mindfulness into my everyday teaching. This
is my sixth year teaching second grade, and as I use mindfulness meditation in the classroom, I have noticed an increase in attention and focus, which has led to productive learning.” Mindfulness has the potential to be very useful because of its effectiveness in promoting emotional balance, improving attention, and contributing to motivated learning.

Based on the current literature, regular mindful awareness practice can change how our body and brain respond to stress, supporting self-reflection, and self-regulation. These functions play a critical role in learning, memory, and retention. Anne assesses mindfulness based on her observations of how students focus during instruction. She responded, “I assess my fourth graders’ cognitive development and learning by continually monitoring their attention and focus during academic lessons. Also, I observe how often they constrain impulsive tendencies towards distraction.” Anne supported mindfulness in the classroom, as it has proven effective in enhancing student attention and boosting retention with her students.

Donna noticed similar outcomes among her students as Anne. She evaluates mindfulness by keeping an informal record of the time students put forth during student-teacher interactions such as class discussions. She explained, “I assess the influence mindfulness has on my second graders by the length of attention and thinking they contribute to lessons and discussions. Whereas most instructional strategies end upon delivery, mindfulness becomes the gift that keeps on giving, serving students in potentially every aspect of their daily lives.” Donna believes that mindfulness is a useful tool that students will carry with them throughout their educational careers to aid in focus and attention.

Fifth grade teacher Lauren assesses mindfulness by how her students recall information from daily lessons. Her students have shown improvement in retaining new information and applying it to class activities, projects, and class discussions. Lauren stated, “Students who take
mindfulness practice seriously have shown improvements in their working memory and capacity to plan and organize themselves during lessons and activities. Students who don’t take mindfulness practice seriously haven’t shown as much improvement in my class.” She witnesses the growth and dedication her students demonstrate throughout the year.

Jane measures the success of mindfulness practice by how often her third grade students can redirect their frustration during lessons and re-focus their attention. Jane uses her class roster to record how often her students use a mindfulness technique to bring their focus back to the lesson. She explained, “Mindfulness is a powerful tool that supports children in calming themselves, focusing their attention, and interacting effectively during instructional time, all critical skills for functioning well in school and academics.” Effective education includes practices that reinforce students’ social and emotional competencies in conjunction with their academic knowledge.

Social and emotional learning is the process through which children acquire and effectively apply knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. First grade teacher Anne incorporates mindfulness as a way to accomplish social and emotional learning in order to build cognitive performance among young children. She stated, “Academic learning depends on the combination of social and emotional skills. I can say with confidence that my first graders enjoy our mindfulness practice and I have seen development in their processing speed, learning, and memory.” Education supports children’s growth in all areas, social, emotional, and academic.

Stress can negatively affect the way children pay attention in class, stay on task, and move from one activity to another. Isabel explained, “We all know that concentrating, and
therefore, learning while stressed or distracted is near impossible. I may not have seen increased academic improvements among my third graders, but I have noticed increased attention in the classroom.” Including mindfulness in education is a simple practice that provides students with a positive way to shift moments of stress, distraction, or anger to moments of attention and thoughtfulness.

Although these responses express a connection between mindfulness and the development of listening and enhanced focus, none of the participants in the study made it known how mindfulness has directly impacted the academic grades of their students. However, they did express that mindfulness engaged and required student responsiveness, which made student focus more successful.

Building Social Relationships

The teachers in this study shared the strong belief that self-awareness and self-regulation skills are important parts of growing up and are closely related to each other. According to Greenberg et al. (2012), self-awareness refers to the ability to accurately assess personal feelings, interests, values, and strengths. Self-regulation is the ability to control and direct one's own feelings, thoughts, and actions. Current research shows that self-awareness and self-regulation are good predictors of children's social success.

Demick (2000) defined social skills with peers as the ability to consider others' perspectives, understand their feelings, and empathize with them, as well as appreciate others' similarities and differences. Many skills are fundamental at the elementary level, including making positive approaches to play with others, initiating and maintaining conversations, cooperating, listening, taking turns, seeking help, and developing friendship skills (Denham, 2000). Third grade teacher Jane reiterated, “Mindfulness practices have created a calm, peaceful
and pleasant environment for my students, where the children enjoy interacting with each other and their teachers. These attitudes have increased personal growth.” Mindfulness has been shown to improve children’s awareness of others and helps them to build positive relationships.

Qualities such as self-awareness, empathy, peaceful problem solving, and self-regulation need to be learned and practiced over time in order to develop positive social relationships. First grade teacher Caitlyn stated, "Hearing my first graders use the term ‘mindful’ in conversations is very pleasing. It is as if the children are reminding themselves and each other how to regulate their emotions." Maya observed her kindergarteners playing together with fewer arguments. Maya exclaimed, “I have noticed that mindfulness practice considerably improved students' attitudes towards one another. It has taught them how to be more mindful of their thoughts and actions, which has enabled them to build strong relationships with their peers.” Children who learn to control themselves make better social and academic choices than children who are overly angry, aggressive, or impulsive (McCallum & Price (2010).

Kelli has taught second grade for six years. She described that children at this age lack the skills to problem solve and often argue and tattle on one another. Kelli stated, “Mindfulness practices have altered the children's anxious energy to calmer, quieter, and more peaceful states in the classroom. Students now seem to be getting along more easily and interacting with less arguments.” Isabel finds that her third graders had difficulty with keeping friendships due to frequent disagreements. She applied mindfulness practices for emotion regulation and coping skills by highlighting the importance of students separating feelings from actions. “If children learn to be mindful of their feelings, then they will be able to decide if they want to act on them, instead of just spontaneously reacting to different social interactions with classmates.” Self-
regulation skills help elementary school children stay focused and calm and, therefore, manage their reactions and behaviors for more positive social interactions.

Julia and Donna emphasized the need to develop communication skills in the primary grades. A strong correlation exists between mindfulness and quality of communication. Julia shared, “I hold a classroom meeting every morning with my first graders and we participate in a minute of mindfulness before we talk about behavior and other things that have come up in our classroom. I have seen less anti-social behaviors among my students. They are more empathetic as well.” Donna advised, “By teaching my second graders through mindfulness practices how to interact with others, conflicts do not escalate to the same degree because they have the tools to regulate themselves.” Practices from the mindfulness program teach young children how to solve social problems, evaluate social situations, and solve differences that occur within their peer group.

Both fourth grade teachers agree that the mindfulness program helped their students to manage peer conflicts more effectively. Robyn explained, “Students are able to problem solve among themselves, which has saved valuable classroom time.” Anne stated, “When students argue about something, I give them each a moment to take a deep breath, and it changes the whole tone of the problem solving session. Mindfulness exercises have also encouraged students to try to problem solve themselves before approaching a teacher.” Mindfulness has the ability to help children establish and maintain healthy and rewarding relationships, by allowing them to communicate clearly, listen actively, cooperate, resist inappropriate social pressure, and seek help when needed.

Fifth grade teacher Lauren believes that building pro-social behavior with peers is essential at the elementary school level. Students face different social challenges in middle
school and high school, and Lauren wants to equip her students with helpful tools before they leave her classroom. She described, “Mindfulness exercises have built social skills, emotion regulation, and conflict resolution skills in a very powerful way that my students grasp.” Both the lower and upper grade teachers revealed that they often see examples of how their students have learned to discuss acceptable outcomes to social situations in more effective ways.

**Challenging Aspects of Mindfulness**

Every teacher needs to establish an effective means of facilitating classroom management. To implement a mindfulness program effectively, management and behavior must be addressed. A common subtheme the interviews showed was the repeated reference to disruptive students and their place within the mindfulness framework. Fourth grade teacher Robyn shared her experiences: “One student specifically would make jokes and laughed at others during our mindfulness exercise. This certainly created a disruptive practice that deterred the other students from opening up.” Because of this challenge, Robyn shortened the time period for her mindfulness lessons.

Lauren shared a similar experience with disruptive students, but stated that if the majority of the class were able to effectively self-regulate it may not have been an issue. However, in a classroom where self-regulation was an issue, that one child could hinder the entire experience: “I think you can integrate mindfulness, but you have to work around really disruptive children. You continue to try, but a lot of the times they’re just not going to do it.” Both Robyn and Lauren share the perception that accepting student’s separation from practicing mindfulness is part of the process and that as long as it does not create a negative environment for the other students, then mindfulness exercises can be continued.
Research on mindfulness has consistently shown that practicing mindfulness increases students’ socially competent behaviors (Schonert-Reichl & Lawlor, 2010; Meiklejohn et al., 2012; Flook et al., 2010). However, the teachers in this study suggested that behavior does not always improve and poor behavior can often diminish the experience for other students. The participating teachers believe guiding the mindfulness practices rather than participating in them allowed them to facilitate classroom management and discipline.

First grade teacher Caitlyn discussed the importance of teacher participation in implementing mindfulness. Convincing teachers to apply a new initiative can be challenging. Implementing new programs, such as mindfulness, requires more effort from the teacher, and Caitlyn finds this to be a challenge for some of her colleagues. “Motivating teachers to embrace the mindfulness curriculum and find time and space to incorporate it into the day is difficult. Even though we have a mindfulness program for our students, not every teacher in school incorporates mindfulness into his or her classroom. This can tamper with how other students accept and practice mindfulness.” A mindfulness program and practice is sustainable in the long term when teachers are engaged.

Despite the teachers' belief that mindfulness practices should be incorporated throughout the school day, most teachers in the study mentioned time constraints as the greatest challenge to this goal. Second grade teacher Donna stated, "At the beginning, teachers were concerned about managing time to fit mindfulness practice into their already full classroom schedule, even though there was allotted time built in to each teacher’s schedule. Yet, I couldn’t help but thinking, how can you not find the time?" The teachers agreed that, while it is essential to reinforce mindfulness, there was not always enough time between different subject periods to do a full
mindfulness session. Many of the sessions from the mindfulness curriculum can take 10 to 20 minutes of class time.

The other challenge for teachers was remembering to stop and do a full mindfulness session during the day. Kindergarten teacher Maya described, “A day in kindergarten goes by very fast, and it is easy to forget to fit in a mindfulness lesson/exercise when you are so busy. Although the students seem to really enjoy our mindfulness practice, this is something I struggle with.” Teachers admit that they need to work on time management to implement mindfulness effectively in their classrooms.

Both first grade teachers, Julia and Caitlyn, revealed that they wanted to teach first grade because young children’s minds are receptive and are eager to learn new things. However, the challenge of working with younger children is that they have difficulty sitting still, arranging their bodies enough to pay attention, and listening for a longer period of time. Julia reported, “About half of the students in my class have attention challenges and they often struggle with sitting still and not distracting their friends with silly behaviors.” Caitlyn stated, “Because of their age, younger children have a harder time sitting and being mindful, so length of time for a practice may need some adjusting.” Lower grade teachers, (kindergarten, first, and second) agreed that student attention is a challenge, but over time they learn to practice mindfulness for longer periods of time.

Upper level teachers revealed that some of their students became bored with mindfulness practice because most were introduced in previous years. Third grade teacher Jane said, “I find ways to change mindfulness practice to fit the subject period, which helps reduce student boredom. We'll do a spontaneous exercise once or twice a week such as, mindfully eat something or mindfully check out the rain to spice things up.” The repetition of certain exercises is a way
for children to maintain the mindfulness skills and benefits, which unfortunately can become boring for students.

Another challenge regarding upper level students (third, fourth and fifth) is their refusal to participate in a mindfulness session, and then disrupting the whole class by making noise and distracting others. Fourth grade teacher Anne described instances in which students did not want to participate and the distractions they caused ruined the mindfulness experience for all. “There are always a couple of students in a class who are not particularly interested at certain times, and they just decide they do not want to participate.” She added, " I have allowed these disruptive students to select the practice of choice for a session, which encouraged their participation. Most days this strategy works.” Teachers must consider the individual needs of every student, and this understanding can lead too more informed choices for responding to disruptions.

**Cross-Case Analysis**

The responses of the teachers who taught lower grades were compared with the responses of the three teachers who taught higher grades. Comparing the two groups of teachers show that the practice was easily adapted to grade level, with the upper grade teachers observing tremendous benefits from the prior work of the lower grade teachers. While most of the exercises in the mindfulness curriculum may be scaled up or down to grade level, a certain practices are more receptive in the lower grades. For example, lower grade students need more guidance than upper grade students. Additionally, lower grade students benefit more from imaginative elements with visualizations, listening, story-telling, dancing, and shorter meditation sessions. Longer meditation sessions and resting in stillness practices were suggested for upper grades because of the required length of time and maturity level. Participants highlighted that practices depend on each classroom since no two classrooms are alike.
Summary

In this chapter, the analysis and findings of ten interviews conducted with elementary school teachers who have implemented mindfulness with an array of students across grades Kindergarten through fifth grade are reported. The results of the interviews show connections to the research questions and literature used to design this study. The teachers’ personal experiences and observations provided clarification on the use of mindfulness and its role within the school district used for the study. Participants indicated an overall positive outlook on mindfulness as an effective tool to assist in student emotional regulation and relaxation, which ultimately had an effect on their cognitive performance.

Teachers also stressed the importance of mindfulness in their own lives in order to facilitate their classrooms as effectively as possible. Each participant found that the positive results of mindfulness implementation included meditative as well as movement-based strategies. The meditative strategies were completed with guided lessons and visualizations to help students focus and keep them engaged. Furthermore, meditation and movement strategies were followed up by conversation that increased student participation and reinforced the importance of involvement in the exercise. It is clear that these varied strategies perceived by teachers positively influenced school aged children.

Participants found that mindfulness training is beneficial in enhancing the performance in cognitive tasks that demand sustained attention, concentration, and problem-solving skills. Mindfulness increases cognitive flexibility and creativity, which gives students a wider range of responses to challenging situations. However, participants in this study did not have enough evidence to support that mindfulness has enhanced their students’ academic grades. Teachers interviewed also discovered that mindfulness training had a positive impact on social
relationships. Mindfulness exercises increased students’ empathy and compassion by helping them to regulate their emotions, which supported peer relationships.

Although most mindfulness practices were acknowledged, teacher participants encountered a few barriers when implementing their mindfulness practices. Student behavior and classroom management was one of the most common challenges teachers mentioned. Additionally, participants found it difficult to implement mindfulness curriculum into their schedule even though it is a district wide initiative. Regardless of the challenges participants faced, each one felt that by exposing students to mindfulness strategies early on in their educational careers, they would be better prepared with the skills to develop and maintain positive emotional health throughout their lives.

In chapter five, a summary of the purpose of the study, research questions, theoretical framework, and methodology are presented. The research findings and implications for mindfulness practice are discussed. Finally, recommendations for future research on mindfulness practices with elementary-aged children are presented.
CHAPTER 5
IMPLICATIONS

In this chapter, the implications of this study in relationship with existing research and the value of future study on mindfulness in education are discussed. The usefulness and productivity of existing mindfulness initiatives in two elementary schools within the same district in a northern New Jersey school district was examined in this study through teacher-informed interviews. It was designed to analyze teachers’ perceptions of the implementation of mindfulness programs in elementary school and identify the most effective mindfulness strategies. Finally, the purpose of this study is to understand the connection between the mindfulness strategies teachers implement and their potential to produce consistent and positive effects on student well-being. In this chapter, the findings of the interviews are compared to existing studies, and the implications of these findings for future researchers and mindfulness educators are discussed.

Overview of the Study

In this study, I focused on gaining insight on whether implementing mindfulness-based practices in elementary classrooms influences students’ cognitive performance and social relationships’ through teacher perspectives. In addition, I explored the teachers’ goals for using mindfulness in the classroom, specific mindfulness strategies used, and barriers towards implementing mindfulness with students. The current study was guided by one overarching research question: For teachers who practice mindfulness in the classroom, what are their perceptions of its influence on early elementary students’ cognitive performance and social relationships? and four sub-questions: (1) How do teachers describe the benefits of mindfulness in their personal lives? (2) How do teachers describe their goals for using mindfulness in the
classroom? (3) What mindfulness practices do teachers implement in pursuit of their defined goals? (4) How do teachers assess the effectiveness of mindfulness in achieving cognitive performance and social relationship benefits?

Theoretical Framework

Researchers examining self-regulation in school settings have described the behavioral aspects of self-regulation as “deliberately applying attentional flexibility, working memory, and inhibitory control to overt impulsive behaviors” (McClelland & Cameron, 2011). The development of self-regulation skills in early childhood is particularly important to succeed in the classroom (Willis & Dinehart, 2014; Zelazo & Lyons, 2011). As access to schools for children during their formative years has consistently increased (Schonert-Reichl & Lawlor, 2010) interest in studying the value of implementing mindfulness practices into schools has increased. The focus of studies examining the benefits of mindfulness in classrooms has been on outcomes related to skills and behaviors children need to succeed in school. Self-regulation and social and emotional competence are significant predictors of school success (e.g. McClelland & Cameron, 2012).

Methodology

For this study, ten participants were interviewed using criteria sampling. Each participant had to teach in elementary school grades K-5, have five years or more of teaching experience, have training in a mindfulness based program, and have used mindfulness in the classroom for at least two years. Data were collected from semi-structured interviews using the research questions, open-ended questions, and follow-up questions to probe for deeper meaning. Interview questions focused on the teacher’s background and personal use of mindfulness, goals of mindfulness practices, use of mindfulness practices in the classroom, and the benefits and
challenges of incorporating these practices in the classroom. The length of the interviews ranged from 40 to 60 minutes. Data were collected through interviews, field notes, reflective journaling, and noted common themes and research connections. All interview transcriptions and memos were analyzed using NVivo and then coded by using field notes and corresponding memos. Some themes that emerged were consistent with the existing literature while others resulted in new knowledge.

**Overview of Key Findings**

The purpose of this study is to explore the perceptions of elementary school teachers who use mindfulness practices in their personal lives as well as with their students. The findings from the interviews indicate several themes consistent with those existing in the research literature. While several themes that emerged from this study align with those found in previous research on the use of mindfulness on students, findings in this study add to the existing literature with respect to teacher narratives demonstrating how they assess the effectiveness of mindfulness, specifically with elementary-aged students, and the challenging aspects of these practices.

In regards to the overarching research question, for teachers who practice mindfulness in the classroom, what are their perceptions of its influence on early elementary students’ cognitive performance and social relationships, the results of this study show that mindfulness practices play a critical role in participants’ personal lives as well as the lives of their students. Teachers perceive mindfulness exercises as a valuable and effective set of skills to pass along to their students to support emotional regulation, attention, focus, and social growth.

The themes identified were consistent with existing literature: (1) mindfulness practices regulate emotions, (2) effective mindfulness practices, (3) teacher assessment of the
effectiveness of mindfulness. The results of this study added knowledge on the use of mindfulness in fostering skills to build student success. More specifically, student success is influenced by mindfulness practices used in the classroom because mindfulness improves emotion regulation, reduces impulsive behaviors, and promotes student relaxation. Sub-themes that emerged from each main theme of this study provide insight into the significance of mindfulness practices on school-aged children as perceived by teachers.

**Benefits of Mindfulness in Teachers’ Personal Lives**

In response to research sub-question one, how do teachers describe the benefits of mindfulness in their personal lives, the responses show that mindfulness practices regulate participants’ emotions. For example, participants found that their anxiety and stress levels decreased and their attention and self-awareness increased with the use of mindfulness. Participants also revealed that mindfulness practices helped them gain more acceptance and compassion, becoming more reflective instead of combative. Many teachers expressed the importance of experiencing mindfulness in their personal life before introducing it to students.

Existing research supports the importance of mindfulness as a daily practice and worth for educators. Kabat-Zinn (2003) emphasized the importance of instructor practice in order to generate an authentic mindfulness experience and positive results in participants. The results of existing research indicate the need for consistent teacher training to develop results in students. Mindfulness curriculum and practice that have been incorporated in schools often comes with training employed by mindfulness professionals or mindfulness organizations, such as the Mindful Schools Organization. This training allows educators to learn and practice mindfulness methods with their students. All teacher participants had a history of mindfulness practice in
their day-to-day lives and had also developed a strong understanding of the significance that the practice held for them.

**Fostering Skills to Build Student Success**

In response to research sub-question two, how do teachers describe their goals for using mindfulness in the classroom, the results show that participants implemented mindfulness practices as a way to foster and build student success by providing students with meaningful tools. Seeing the benefits of mindfulness practices in their own lives, participants’ goals were to improve their students’ cognitive performance, emotional awareness, and social relationships. All participants agreed that self-awareness and emotional regulation are closely related benefits of mindfulness and important in the growth of young children. Participants found that the application of mindfulness practices reduce student stress and anxiety and fosters the regulation of these mental reactions through a mixture of mindfulness exercises. An analysis of the literature indicates that goals were similar for the mindfulness programs for children that had been implemented. The goal of mindfulness practices utilized in a range of studies was to teach students how to understand their thoughts, feelings, and negative emotions (Broderick & Metz, 2009). Children who exhibit impulsive behaviors or anxiety and stress can use mindfulness as an instrument to address these concerns successfully.

**Effective Mindfulness Practices**

In response to research sub-question three, what mindfulness practices do teachers implement in pursuit of their defined goals, the results show that all teacher participants utilized a wide range of mindfulness techniques and practices with their students. Many of the mindfulness practices included some degree of meditation. Meditation involves the following methods: (a) contemplating or reflecting; (b) performing a mental activity, such as giving full
attention to a breathing exercise or repeating a mantra, for the purpose of increasing awareness; (c) focusing on, reflecting upon, or pondering about one’s thoughts. In this study, based on the mindfulness practices employed by teachers, all four definitions apply. The focus of mindfulness exercises have been more heavily on the operational values of meditation, such as increased executive functions, social skills, emotional stability, general well-being, and decreased anxiety which allows a broader range of populations to benefit from the practices, including the public-school system (Hayes, 2004).

Mindfulness techniques that participants taught their students ranged from traditional sitting and lying down meditations to guided visualization, music meditations, to movement-based practices such as yoga and resting in stillness (lying down) practices. Teachers communicated that the use of these various methods was implemented to keep students engaged and focused during the mindfulness activity. The array of mindfulness techniques that can be tried with students is described in the existing research. The teachers interviewed for this study perceived that students reacted most positively to guided, listening, and thinking meditations, or movement techniques.

**Teacher Assessment of the Effectiveness of Mindfulness**

In response to research sub-question four, how do teachers assess the effectiveness of mindfulness in achieving cognitive performance and social relationship benefits, the results show that each teacher perceived mindfulness as helping to engage students and encourage their attention and concentration; however, they did not report finding a connection between these interventions and student grades. Research on the effects of mindfulness interventions upon student academic improvement was mentioned as an area of variation and uncertainty in the current literature, as well as for teacher participants. Few studies show a link between cognitive
enhancement and student academic achievement. For example, Saltzman and Goldin (2008) conducted one of the few studies, which indicate academic improvement among students, but suggested that academic achievement was one of the last variables to develop during consistent mindfulness intervention within the classroom.

Teacher perceptions of student increased self-awareness and self-regulation is consistent with research focusing on the role of mindfulness training in children’s development. Participants within the study conveyed that students often demonstrated levels of calmness and relaxation after mindfulness instruction. This calmness and relaxation inspired increased collaboration with peers, and teachers noticed a decrease in student conflicts. Teachers also noted that mindfulness strategies supported students’ ability to solve social problems, analyze social situations, and solve differences that surfaced within their peer group. Teachers believed that mindfulness lessons created more positive peer relationships at school. This is in line with the literature, as researchers have recognized the link between mindfulness and an increase in positive social characteristics (i.e., empathy) (Beddoe & Murphy, 2004; Shapiro, 2009).

The teachers in the present study believed that it was important to encourage mindfulness behaviors in every aspect of their students' day. Despite their belief in mindfulness training, all teachers mentioned certain challenges and barriers they faced. Participants found disruptive students, poor behavior, attention challenges, unwillingness to practice, and time constraints as obstacles during mindfulness practice. Teacher participants found challenges of adapting mindfulness practices to their particular grade level. Teachers of lower grades (kindergarten through second grade) reported different challenges than the teachers of the higher grades (third through fifth grade).
Teachers of lower grades felt that younger children are more receptive to mindfulness teachings, but they may have a more difficult time maintaining the practice. For example, some children were hesitant to close their eyes, and many children had problems sitting still for a certain period of time. Additionally, children can be disruptive and exhibit poor behavior during their practice, possibly because of maturity or attention issues. Despite the challenges, the lower grade teachers agreed that by the end of the school year, their students were excited to participate in their mindfulness practice. Teachers of upper grades all agreed that they had an advantage because most of their students had prior training in mindfulness in the lower grades. These teachers also felt that their students were more mature and had better control over their emotions, compared to students in younger grades. However, one challenge to implementation of mindfulness practices with the older students was boredom and resistance.

A number of studies have shown evidence of the positive impact of practicing mindfulness on similar challenge areas, such as impulsive behaviors and maintaining focus (Napoli et al., 2005; Schoner-Reichl & Lawlor, 2010; Semple et al., 2005). In fact, the use of mindfulness has been linked to a reduction in impulsive behaviors and researchers are beginning to examine how mindfulness-based practices can help children and adolescents with difficulties in attention and inhibitory control (Singh et al., 2009). A successful way of introducing the concept of mindfulness to children is by bringing their attention to an event or happenings in their environment and expanding the need for mindfulness by revealing what they are aware of and what they may not be aware of (Hooker & Fodor, 2008). This research proposes that even when teachers are highly supportive of a new curriculum or practice in their school, their successful implementation can be interrupted.
Implications

The findings and analysis of mindfulness practices with elementary school-aged children have some practical implications for those interested in mindfulness in education, especially with young children. The findings of this study and the research on this topic both show that teachers who are experienced and trained in mindfulness perceive a variety of benefits from using mindfulness in their classrooms. In schools where mindfulness curriculum has not been developed, school initiatives to educate and inspire teachers about the usefulness of mindfulness in their classrooms would need to complement implementation of mindfulness programs.

In addition, results of this study further support that an awareness surrounding mindfulness philosophy in education benefits the mental health of students. Research and participants’ experience has shown that mindfulness as a mental-health and well-being initiative not only benefits students, but helps teachers in their personal and professional development as well. By practicing mindfulness, teachers could better regulate their classrooms more efficiently and promote precautionary approaches to conflict resolution, social relationships, and emotional regulation in their classrooms.

Lastly, the findings in the study demonstrate that implementing a mindfulness program for elementary school-aged children stimulates focus, listening, and attention within the classroom. The perceived benefits from mindfulness practice are related to better focus and a positive impact on students’ learning. Overall, cognitive performance among students increased with sustained attention during lessons and activities in elementary classrooms. The implication of this is that mindfulness aided in strengthening concentration throughout the day, even though improvements in academic grades were not observed.
Limitations

This study is limited in several ways. The sample size of teachers was small and only represents grades kindergarten through fifth grade in a school district in northern New Jersey. Teachers who are in other areas of New Jersey may have different experiences and perceptions of school mindfulness practices. For example, the teachers interviewed in this study teach in an upper/middle income school district. Therefore, the results of the research do not reveal much about teachers who work in low-income public schools with fewer resources and more student challenges. Considering the limitations related to teacher sample and school representation, future research on teachers’ participation in school mindfulness with school-aged children should collect data across a larger and more diverse population of teachers, including teachers of a larger range of grades.

Another limitation to the study is that the sample is limited to teachers who were experienced in mindfulness and who were very positive about their school’s mindfulness program. The ten teachers interviewed were already familiar with and personally using mindfulness practices before being introduced to their school's mindfulness curriculum. Teachers who are new to mindfulness or new to teaching might have more challenges with implementation of mindfulness techniques and strategies. The results of this study also do not involve teachers who were displeased with their use of mindfulness practices.

Finally, this study is limited by the interview method. First, the study involved only interviews with the teachers; the data did not include observations of the teachers interacting with their students or conducting mindfulness lessons with students in classrooms. For instance, the results of this study does not indicate whether mindfulness practices were implemented correctly or track the quantity of time participants implement mindfulness-based exercises.
Therefore, it is not known how thoroughly the teachers' beliefs match their actions in the classrooms. Observations of mindfulness sessions in the classroom would provide additional information about the implementation of mindfulness practices with elementary students.

**Recommendations**

This section includes recommendations for teachers, parents, students and schools. Recommendations for policy, practice, and future research, based on the analysis of teacher narratives, are further discussed in this section.

**Recommendations for Policy**

Schools can be a stressful time for students as they experience new emotions, people, ideas, and responsibilities, which can cause an increase in stress. The expectations for student performance have increased, and they are not necessarily taught how to manage the demands, creating a cycle of difficulties (Saltzman & Goldin, 2008). However, mindfulness within the classroom can address these problems. With the call for more social and emotional learning in schools and all the benefits seen from mindfulness-based practices, the first recommendation is to adopt a policy to implement mindfulness in the elementary school curriculum.

Mindfulness should be used in the classroom because it can offer students ways to manage the curricular demands of school as well as the demands outside of academics, such as relationships, listening, and emotions. Mindfulness helps teachers to focus on the whole child instead of just the content the child must learn in school. Mindfulness practices can help students increase their control over their emotions and attention, while also increasing their cognitive performance by increasing productivity, memory, and listening skills (Broderick & Metz, 2009; Napoli et al., 2005; Saltzman, 2010). Any district interested in implementing a mindfulness curriculum policy should define their goals for utilizing it with their students. Districts should be
cautious of not using mindfulness as an academic improvement, but to add to student self-awareness.

The focus of previous studies has been on student-centered approaches of the implementation of mindfulness interventions with limited research on the influence that mindfulness trained teachers have on their students’ experiences. Increased attention to teacher training, teacher value of mindfulness use, and teacher evaluations among a diverse group of elementary students is imperative to the use of mindfulness with school-aged children. Therefore, the second recommendation is to implement a policy in school districts to integrate continuous educational training and professional development for teachers in mindfulness curriculum. As mentioned in Chapter 2, mindfulness needs sustained practice to be effective. This policy should outline the district’s responsibility to providing teachers with tools for mindfulness in the classrooms.

Additionally, an evaluation policy should be developed to assess the mindfulness practices that prove most effective with students. Mindfulness is much different than academic curriculum and the evaluation of such a program needs to align with the underlying philosophies. Teacher perceptions on the types of strategies that worked best varied from grade to grade. Studies with children have utilized a number of formal practices that involve traditional lying down, sitting, standing or moving meditations as well as informal awareness that is cultivated through the activities of everyday life (Meiklejohn et al., 2012). An evaluation policy and mindfulness assessment system would allow school leaders and staff to make adjustments to the implemented curriculum for a more successful experience.
Recommendations for Practice

The findings and analysis of teacher experiences have several implications for educators and school administrators and for teachers who desire to utilize mindfulness practices within their own teaching. A committee, including all stakeholders, should be formed to determine how to apply mindfulness into the current school curriculum. Each committee member should have a specific role and responsibility in implementing mindfulness curriculum successfully. The committee should research current mindfulness programs that produce positive student outcomes. The committee should complete a thorough analysis of teaching materials that follow mindfulness curriculum. Integrating a mindfulness curriculum takes time, effort, and resources that school communities would need to commit to in order to effect real change.

To assist with the implementation of mindfulness curriculum and practices within classrooms, it is recommended that administrators analyze the time and resources used for educational training and professional development for teachers. The mindfulness committee should research mindfulness programs that would best fit their goals for implementation. Employing a new program in classrooms might be difficult with only minimal training support for teachers. Ongoing training and mentoring for all staff members should be provided, and professional collaboration sessions, team meetings, and common preparation times should be incorporated. Common planning time can be arranged in the master schedule, on in-service days, or during department meetings.

Continuous professional development for teachers increases the value of mindfulness practices, teacher participation, and student participation. All training and professional development offered by the district should be utilized and supported district wide. Training should be offered with the focus on increasing staff knowledge on mindfulness, providing staff
with school-based data to demonstrate the need for mindfulness education, and practicing and leading mindfulness activities.

The impact of parent involvement on the effectiveness of mindfulness was not examined in this study nor in the current literature. Inviting parents to observe mindfulness practices in the classroom would be beneficial for implementation. This may increase parent interest in mindfulness practices, so they might encourage their children’s participation in mindfulness activities. A recommendation is to invite parents to one or more of the teacher trainings or special training sessions. Such training would increase uniformity between students’ home and school lives and would also improve parent-teacher relationships.

The challenges that teachers face when implementing mindfulness must be considered when determining which curricula and practices work best for students. Behavioral interruptions and classroom conflicts can be a significant barrier for students during mindfulness initiatives. Researchers have studied the effectiveness of mindfulness for groups of students with behavioral needs or concerns or have separated student populations based on learning abilities. The suggestion is to assess mindfulness methods that are adaptable to all classroom environments, including multiple learning personalities and accommodating students with disabilities. In order to develop more concrete practices, it is recommended that mindfulness strategies used with students be evaluated regularly.

An assessment developed by the mindfulness curriculum committee should be used to gather insight from students and staff regarding the mindfulness curriculum and practices being applied in the classroom. Teachers will regularly observe mindfulness practices being used with their students and provide feedback to the committee. Teachers, students, and parent’s perceptions of the innovative and creative mindfulness practices used will also be a part of the
evaluation. Assessing this initiative is imperative to the success of mindfulness implementation within the elementary curriculum. Using the data gathered should help determine which practices are most effective for both teachers and students.

**Recommendations for Future Research**

Future mindfulness education research is needed for elementary school-aged children. The focus of current research is more on adults, adolescents, and hyperactive students. To thoroughly understand the influence mindfulness has on younger students, additional studies are needed. In addition, a quantitative analysis or mixed methods approach is highly recommended for future research. Although the results of mindfulness practices can be demonstrated through conclusive skills measured by quantitative means, the behavioral and mental effects from mindfulness practices are also subjective and personal, which is difficult to quantify alone. Future research would benefit from an experimental design including randomization, control groups, and objective and subjective measures from multiple sources including the child, parent and teacher.

Another recommendation for future research involves the development of more rigorous studies and research on the link between cognitive and academic progress with the use of mindfulness in education. Additional research is needed to measure the extent to which mindfulness exercises promote outcomes like increased focus, attention, and academic achievement, as well as whether the exercises work better for some students than others. One example of future studies would be analyses of teacher perceptions from a larger population reveal more comprehensive results. Another example of future research may also involve longitudinal studies, which follow students through their elementary years.
Furthermore, data could be collected from schools that use mindfulness practices to aid in curriculum development and staff training. Researchers should also examine the connection between the amount of time spent in mindfulness practice and outcomes. Research results thus far have shown mixed results, with some finding that increased time in mindfulness practice is beneficial and others showing no significant difference (Biegel et al., 2009). Research into whether students who engage in mindfulness practices at home as well as at school experience any greater benefit is also recommended.

**Conclusion**

Findings for this study add to the current body of research that exists on mindfulness practices in education. The purpose of this study is to explore, understand, and share the narratives of teacher perceptions regarding mindfulness strategies and initiatives with school-aged children within the classroom. Based on the findings of the study, mindfulness in schools is effective in encouraging student emotion regulation, cognitive performance, and social relationships. The teachers in this study reported that the best results for mindfulness implementation required guidance in mindfulness techniques and effective behavioral management of students. The interest in mindfulness programs and practices in schools has increased and can benefit students. The results of the study discuss some of the challenges that mindfulness educators face with the hope of bringing forward better and more effective opportunities.
REFERENCES


Schmidt, & H. Walach (Eds.), *Meditation-Neuroscientific Approaches and Philosophical Implications* (pp. 381-404). Dordrecht, The Netherlands: Springer.


APPENDICES

Appendix A
IRB Approval Letter

Appendix B
Letter of Recruitment

Appendix C
Informed Consent Form

Appendix D
Mindful Educator Essentials Elementary School Curriculum (K-5)

Appendix E
Interview Protocol
June 7, 2018

Angela Penna-Wilkos

Dear Ms. Penna-Wilkos,

This letter is a formal statement that your study “Exploring the Influence of Mindfulness on Elementary Aged Students Through the Lens of the Classroom Teacher: A Case Study” does not fall under the purview of the IRB. This is because, as you describe it in your letter of June 6, 2018, the study is a non-generalizable case study.

Please remove the reference to the IRB office and myself in the Informed Consent document before you give it to the participants.

Sincerely,

Mary F. Ruzicka, Ph.D.
Professor
Director, Institutional Review Board

cc: Dr. Elaine Walker
Appendix B

Letter of Recruitment

Dear Teacher,

Hi, my name is Angela Penna-Wilkos, and I am a student within the Department of Education Leadership Management and Policy program at Seton Hall University. I’m e-mailing you about a research study that I’m conducting for my dissertation.

The study that I am leading is about the influence mindfulness practices have on elementary aged students. I am interested in learning about teachers’ perspectives on the implementation of mindfulness training and how it may impact students in grades kindergarten through fifth.

You will be asked to answer some interview questions about your personal experiences with mindfulness training and its use in your classroom. Interviews should take about 45 minutes to complete.

If you are interested in being interviewed, you will be asked to participate by meeting with me to answer questions regarding the mindfulness practices used in your classroom. We can meet when it is most convenient for you at your school. Also, once the interview has been transcribed, I will ask you to review the interview for accuracy.

Participation in this research study is completely voluntary. Also, you can withdraw any time if you change your mind. If you do not want to participate, please send me a reply e-mail saying ‘No thanks.’

If you decide to participate, please understand that I cannot guarantee anonymity, but your identity and the information you disclose during the interview will remain confidential. Pseudonyms will be used instead of interviewee names to preserve confidentiality.

All data will be securely stored on a USB device and will be stored in a locked cabinet within my home to maintain confidentiality.

If you would like to participate, please provide a date and time when you are available to meet by replying to this e-mail message. Remember, that the interview session will take about 45 minutes.

Thank you for your time,

Angela Penna-Wilkos
Appendix C

Informed Consent Form

Dissertation Title: Exploring the Influence of Mindfulness on Elementary Aged Students Through the Lens of the Classroom Teacher: A Case Study

Researcher’s Affiliation
Angela Penna-Wilkos, a doctoral student within the Department of Education Leadership Management and Policy program at Seton Hall University, is conducting a research study.

Purpose of Research
The purpose of this research is to examine teachers’ perceptions of their experiences on mindfulness practices with elementary school age children. The participants for this study were asked to participate because they teach in grades K-5 and have experience in implementing mindfulness practices within the classroom. The interview should last about 45 minutes.

Description of Procedures
If the participant choses to be a part of this research study, the researcher will ask each participant to be interviewed by the researcher. Before the interview session begins, the study will be explained. The researcher will then ask questions that are related to the study. All dialogue will be audio recorded and transcribed only by the researcher.

Research Study Instrument
Participation in this research will involve one 45-minute interview. The interview will be conducted at a place and time, which is most convenient for the participant. The contents of this interview will be used for the research study mentioned above. During the interview, questions based on the participant’s personal experiences with mindfulness as well as the influence it may have on students, will be asked. Below are a few examples of the types of questions the researcher will ask during the interview process.

- When were you first introduced to mindfulness and what were your impressions of mindfulness strategies?
- What do you expect out of the mindfulness practices you implement within your classroom?

Voluntary Participation
Participation in this study is completely voluntary and the teacher may decline to participate without any penalty, and any participant may withdraw from the study at any time without any penalty. If the participant feels uncomfortable at any time during the interview process, the participant has the right to decline an answer to any question.
Anonymity
Anonymity cannot be guaranteed within this study. All participants will be given a pseudonym so that the researcher can identify their individual responses to interview questions.

Confidentiality
Participant identity and the information disclosed during the interview will remain confidential. All information in this study will be kept private. No reference will be made in written or oral materials that will link participants to the study.

Records
To ensure participant’s data and responses are safe, all data and recordings will be stored on a USB memory stick in the researcher’s home in a locked cabinet. After completion of the study, all records will be locked and stored in a secured cabinet for a minimum of three years. The researcher will be the only person to have access to the cabinet. After three years, all data will be removed and destroyed. Only the researcher and the Seton Hall dissertation committee will have access to the data. The committee is obligated to protect the data from disclosure outside of this research study.

Risks
There are no likely risks with participating in this research study. If answering questions causes stress, participants may refuse to answer any questions or end the interview at any time. No participants will be forced to complete the study if they wish to end the interview.

Benefits
There are no direct benefits expected to participants. The knowledge gained from the research will add to the existing literature on the use of mindfulness practices with elementary students. This study aims to expand on the influence mindfulness may have on younger students since there is little information regarding mindfulness with elementary aged children.

Participant Reward:
Due to the nature of this study, participants will not receive any rewards for their participation.

Compensation
This study does not involve any payment.
Alternative Procedures
There are no alternative procedures the participant should be aware of.

Contact Information
If participants should have any questions about the research or their rights as a participant, please contact the following:
Principal Researcher: Angela Penna-Wilkos, at 201-805-2250 or by email at angela.pennawilkos@student.shu.edu
Researcher's Advisor: Dr. Elaine Walker, can be contacted at 973-275-2307, or by email elaine.walker@shu.edu

Participant Consent
All interviews will be audio-recorded using participants assigned pseudonym. The researcher will transcribe all audiotapes and all tapes will be kept in a locked cabinet in the researcher's home. When the process is completed, tapes will be destroyed appropriately. Transcriptions will also be held for three years, then properly disposed of.

I have read, understand, and had the opportunity to ask questions regarding this consent form. I fully understand the nature and importance of my involvement in this research study as a participant. In addition to agreeing to participate, I also consent to the recording of the interview process.

Consent to participate in this study is indicated by signing your name below. A copy of this signed and dated Informed Consent will be provided to you.

Participant's Signature: ___________________________ Date: ___________________________

Name: (printed): ________________________________________
Appendix D

Mindful Educator Essentials
Elementary School Curriculum (K-5)

Summary - Mindfulness Classes

Week 1
Class 1: Introduction and Mindfulness of Sound
Class 2: Mindfulness of Breath - Find Your Base
Class 3: Heartfulness - Sending Kind Thoughts

Week 2
Class 4: Body Awareness
Class 5: Mindfulness of Breath
Class 6: Kind and Caring on the Playground

Week 3
Class 7: Mindful Seeing
Class 8: Slow Motion
Class 9: Giving/Generosity

Week 4
Class 10: Mindful Eating
Class 11: Past/Present/Future
Class 12: Gratitude

Week 5
Class 13: Walking
Class 14: What Can We Be Mindful Of?
Class 15: Ending Review and 2+2

Week 6
Class 16: Extras: (for third grade and up)
Class 17: Mindful Test Taking
Class 18: Creating Space
Appendix E

Interview Protocol/Questions

**Study Title:** Exploring the Influence of Mindfulness on Elementary Aged Students Through the Lens of the Classroom Teacher: A Case Study

**Time:**
- **Date:**
- **Place:**
- **Interviewer:**
- **Interviewee:**

**Background Information:**
- a. Gender
- b. Age range (21-29, 30-39, 40-49, 50-59, 60-70)
- c. Highest level of educational attainment
- d. Years of teaching experience

**Interview Introduction:**
Thank you for taking time out of your day to meet with me. I’m interested in learning about your experiences with the use of mindfulness practices in your classroom. More specifically, I am curious to find out if the mindfulness practices implemented within your classroom have an influence on cognitive development and social relationships among elementary aged students.

Before we start the interview, there are a few things you should know.
1. I would like to ask for your permission to tape record our conversation. This will help me to give you my full attention now and return to our conversation later for data analysis.
2. Your answers and identity will be confidential.
3. The interview is designed to gather information from your perspective.
4. If you want me to stop at any time, just let me know.

I’m going to start with a few questions about your personal experiences with mindfulness as well as mindfulness practices used within your classroom.

**Background Information**
1. What is your role at the school?
2. How long have you been teaching?
3. What are your experiences with mindfulness in your personal life?
   - Can you describe the benefits of mindfulness in your personal life?
4. How have you been trained in mindfulness?
5. How long have you been using mindfulness in your classroom?

**Goals and Structure of Classroom Mindfulness Practices**
1. What do you expect out of the mindfulness practices you implement within your classroom?
What are you hoping to see?
How have mindfulness practices changed your classroom environment?

2. What specific mindfulness practices do you use on a daily basis with your students?
   Can you give me examples?

Influences of Mindfulness on Classroom Practices
1. What aspect of mindfulness do you find the most positive/challenging to your practice as a teacher?
   Can you give me examples?

2. What changes, if any, do you notice in student behavior?
   What changes are noticed in student cognitive development?
   What changes are noticed in student social relationships?
   What does focus/attention look like?
   What does self-regulation look like?

Conclusion
Is there anything else you think is important in understanding your mindfulness practice or experience with students?