

TEACHERS' PERCEPTIONS OF MINDFULNESS-BASED PRACTICES  
IN ELEMENTARY SCHOOLS

A Thesis

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EXPLORING TEACHERS' PERCEPTIONS OF MINDFULNESS-BASED  
PRACTICES  
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Abstract  
of  
TEACHERS' PERCEPTIONS OF MINDFULNESS-BASED PRACTICES  
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This study explored elementary school teachers' perceptions and experiences regarding implementation of mindfulness practices in their classroom. 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). Currently, there is increasing interest in the utility of mindfulness practices for children and adolescents (Zelazo & Lyon, 2012), and school mindfulness programs are increasing in California as well as other areas of the country. Emerging evidence suggests that these programs are beneficial for increasing children and adolescents' attention, resilience, self-regulation and social-emotional skills (Napoli, Krech, & Holley, 2005).

Given the rising presence of mindfulness practices in elementary schools, it is important to learn about teachers' experiences with these programs. Therefore, in this study, semi-structured interviews were conducted with eight elementary school teachers

in the Bay Area of Northern California. Interview questions focused on the following areas: (a) teachers' introduction to and training in the mindfulness program, (b) their experiences and beliefs about implementing mindfulness practices in their classrooms and adapting them to their students' grade level and (c) their perceptions of the benefits of mindfulness practices for their students and themselves.

Qualitative analyses of the eight interview transcripts found 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. However, they all mentioned time constraints as a challenge to achieving this whole-kids approach. The teachers also mentioned implementation challenges related to the age level of the students, with teachers of younger students (kindergarten through second grade) reporting different challenges than teachers of older students (third and fourth grades). Despite these challenges, 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.

\_\_\_\_\_, Committee Chair  
Dr. Ana Garcia-Nevarez

\_\_\_\_\_  
Date

## DEDICATION

This thesis is dedicated to my wonderful husband, Paul who lovingly and patiently offered support and encouragement throughout this endeavor; including driving with me back and forth from Sacramento to Oakland, California for the teachers' interviews. Thanks especially to Jacqueline S. Hotchkiss, a classmate and friend, who believed in me, shared her knowledge and kept me motivated.

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## Chapter 1

### INTRODUCTION

#### **Statement of the Problem**

Mindfulness research and applications are steadily increasing in settings such as medical settings, various workplaces and school settings. According to Shapiro and Carlson (2009), "Mindfulness is the awareness that arises through intentionally attending in an open, accepting, and discerning way to whatever is arising in the present moment." The components of mindfulness include a focus on the present moment, non-judgmental acceptance of experiences and events, and the ability to control negative emotions (Coffey, Hartman, & Fredrickson, 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, there currently is increasing interest in the utility of mindfulness practices for children (Napoli et al., 2005; Zelazo & Lyon, 2012). Many children are experiencing difficulties in a variety of domains, including academic, psychological and

cognitive. Furthermore, the pressure engendered by these difficulties may lead to anger, violent behavior, conduct disorders, and various types of anxiety, all of which can negatively impact students' school performance. In order to address such problems, the mindfulness-based program is one tool that is currently being implemented in classrooms throughout the United States and other countries. Such transformative school programs are believed to have the potential to help children become more resilient as well as more socially and emotionally competent (Domitrovich, Cortes, & Greenberg, 2007).

Given the rising presence of mindfulness practices in elementary schools, it is important to learn about teachers' experiences with these programs. Teachers play an important role in the implementation of mindfulness programs by evaluating the benefits of the practice for their students' academic development. Furthermore, in addition to their responsibility for students' academic development, teachers are increasingly expected to be more keenly aware of their students' social emotional development and to have effective methods for dealing with social-emotional challenges (Ritchart & Perkins, 2000). Therefore, it is important to learn about teachers' perceptions of their school's mindfulness programs, their experiences in incorporating mindfulness in the classroom and their beliefs regarding the benefits of these programs for their students and themselves.

### **Statement of Purpose**

The purpose of this qualitative study was to examine elementary school teachers' perceptions and experiences regarding the implementation of mindfulness-based interventions in their classrooms. Greenland (2010) proposes that teachers' personal beliefs about children's learning influence their teaching practices and interaction with children. She also notes that teachers' beliefs and perceptions regarding their role in the classroom are significant to implementation of mindfulness practices. The elementary school teachers in the current study had been implementing the mindfulness-based practice in their classrooms for approximately three years at the beginning of this study in 2011. The specific questions this research sought to answer were the following:

- (1) How were the teachers introduced to and trained for the mindfulness program at their school?
- (2) What are the teachers' experiences and beliefs regarding implementing the program in their classrooms and adapting it to their students' grade level?
- (3) What are teachers' perceptions of the benefits of the school's mindfulness program for their students and for themselves?

## **Background and Significance of the Study**

### **Mindfulness Theory and Application**

The current concept of mindfulness originated with the meditation practices in the Eastern Buddhist tradition. Historically, mindfulness practices were used for the purpose of promoting individual awareness (Gogerly, 2007). Around 1960, Eastern meditation practices began to be popular in the Western world, when Nhat Hanh, a Vietnamese Monk, began leading retreats in the United States. Consequently, the concept of mindfulness began to spread in Western thought and spiritual practices. Currently, mindfulness programs, such as those found in elementary schools, tend to be secular in orientation. 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: (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.

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. The framework of positive psychology also 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. The

development of positive emotions and resilience are essential in recovery from misfortune, setbacks or life changes.

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). The development of flexible attention is hypothesized as being central to strengthening of executive functions. 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).

### **Children and Mindfulness**

Zelazo and Lyons (2012) propose that all core aspects of mindfulness can be adapted for children, including learning to monitor their attention and observe their

thoughts and feelings without emotional reactivity. Adaptations include adding more concreteness and physical involvement in mindfulness activities, as well as adjusting the length of mindfulness sessions for the specific age groups. For example, Coholic, Eys and Lougheed (2012) showed that using an art-based mindfulness activity with six year old children improved overall classroom performance. Children who participated in the art-based mindfulness group self-reported lower emotional reactivity in comparison to children in the control group.

Mindfulness researchers propose that programs nurturing mindfulness are an effective way to build children's social-emotional well-being and resilience. For example, the practice of focusing on the breath is strongly believed to be a simple and effective way to achieve concentration and relaxation and also to promote happiness and life satisfaction in young children (Greenland, 2010; Napoli et al., 2005). Kabat-Zinn (2003) suggests 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. All of these skills are relevant to educational goals and classroom success.

Seligman, Ernst, Gillham, Reivich and Linkins (2009) argue that schools play a major role in cultivating the kinds of mental habits and social-emotional dispositions that children in general will need to realize in order to lead productive, satisfying and meaningful lives in the present century. Researchers in the field are making firm claims that mindfulness practice beginning in school settings enhances the quality of American public education by cultivating more positive habits of mind (Burke, 2010; Rempel,



2012). Furthermore, mindfulness encourages teachers' professional development by promoting changes in old mindsets, or habits of mind, so that they are better prepared to meet the needs of their students as well as the demands of their jobs (Roeser, Skinner, Beers, & Jennings, 2012).

### **The Role of Teachers in School Mindfulness Programs**

Teachers assume a wide range of roles to support school and student success. The mindfulness program in schools is a growing movement that has reported benefits for many students and their teachers. Therefore, it is of utmost importance to learn about teachers' perceptions, beliefs and experiences regarding the mindfulness programs in their schools. The classroom teachers are the ones who implement the program as well as evaluate the benefits for their students. However, even though teachers' perceptions are understood to be central to the implementation and success of new school programs and interventions, little is known about how teachers perceive the mindfulness program in their school and what they expect from it.

The intent of this thesis research was to provide information on the perceptions and beliefs held by elementary school teachers who practice mindfulness in their classrooms. Understanding the perspective of teachers, and learning about their experiences with a school-based mindfulness program, will promote further understanding of how the program is implemented and what potential benefits and challenges it has for students and teachers.

## **Methods**

### **Participants and Schools**

Eight teachers (7 female, 1 male) from three Northern California elementary schools with mindfulness programs participated in this qualitative study. Originally ten teachers were recruited through the Mindfulness-Together-Online-Community, a web site organized by Susan Kaiser Greenland in order to offer professional development opportunities and a support network for mindfulness-based educators. However, two teachers were unable to participate because of scheduling difficulties. The eight elementary school teachers taught kindergarten through fourth grade, and had been implementing the program in their classrooms for approximately three years prior to the interviews in 2011. Each of the eight teachers had a minimum of 10 years of tenure at his or her present school. Representing diverse backgrounds, these teachers had come from various parts of the world (i.e., India, Japan, Palestine, New York and California).

Three elementary schools participated in this study, all of which are located in the Bay Area of Northern California. Five of the eight teachers taught at Park Day School, a culturally diverse private school in Oakland, California that serves students in grades kindergarten through eight. The majority of students at Park Day School come from middle to upper income families. Another teacher taught at Marin Elementary School, a small, culturally diverse public school located in Albany, California, that serves students from kindergarten through fifth grade. The majority of students at Marin Elementary

come from relatively affluent neighborhoods. Finally, two teachers taught at Bridges Academy at Melrose, a small public school located in East Oakland, California, that serves students in grades kindergarten through fifth. This school is located in a low-income area, and serves primarily low-income students.

### **Data Collection Procedure**

Data were collected through semi-structured, open-ended interviews with the teachers. Most interviews were conducted in the teachers' classrooms, during their lunch break or after school. One of the interviews however, was conducted via telephone. The interview protocol consisted of open-ended questions that covered the following four areas: (a) the teacher's introduction to and training experiences for the school's mindfulness program; (b) the teacher's experiences and challenges regarding implementing the mindfulness program in their classroom; (c) the teachers' perceptions of the benefits and challenges of mindfulness practices for the students, and (d) their perceptions of the extent to which parents and the school community accepted and valued the program at their school. The interviews were approximately 30 to 45 minutes in length and were audio recorded to help ensure accuracy in reporting teacher responses.

## **Analysis Procedure**

The audiotaped interviews were transcribed in their entirety. These interview transcripts were analyzed for commonly shared themes and issues in the following three areas: (a) teachers' reports of their introduction to the mindfulness program, (b) the teachers' incorporation of mindfulness practices in their classroom and their adaptation of the practices to students' grade levels and (c) teachers' perceptions of both student benefits and classroom challenges associated with use of the program. Once key information about the perceptions of the mindfulness-based program and emerging themes had been identified on the transcripts, summary sheets were prepared for each of the participants. This allowed analysis of beliefs, values, and practices that were shared and not shared among the eight elementary school teachers.

## **Limitations of the Study**

This qualitative interview study explored teachers' beliefs and experiences regarding their school's mindfulness program. It is important to note the limitations of this study. First, the sample of teachers was small, and the teachers represented just three schools in the Bay Area of Northern California. Second, the teachers taught kindergarten through fourth grade; it is not clear whether similar teacher reports would be found for teachers of higher grades. Third, most of the eight teachers were already familiar with and personally using mindfulness practices before being introduced to their school's

program. Therefore, the sample is limited to teachers who were experienced in mindfulness and who were very positive about their school's mindfulness program.

Also, interviewing was the only method used to study teachers' experiences in school mindfulness programs. The limited scope of the thesis research did not allow for additional methods such as classroom observations of teacher-student mindfulness sessions. Furthermore, the interviews were conducted during the teachers' lunch breaks or immediately after school, and these times may not have been the most relaxed time for teachers. These time periods also did not allow for extended, in-depth interviewing.

### **Organization of the Thesis**

This thesis contains a total of five chapters, plus an appendix and reference section. Chapter One has provided a brief introduction to the thesis. Chapter Two presents a review of the literature in three areas: (a) Theory and Applications of Mindfulness, (b) Mindfulness and Children and (c) Teachers' Beliefs and Perceptions. Chapter Three provides an overview of the methodology. Chapter Four presents the qualitative data on teacher's perceptions of the mindfulness program in their school. Finally, Chapter Five discusses the implications of the interview data, the limitations of this study and possible directions and considerations for future study.

## Chapter 2

### REVIEW OF THE LITERATURE

Recently, mindfulness research and applications have greatly expanded worldwide (Greenland, 2010; Roeser & Zelazo, 2012; Schoeberlein, Koffler, & Jha, 2005). Kabat-Zinn (2005) defines mindfulness as a special state of consciousness in which individuals are intentionally attentive to present momentary experiences. More 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 et al., 2010). Training programs for developing mindfulness generally include activities such as yoga-based physical exercises, breathing exercises, guided meditation and journal-writing exercises (Mendelson, Greenberg, Dariotis, Gould, Rhoades, & Leaf, 2010). Mindfulness has been shown to be positively related to adults' physical health, social-emotional well-being and positive social relationships (Brown, Ryan, & Creswell, 2007).

Until recently, mindfulness programs exclusively focused on adult health and well-being. However, there is increasing interest in the utility of mindfulness practices for children. 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, Singh, Lancioni,

Singh, Winton & Adkin, 2009). Additionally, school mindfulness programs address children's management of stress. Stress has been shown to have a negative impact on children, and may reveal itself in the form of complaints, anger, anxiety, depression and the inability to focus and concentrate during classroom activities (Semple, Reid, & Miller, 2005). Because the present day society and the life experiences of children have changed considerably in the 21st century, there is a great need for transformative programs such as mindfulness training in schools (Weissberg, Walberg, O'Brien & Kuster, 2003).

Furthermore, proponents of mindfulness training argue that children's mindfulness must be cultivated, much in the same way that academics, sports or music are cultivated ([mindfulschools.org](http://mindfulschools.org)). Such transformative school programs are believed to have the potential to help children become more resilient as well as more socially and emotionally competent. School-based mindfulness programs are especially increasing in California; in the bay area of Northern California alone, there are 53 elementary schools with mindfulness programs ([www.mindfulschools.org](http://www.mindfulschools.org)). But these programs are also increasing in other states such as Massachusetts and Ohio. Documented benefits of these school mindfulness programs suggest that children are empowered to rise above adverse situations by recognizing their control over whatever is happening in the present moment ([www.mindfulschools.org](http://www.mindfulschools.org)).

Given the rising presence of mindfulness practices in elementary schools, it is important to learn about elementary school teachers' experiences with these programs as well as their perceptions of the mindfulness practices and their benefits. According to

research findings, teachers' perceptions and endorsement of new classroom practices ultimately determine how beneficial and productive these practices will be (Brown, 2009). McCready and Soloway (2010) argue that school administrators and others concerned with reform must consider the teachers' perceptions of the benefits for their students. The way in which a given curriculum is enacted may vary based on the individual teacher's beliefs, values and perceptions related to teaching experiences, learning and the instructional environment. Also, Zhang and Burry-Stock (2003) suggest that teachers should have personal knowledge of new programs such as mindfulness before classroom implementation. The beliefs and attitudes of teachers toward new classroom programs are essential because teachers are primary in student evaluation, assessment of academic skills and social competence; and they are the ones who carry the most responsibility for implementing new programs.

The current qualitative interview study endeavored to gain a better understanding of elementary school teachers' perceptions of the mindfulness programs at their schools. Specifically, the study focused on the following areas: (a) the teachers' training experiences for the mindfulness program at their schools, (b) their experiences, challenges and beliefs regarding implementing mindfulness practices in their classrooms and adapting them to their students' grade level and (c) their perceptions of the benefits of their school's mindfulness program. This study draws upon the literature in three areas, all of which are reviewed in this chapter. First, this chapter reviews literature on theory and application of mindfulness that is based on adult populations. Second, the chapter reviews research on relations between mindfulness practices and children's development



as well as the research on school-based mindfulness programs. Third, the chapter reviews literature on teachers' perceptions of new school practices in general and on teachers' perceptions of the school-based mindfulness program specifically.

### **Theory and Applications of Mindfulness**

The majority of mindfulness research has focused on clinical psychology interventions for adults as well as the promotion of physical health and the alleviation of pain. However, more recently, research on mindfulness has also been situated within the positive psychology framework for promoting social-emotional well-being. This section briefly discusses the following areas: (a) the history of mindfulness, (b) the positive psychology framework and (c) key theoretical claims about mindfulness. These areas provide the background for the emerging work on mindfulness and children.

#### **Brief History of the Mindfulness Field**

The current concept of mindfulness originated with the meditation practices in the Eastern Buddhist tradition. Historically, mindfulness practices were used for the purpose of promoting individual awareness (Gogerly, 2007). Around 1960, Eastern meditation practices began to be popular in the Western world, when Nhat Hanh, a Vietnamese Monk, began leading retreats in the United States. Consequently, the concept of mindfulness began to spread in Western thought and spiritual practices. Although techniques used in Buddhist meditation are considered to be spiritual practices, their main

purpose is ultimately to allow the mind to become free of negative thinking. A mind free of criticism allows an individual to develop the ability to see people and situations without judgment, and therefore to increase empathy and compassion. Currently, mindfulness programs tend to be secular in orientation. The secular approach is influenced by the work of social psychologist, Langer (e.g., Langer, Hatem, Joss, & Howell, 1989), who emphasizes the skill of mindful attention and contrasts it with mindless processing of external stimuli.

Many definitions and descriptions of "mindfulness" have been offered. For example, the definition of Bishop et al. (2004) added the components of self-regulating attention and the ability to manage behavior and emotion. However, the most profound and frequently used definition of mindfulness was offered by Kabat-Zinn (1994, p.4), who simply defined it as, "paying attention in a particular way: on purpose, in the present moment, and non-judgmentally." Therefore, 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). Other terms that have been used for the mindfulness construct are *contemplative practice* and *meditation*.

Kabat-Zinn was the first medical doctor to conceive of mindfulness practices as an appropriate element in the treatment of chronic medical conditions and stress. Subsequently, he adapted Naht Hahn's teachings into his eight-week Mindfulness Based Stress Reduction (MBSR) course, which has become a very popular supplemental form

of treatment in contemporary psychotherapy and medical settings (Hofmann, Sawyer, Witt, & Oh, 2010). The program is based on a series of classes given over an 8-week period in which participants learn various cognitive methods to better manage their thought processes. The original concept and intention of MBSR was to teach patients how to supplement their medical treatments by taking an active role in their own well-being. In other words, whatever is occurring in everyday living is done in mindfulness. Abrams (2007) claimed that such practices teach individuals how to calm themselves, accept their thoughts, soothe any discomfort and become present in the moment.

### **The Positive Psychology Framework**

Although mindfulness research is interdisciplinary, much of the current research on mindfulness is situated within the theoretical framework of positive psychology. As opposed to psychology's traditional focus on negative aspects of human well-being, mental health issues and other illnesses, positive psychology offers a scientific approach to studying happiness and fulfillment. The positive psychology field focuses on the strengths and virtues that enable individuals as well as communities to progress and prosper (Cohn & Fredrickson, 2010; Seligman et al., 2009). It is founded on the premise that most people desire to lead meaningful and fulfilling lives through which their best qualities and attributes may be experienced.

Mindfulness training fits with the focus of positive psychology because it encourages adults as well as children to learn how to focus more closely on positive

aspects of themselves, others and their world. The practice of mindfulness also encourages them to think in different ways with a positive attitude. Qualities and virtues promoted by mindfulness training include compassion for self and others, open mindedness, and positive emotions such as gratitude.

Work within the positive psychology framework also focuses on the development of resilience. Resilience is an important concern of positive psychology because it takes into consideration the capability of individuals to recover from or adjust readily to misfortune, stress or change. Fredrickson (1998) developed the "broaden and build" theory to explain how increased positive emotions relate to both resilience and creativity. She claims, "positive emotions set people on trajectories of growth that, over time, build consequential personal resources" (p.1045).

In a recent study, Fredrickson, Cohn, Coffey, Pek and Finkel (2008) assigned half of their adult participants to a seven-week "loving-kindness" meditation intervention and the other half to a wait-list control group. Loving-kindness meditation is described as a way of evoking positive emotions and increasing warm and caring feelings toward the self and others. During the meditation exercise, participants were first asked to focus on their heart region and think about a person for whom they already felt warm and loving feelings. Next, they were asked to extend warm and loving feelings to themselves; then they were to extend these feelings to other people. Fredrickson and her colleagues found that the meditation group reported increases in their daily experiences of positive emotions such as joy, gratitude and happiness, compared to the control group.

## **Key Claims about Mindfulness and Research Findings**

Mindfulness research and theory proposes several claims about the benefits of mindfulness training for adults' positive functioning. This subsection focuses on three claims: (a) physical health benefits, (b) attention and executive function benefits, and (c) social-emotional benefits.

**Mindfulness training increases physical health.** Mindfulness training may be cultivated in adults through a variety of meditation-based attention exercises such as body scan, yoga, mindful walking and breath awareness activities. For example, MBSR training is steadily being adopted into clinical settings as a supplemental treatment of physical health problems such as chronic pain and stress (Kabat-Zinn, 2003). The typical mindfulness-based intervention is an 8-week, 2-hour group lesson supplemented by daily individual practice at home, plus a full day silent retreat. During MBSR training, participants are instructed to focus attention on their moment-to-moment experiences, paying attention to the breath and observing certain sensations involved with breathing such as the up and down movement of the diaphragm as they breath. If attention wanders, it should be quickly brought back to the present moment. In this manner, practitioners reflect on experiences as they arise without triggering emotional reactions or evaluations.

A large body of literature has documented the beneficial effects of MBSR practices on physical health. Grossman, Niemann, Schmid and Walach (2004) argue that mindfulness exercises have been shown to decrease the body's reactivity. For example, physical discomforts such as severe back pain have been reportedly minimized by

mindfulness exercises. The effectiveness of the practice may include diverting attention away from the situation, or it may require "bringing one's complete attention to the present moment and paying attention in a particular way, on purpose" (Kabat-Zinn, 1994, p. 4). Participants may encounter a wide range of chronic pain, other physical discomforts, as well as sources of anxiety all of which may require the practice of mindfulness in different forms.

Mindfulness training has also been used to decrease individual stress levels. High stress levels are believed to have a negative impact on physical health. Therefore, management of stress can potentially increase physical health. For example, in recent research by Baer, Carmody, and Hunsinger (2012), adults with problematic levels of stress related to chronic illness and pain were given the eight-week MBSR training. The participants reported greater levels of mindfulness after the second week, and they reported lower levels of perceived stress at the fourth week of training. In another recent study, Roeser et al. (2013) found that elementary school teachers in a mindfulness training condition showed significantly reduced teacher stress and burnout, compared to teachers in the control group.

Several universities have reportedly included mindfulness-based stress management in the core curriculum for undergraduate medical students as part of their health enhancement program. For example, Rosenthal and Okie (2005) reported on a mindfulness program adopted by Harvard University as a potential intervention for reducing the incidence of depression and stress among their students. The researchers

found that 10 to 15 minutes of daily mindfulness exercises for a few times per week promoted greater tolerance or elimination of stress.

**Mindfulness training increases attention and executive functions.** A number of mindfulness researchers propose that mindfulness practices increase adults' focused attention abilities (Hamilton et al., 2006). Researchers also propose that mindfulness practices promote flexible attention, which is the ability to control and easily switch the focus of attention (Zeidan, Johnson, Diamond, David, & Goolkasian, 2010). The development of flexible attention is hypothesized as being central to the strengthening of executive functions. In the Roeser et al. (2013) study mentioned above, elementary school teachers who participated in mindfulness training showed increases in focused attention and working memory capacity, in addition to reduced stress levels.

According to Heeren et al. (2009), executive functions refer to the individual's coordination of reasoning, working memory and self-control. Heeren et al. (2009) examined the effects of mindfulness training on executive functions with college students in an upper division sociology course. It was predicted that students who participated in mindfulness practices would show an increase in performance on higher-level cognitive skills over the semester compared to a control group of students. The class met twice a week, with the first ten minutes dedicated to a specific meditation practice. Students were responsible for continuing the practice throughout the week and keeping a journal in which they kept track of the days and times they meditated, any difficulties encountered, as well as their ability to handle frustration. At the end of the semester, as predicted, the meditation group showed increased performance on executive function tests. Brown,

Ryan and Creswell (2007) propose that enhanced attention skills and executive functions have important benefits for self-regulation and well-being. They propose that "...the fuller awareness afforded by mindfulness facilitates more flexible, adaptive responses to events, and helps to minimize automatic, habitual, or impulsive reactions..." (p. 223).

**Mindfulness training increases social-emotional well-being.** Some researchers propose that mindfulness training indirectly influences emotional well-being by means of increased self-regulation and emotional regulation abilities (Brown & Ryan, 2007). The proposal is that mindfulness training increases self-awareness, clarity of thought and acceptance of emotions, which in turn increase effective regulation of negative emotions. For example, Schroevers and Brandsma (2010) conducted a study of 64 adults who participated in an eight-week session of mindfulness training. In addition to the training, the participants were asked to do informal mindfulness exercises for 45 minutes during their daily routine. The participants' daily activities included eating a meal, shopping or cleaning with full focus and awareness. The participants' post-intervention reports showed a significant decrease in negative emotions and an increase in positive emotions. Additional studies show that mindfulness training relates to participants' decreased reports of negative emotions and decreased reactivity to sadness-inducing stimuli (Arch & Craske, 2006; Farb, Anderson, Mayberg, Bean, McKeon, & Segal, 2010). Furthermore, research suggests that mindfulness may decrease depression by decreasing the ruminative thoughts that are associated with depression (Baer, 2003).

Another proposal is that mindfulness training increases positive emotions, which then increase social-emotional competence and well-being. Fredrickson's (1998) study on



broaden-and-build theory of positive emotions revealed that daily experiences of positive emotions increase over time and build powerful personal resources. Fredrickson et al. (2008) tested the build hypothesis in a field experiment with 139 working adults. Half were randomly assigned to the loving-kindness meditation practice. The results of this study revealed that the meditation produced increases over time in daily experiences of positive emotions, and thereby produced increases in a wide range of personal resources (e.g., self-acceptance and good physical health). This study's research on mindfulness training centers on how positive emotions are the mechanism of change and how loving-kindness meditation is an intervention strategy that produces positive emotions.

Mindfulness training may also affect an individual's ability to maintain successful social relationships. For example, Fredrickson et al.'s (2008) study, mentioned above, found that the loving-kindness meditation practice resulted in participants' increased positive emotions, which positively related to more positive social relationships. Regarding romantic relationships, Barnes, Brown, Krusemark, Campbell and Rogge (2007) demonstrated a correlation between increased mindfulness in couples and an enhanced relationship. The couples reported improved closeness as well as general relationship satisfaction. Mindfulness scholars propose that mindfulness enhances closeness and attunement in relationships and increases awareness of the others' emotions and nonverbal behaviors (Brown et al., 2007; Duncan, Coatsworth & Greenberg, 2009).

## **Practical Applications of Mindfulness in Different Settings**

Recently, the applications and practices of mindfulness have been promoted in settings that require concentration and social-emotional adjustment. These settings include workplaces such as businesses, government agencies, the helping professions and universities. Often mindfulness is introduced into these settings by means of the MBSR 8-week course. Four workplace applications are discussed below.

First, mindfulness practices have been introduced in workplaces where keen attention is crucial and where the slightest error can be critical. The objective of mindfulness applications in these settings is to develop the ability to pay attention to tasks by eliminating external thoughts that divert attention. In a technical workshop, a study was conducted involving 15 machinists (Tang et al., 2009). Machinists' work requires total focus, attentiveness, and accuracy. Eight machinists were in the experimental group, and seven machinists were in the control group. The experimental group was assigned to a guided, twenty-minute meditation before beginning their workday and a ten-minute meditation after lunch break. The group was encouraged to do the same meditation before retiring in the evening for relaxation and to improve concentration and mental stability. After the 8-week MBSR, the craftsmen were reported to have become more focused and attentive in that there were fewer physical cuts and bruises as well as an improvement in accuracy of performance over the control workers (Tang et al., 2009).

Second, mindfulness practices have also been applied to the medical field with reported benefits. Baer (2003) presented findings on a study of 12 emergency room

nurses who participated in mindfulness meditation practices for the required 8-weeks program, plus a one-day, six-hour retreat. They later self-reported such benefits as decreased tendency to focus on the negative aspects of their clients and increased ability to free the mind of others' negative emotions as well as less mental and physical fatigue. In addition to regulating negative emotions, the nursing profession also requires the ability to show compassion and empathy for others (Beddoe, & Murphy, 2004). The participating nurses reported experiencing remarkable results of increased self-compassion and reduced stress during their interactions with clients after participating in mindfulness meditation practice.

Third, mindfulness practice is currently being introduced into the realm of higher education. According to a recent study by Mrazek (2013), colleges and universities are beginning to experiment with mindfulness as a means for boosting college students' standardized test scores, (e.g., GRE and LSAT) by improving working memory. Application of mindfulness is believed to increase cognitive ability and concentration under pressure (Mrazek, 2013). The study consisted of 30 undergraduate students. Fifteen students were randomly selected to participate in mindfulness training and 15 students were placed in a control group. The standard MBSR training of 8-weeks of mindfulness practices were assigned to the group twice a day. The morning practice was guided by an experienced meditation practitioner. Evening practices were suggested before studying or retiring for the evening. The self-reported results suggested that participants were more relaxed, more confident and less stressed, compared to the control group.

Finally, the mindfulness approach to parenting has been considered an avenue for promoting secure attachment relationships between parents and children (Duncan et al., 2009). In terms of "mindful parenting," Suzuki (1970) proposes that the practice of mindfulness can empty parents' minds of old habits and limitations imposed by previous experiences, thereby allowing for spontaneous possibilities they may not have envisaged previously. This implies that mindfulness can reduce the tendency of parents to respond to their children based on the way they themselves were parented. In structured mindfulness training, parents are encouraged to focus their attention on one thing at a time. While some parents may respond to their children without focusing on what is happening in the here and now, mindfulness practice reminds parents to take a few mindful breaths before responding in haste or anger. Furthermore, there is evidence that the mindful approach to parenting has many positive effects on those practicing it. Specifically, Gunurata (1991) suggests that the changes to the mindful parent appear to improve the overall quality of life for parents, children and others with whom they come in contact. As opposed to learning a set of skills to specifically change behaviors, mindfulness training produces positive changes that seem to result from a change in the way the mindful person relates to events in his or her environment.

Therefore, research indicates that training in mindfulness has many positive effects on individuals including parent-child relationships, spousal relationships, friends, and others who are important in their lives. Parents are able to re-connect with children and also see themselves as more skillful, positive and reliable parents. Such parenting skills are essential for building self-confidence in children as well as a supportive

foundation for school readiness, peer relationships and overall academic success. It seems only natural that such practices as mindfulness are currently increasing in application for children and youth. The following section discusses the application of mindfulness to children and the school setting.

### **Mindfulness and Children**

While research on mindfulness and children's development is a much smaller body of work, compared to the work targeting adults, it is a growing area of research and application (Broderick & Metz, 2009, Greenland, 2010; Zelazo and Lyons, 2012). Programs that nurture mindfulness may be an effective way to build resilience and social-emotional competence in typically developing children as well as an effective supplementary treatment for clinical disorders such as childhood anxiety and stress related behavior Salzman, & Goldin, (2008). Currently, children are being trained in mindfulness practices in treatment settings, health promotion and prevention contexts as well as in school settings. Available research reports that the development of mindfulness is associated with beneficial outcomes for children and adolescents (Burke, 2010; Zelazo and Lyons, 2012).

## **Adapting Mindfulness Practices for Children**

Because children are reportedly experiencing a lot of stress, and are under more pressure than ever before, mindfulness training and practices are increasingly being adapted for children. Zelazo and Lyons (2012) propose that all core aspects of mindfulness can be adapted for children, including learning to monitor their attention and observe their thoughts and feelings without emotional reactivity. Adaptations include adding more concreteness and physical involvement in mindfulness activities, as well as adjusting the length of a mindfulness session for the specific age groups.

Children may need more concrete explanations and examples of mindfulness (Chambers et al., 2008). Therefore, mindfulness exercises for children usually start with something that is concrete such as 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 schoolyard in a mindful way or to be mindful of others during transitions in the school day.

Mindfulness training also has to be adapted to children's attention spans (Zelazo & Lyons, 2012). 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, mindfulness training extends to children through 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 have been age-appropriately simplified so that children can benefit from the practice. Zelazo and Lyons (2012) suggest that adolescents and children can better understand the goals of mindfulness with the use of age-appropriate props, words and phrases. Also, teachers can be 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.

### **Benefits of Mindfulness for Children and Adolescents**

Greenland (2010) proposes that mindfulness practices build children's inner and outer awareness and attention, which positively affects their academic performance as well as their social and emotional skills. Consistent with her proposal, emerging evidence suggests that age appropriate mindfulness practices are beneficial for building children and adolescents' attention, resilience, self-regulation and social-emotional skills (Brown et al., 2007). Therefore, studies grounded in developmental theory indicate that mindfulness practices are associated with beneficial outcomes for children and youth.

Langer et al. (1989) argue that, when students are mindful, their perspective-taking skills increase. Three benefits of mindfulness training for children are discussed below.

First, research suggests that mindfulness training is a valuable tool for increasing children's attention and self-regulation skills as well as improving their executive functions, just as it is for adults. Developments in these areas play a significant role in supporting academic competence. Napoli et al. (2005) conducted a 24-week study that evaluated the mindfulness-based component with 194 elementary school children. Half of the students received mindfulness training; the other half did not. The results showed that, compared to the control group, children who received the training showed significantly larger increases in selective attention and sustained attention from pretest to the posttest.

Second, recent studies show that mindfulness training reduces children's disruptive behaviors. Regular mindfulness exercises have been shown to enhance awareness and self-control in children and adolescents diagnosed with Attention Deficit Hyperactivity Disorder (ADHD). For example, a recent pilot study by van de Weijer-Bergsma, Formsma, de Bruin and Bogels (2012) showed significant increases in attention abilities for children and adolescents with ADHD who participated in eight weeks of mindfulness exercises (e.g., sitting meditation, body scan and breathing space). The changes in attention abilities were maintained at the 8-week follow-up. Also, parents of the participants reported a reduction in parent-child conflicts and therefore an improvement in their parent-child relationship.



Children and adolescents diagnosed with ADHD are reportedly often non-compliant with parental instructions. According to Singh et al. (2009), previous methods used to reduce these children's problem behaviors, such as medication and other forms of manipulation, have not been shown to enhance positive interactions between the children and their parents. However, recent studies show that mindfulness training with parents, without a specific focus on reducing problem behaviors, can promote positive interactions with their children and increase parenting satisfaction as well. Singh et al. (2009) found that giving mothers mindfulness training enhanced compliance by the child. When children and parents were both given mindfulness training, children's compliance increased even more and was maintained during follow-up.

Third, mindfulness training has been linked to social-emotional benefits. Kennedy Root and Denham (2010) argue that the role of emotions is essential in a multitude of areas of young children's development, including the development of positive peer relationships. Children who have more emotion knowledge and skills are better able to show empathy for peers who may be upset. This is important because children who misread emotions and behave inappropriately may be rejected by their peers (Izard, Fine, Schult, Ackerman, & Youngstrom, 2001). Furthermore, Webster-Stratton & Reid (2004) propose that social skills such as problem solving, empathy, effective communication and anger management are essential for being successful students and for academic persistence. In a study by Mendelson et al. (2010), urban elementary school children assigned to a mindfulness training condition later reported reduced emotional arousal on the Responses to Stress Questionnaire. Mindfulness training has been linked to

children's reduced anxiety (Semple, Reid, & Miller, 2005). It has also been linked to children's increased social skills and overall sense of well-being (Napoli et al., 2005; Saltzman & Goldin, 2008).

### **Mindfulness Programs in Schools**

Just as mindfulness practices have expanded into the field of business, hospitals, universities, various workplaces and even the military, they have also expanded into elementary schools and higher grades. Kabat-Zinn (2003) suggests 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. One organization that has worked to create mindfulness programs in Northern California schools is the Mindful Schools Organization ([www.mindfulschools.org](http://www.mindfulschools.org)). Its mission is to integrate the practice into schools' curricula as a way of empowering children and adolescents with long-term skills that enable them to make healthy choices, reduce stress, control anger and resolve conflicts ([www.mindfulschools.org](http://www.mindfulschools.org)). Currently, mindfulness programs are being implemented in several regions of the United States and abroad.

Mindfulness practices can be taught to very young children. With the use of short, interactive, child friendly exercises based on the MBSR practice, children learn to be more mindful of their thoughts and actions. These skills usually result in improvements in concentration, attention, conflict resolution and empathy among students

([www.mindfulness.org](http://www.mindfulness.org)). Such improvement in children's attitudes and behavior can build a calm climate in the classroom as well as improve the overall school environment.

**Positive education.** School-based mindfulness programs are consistent with the objectives of the "positive education" framework. Seligman et al. (2009) defined positive education as, "education for both traditional skills and for happiness." In recent years, there has been a growing acceptance that schools should provide children with a formal education as well as foster their overall well-being (Terjesen, Jacofsky, Froh, & DiGiuseppe, 2004). Regarding the goal of well-being, recent school-based mindfulness programs have focused on identifying problems of mental health, bullying and antisocial behavior within the school context (Weissberg & Kumpfer, 2003). However, to be consistent with the positive education framework, mindfulness curricula should be applied to more than behavioral problems; instead they should focus on approaches that are beneficial to most children. Mindfulness intervention training in education has the potential to build strong classroom relationships as well as encourage positive emotions that could increase learning (Seligman et al., 2009).

Heckman (2007) argues that schools can play a major role in cultivating the kinds of mental habits and social-emotional dispositions that people in general will need to realize in order to lead productive, satisfying, and meaningful lives in the present century. Researchers in the field are making firm claims that mindfulness programs in school settings enhance the quality of American public education by cultivating more positive habits of mind (Burke, 2010; Rempel, 2012). The kind of education needed in this century must include developmental outcomes that reach beyond academic learning to

include children and adolescents' social, emotional and ethical development (Steinberg & Steinberg, 2006). Schools are great locations for well-being initiatives because children spend much of their time in school. The day-to-day interactions and experiences with peers, teachers and others are integral to students' well-being.

**Benefits of school mindfulness programs.** 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](http://www.mindfulschools.org)). While many children in economically disadvantaged areas have been struggling academically, psychologically and cognitively, analysis of the data on school-based mindfulness programs shows that students improve in these areas (Children's Defense Fund, 2008). Studies have also shown that students' suspension and high school dropout decrease in schools where students are participating in mindfulness programs (Children's Defense Fund, 2008).

Another purpose of mindfulness programs in schools is to help children develop into well-rounded individuals who are self-sustaining and responsible, with a sense of caring for others. The very characteristics of mindfulness are its observance, flexibility and the ability to free the mind of conceptualization. Teasdale, Segal and Williams (1995) propose that, with mindfulness training, children are able to disregard automatic thought of habits and the behavior that may follow, and they are therefore more relaxed and better able to learn.

Mindfulness practices have been associated with improved behavioral regulation, which saves class time and promotes learning. Studies have shown that mindfulness

school programs are beneficial for children with executive function difficulties. Because these exercises increase focused attention, students are better able to pay attention by being in the present moment (Flook, Smalley, Kitil, Galla, Greenland, et al., 2010). Research also suggests that children are encouraged to enjoy learning, emotions are better controlled, and children are apt to participate in academic activities (Cohen, 2006).

In conclusion, research findings on school mindfulness suggest that age-appropriate classroom practices are useful for overall social-emotional well-being and academic growth (Greenberg & Harris, 2012). Research conducted by the Mindful Schools Organization (2012) found enhanced concentration and focus, impulse control, decision making and problem solving. The emerging data are showing these benefits for schools, but there has been little attention to the role of teachers in school-based mindfulness programs. For this reason, the present study examines elementary teachers' perception of and experiences with school-based mindfulness programs. The following section discusses teachers' beliefs and perceptions about mindfulness practices in school and also discusses teachers' role in school mindfulness programs.

### **Teachers' Beliefs and Perceptions**

The main influence on daily details of curriculum implementation is the classroom teacher. However, there may be certain constraints such as the assigned curriculum, administrative guidelines, equipment or classroom space; otherwise, the teacher is relatively free to make modifications, improvements as deemed appropriate,

adapt and do certain academic experiments in the interest of students. Consequently, when consideration is being offered for new classroom practices or interventions, the first concern is with the teachers' perceptions. The following subsections discuss the role of teachers' beliefs in education, their perceptions of new educational programs, as well as their role in implementation of school-based mindfulness programs.

### **Teachers' Beliefs in Education**

Teachers' beliefs are "implicit assumptions about students, learning, classrooms, and the subject matter to be taught" (Kagan, 1992, p. 66). These beliefs have implications for teachers' interactions with students, their teaching behaviors and their overall approach (Harwood, Hansen, & Lotter, 2006). Roeser et al. (2012) propose that teachers' beliefs, or habits of mind, are strongly related to effective teaching. Teachers may impart their habits of mind to their students through role modeling and direct instruction. The beliefs and perceptions of classroom teachers have great significance in their interaction with students of varying levels of maturity, backgrounds, and learning abilities.

Intuitively, teachers may often feel the need to shift the focus of their attention in the classroom back and forth to students of different levels of learning. All of this must be accomplished in a manner that avoids obvious unequal treatment and opportunities for learning among students of a different ethnicity or socioeconomic background. It may require teachers' great effort in awareness, empathy and mental flexibility (Roeser et al., 2012).

Teachers' beliefs and perceptions about students may affect their behavior with them. A study conducted by Thornburg and Mungai (2011) reported on the significance of teachers' beliefs and perceptions about their students. In this study, the majority of teachers made reference to their limited capacity to work with increasingly diverse students. The teachers attributed the difficulties in teaching culturally and linguistically diverse students to their own lack of expertise. Thornburg and Mungai (2011) argue that teachers' perceptions of student diversity may relate to lowered expectations for their students. Teachers' beliefs and feelings about classroom curriculum and subject matter have also been documented as having a strong relationship to their behaviors and classroom instruction. For example teachers who think of mathematics as being a difficult subject to teach children may teach the subject differently, perhaps with less enthusiasm and detail than teachers who enjoyed mathematics.

In a study conducted by Kagan (1992), elementary school teachers were asked to reflect on the question, "What are your perceptions of the teaching and content of mathematics and science?" The majority of teachers reported that mathematics was not their strongest area and that mathematics and science had never been their favorite or most-liked subject when they were in school. However, they felt that the integrating of math and science was essential for preparing children to be competitive in the global economy as adults. In fact one of the basic requirements for teaching mathematics and science was to demonstrate the ability to integrate mathematics and science content and teaching methodology (Lake, Jones, & Dagli, 2005). These teachers felt that math teachers should use assessment strategies that focus on understanding rather than on right

answers. They also felt that mathematical activities should be engaged with confidence and enthusiasm as well as embracing the concept as a tool for problem solving and reasoning. The potential implications of the teachers' beliefs may be inquiry-related regarding teachers' self-confidence as mathematics teachers. This may also be associated with their students' self-confidence as mathematical learners (Stipek, Givvin, Salmon, & MacGyvers, (2001).

### **Teachers' Perceptions of New Educational Programs**

Teachers have often been accused of being resistant to education reform, especially in classroom implementation of a new curriculum (Thornburg & Mungai, 2011). Therefore, it is important to establish whether the reform empowers the teachers or if the teachers are resistant to the suggestion of classroom change. As stated by the National Commission on Excellence in Education (1983), American schools lag behind schools in other countries in subjects such as mathematics and science. Also, Zeleny (2010) noted that 1.2 million American students dropped out before graduation in the 2010 school year, indicating a strong need for teachers' commitment to new educational programs. In particular, teachers' perceptions and professional development play a major role in the advancement of education. Due in part to advances in technology, family lifestyle changes and media exposure and influence, the approach to learning requires new educational programs.



While the teachers' roles in new educational programs and change should be the improvement of instruction along with the improvement of the overall school community, the elements and components involved must be clearly identified. Thornburg and Mungai (2011) agree that teachers should be given enough information so that they have an understanding of changes at the program, policy and practice levels. Understanding new ideas may eliminate teachers' resistance to new classroom and curriculum changes. Darling-Hammond and McLaughlin (1995) suggest that dialogue among teachers and collaboration within the school community can create better understanding within the school community as well as improve professional development. Such dialogue and reflection may create better teacher acceptance and understanding of a new curriculum as well as ways to best facilitate students' progress.

Teachers claim that they are often expected to take leadership roles in introducing new educational programs while at the same time maintaining their professional identity. Bogdan and Biklen's (2007) interview study with teachers revealed that, when new programs are implemented, there may be considerable impact on the workplace, the school's culture, organization and prior constraints on teachers. For example, 38 of the 42 teachers in their study expressed concern about time commitments. The teachers felt the reform responsibilities would take them away from instruction of their students. A second concern was the possibility of changes in their role and authority as a result of the reform. Third, the teachers felt that reform did not improve communication among colleagues; instead, they felt that their voices were diminished. Communication is a most important element of learning communities. Collay (2006) proposes that when new

educational programs are being introduced, knowledge of the reality of teachers' daily lives must be taken into consideration.

### **Teachers' Role in School Mindfulness Programs**

The above discussion suggests that it is important to understand teachers' roles in school mindfulness programs also, as well as their beliefs and attitudes about mindfulness. It is also important to acknowledge the time challenges teachers face when mindfulness programs are first introduced in a school. Teachers who are not familiar with the program should first investigate the purpose and benefits of the mindfulness program before they are asked to embody its core characteristics. One initial challenge of mindfulness programs for teachers is that they are most effectively implemented when teachers practice the exercises and principles in their own life (Albrecht et al., 2012). Also, teachers may need to transform the way they communicate and connect with others. Therefore, cultivating the application of mindfulness may often lead to behavior changes in teachers' beliefs and practices. The impact of teachers' changing beliefs and attitudes is that they may influence the benefits for student learning. Jennings and Greenberg (2009) addressed the idea of teachers' habits of mind in new educational programs, arguing that teachers are expected to be flexible when problem solving. It was also suggested that teachers must regulate their emotions, be resilient after setbacks as well as attend to others with empathy and compassion. Therefore, teachers' commitment to mindfulness practices is important in the implementation of a school's mindfulness program, and it

potentially affects their students' experiences in the program and in the classroom in general.

Not only are teachers important to the effectiveness of mindfulness programs, but also mindfulness programs are instrumental in helping teachers reduce stress and increase the pleasure of teaching. Schools around the world are reportedly beginning to implement programs that inspire and nurture teachers in addition to students (Schoeberlein et al., 2005; Tregenza, 2008; Yager, 2009). 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. Also, relationships between teachers and students may become more positive. Albrecht et al. (2012) argue that, although teachers may have many classroom concerns such as stress and students' inappropriate behavior, mindfulness seems to have the ability to restore hope in teachers and build confidence in their classroom performance. To continue the study of a very important educational topic, the current research examined elementary school teachers' experiences of training for and implementing mindfulness practices in their classroom. It also explored the teachers' perceptions of the benefits and challenges of mindfulness programs for their students and themselves.

## Chapter 3

### METHODS

#### **Research Design**

This exploratory, qualitative study examined elementary school teachers' experiences and perceptions regarding the mindfulness program in their schools. Semi-structured interviews were conducted with eight teachers in order to explore their beliefs and attitudes about the mindfulness-based program, as well as their strategies for implementing it in their classrooms. The interviews were transcribed and qualitatively analyzed to address the following areas: (a) teachers' introduction to and training for their school's mindfulness program, (b) their experiences and beliefs regarding implanting the program in their classroom and adapting it to their students' grade level and (c) their perceptions of the benefits of the mindfulness program for their students and themselves.

#### **Participants**

##### **Recruitment of Teachers**

Elementary school teachers were recruited through my personal contacts in the Mindfulness Together Online Community website. This website is an online network offering professional development opportunities and support to educators, parents and

other professionals who are interested in using mindfulness practices. Through this online community, I contacted the director of Mindful Schools in Northern California and sent her information about the proposed research project. The director was supportive of the research plan, and consequently provided a list of four elementary schools that were implementing the program, along with the email addresses of the teachers at these schools. I then emailed these teachers, explaining the purpose of the research and seeking their voluntary participation in interviews. Ten teachers initially volunteered to be interviewed; however, two of them had scheduling problems and ultimately were not able to participate.

### **The Sample**

The resulting sample consisted of eight elementary school teachers (7 females and 1 male) who were currently implementing mindfulness practices in their classrooms. All participants were currently teaching in multicultural classrooms, serving 16 to 21 students in grades kindergarten through fourth grade in the Bay Area of Northern California. Specifically, one teacher taught kindergarten, three teachers taught first grade, one teacher taught second grade, two teachers taught third grade, and one teacher taught fourth grade. The sample of teachers was culturally diverse. Specifically, the teacher from India taught kindergarten, the teacher from Japan taught the second grade class, one of the two third grade teachers came from Palestine, one of the three first grade teachers in the study and the fourth grade teacher came from New York, The remaining three, a

third grade and two first grade teachers, are native of California. All teachers were credentialed, with teaching experience ranging from five to 29 years in elementary school classrooms and an average of 14 years of experience. Six teachers reported that they practiced mindfulness in their daily lives as well as in their classrooms. The teachers' participation was voluntary, and no compensation was given.

### **Participating Schools**

The eight teachers worked at three Northern California elementary schools with the mindfulness program currently in operation. Five of the teachers taught at Park Day School, which is located in Oakland, California. Park Day School is a private, culturally diverse, independent school with a 35 year history of progressive education, serving students in grades kindergarten through eighth. The majority of students are European American, while the other students are Latino American, African American and Asian American. The majority of these students are children of middle to upper income families. Park Day has been described as, "an urban oasis, situated on four gated acres of trees, gardens and outdoor nature centers" ([www.mindfulschools.org](http://www.mindfulschools.org)).

One teacher taught at Marin Elementary School, a small public school located in Albany, California that has served children from kindergarten through fifth grade since 1916. Marin Elementary School's population is culturally diverse (i.e., 59% European American, 23% Asian American, 7% Latino American, 5% African American, and 6% are of other nationalities). Most of its students come from relatively affluent

neighborhoods, with only 9% of students categorized as low income. According to the school's website, it is one of the few public elementary schools in California to have received a distinguished Academic Performance Index Ranking of 9 out of 10 (<http://marin.ausdk12.org>). Marin Elementary appears to be strongly student centered, and geared toward promoting the development of strong, positive relationships between students and teachers. According to the school's mission statement, "At the heart of this school are the interactions between the students and their teachers. The students' spirit and energy infuse the campus and sets the rhythm of the school day" (<http://marin.ausdk12.org>).

Finally, two teachers taught at Bridges Academy at Melrose, a small public elementary school in East Oakland, California, serving students in grades kindergarten through five. This school is located in a predominately low-income area, and serves primarily low-income students. Bridges Academy's students are mostly Latino, but there is a small group of African-American children. Many of these students are children of immigrants who are learning English as a second language. To meet the needs of this population, the school offers a Spanish bilingual program and a structured English immersion program. One of the official goals at Bridges Academy is to promote cooperative relationships among teachers, parents and students. According to the school's website, the school "nurtures strong social and interpersonal skills so that the students can build the working relationships and friendships necessary for success. There is also a school-wide structure of parent leadership and training so that parents can closely monitor and support student progress" ([www.bridgesatmelrose .org](http://www.bridgesatmelrose.org)).

### **The Mindful Schools Program and Training**

The mindfulness program at the teachers' schools was created by the Mindful Schools Organization, located in Northern California. Mindful Schools is a public and private partnership program, with a mission of transforming elementary school education through mindfulness practices. The pilot program for school-based mindfulness training began at Park Day School in the fall of 2007. It was organized by Laurie Grossman, a teacher at this school, who later resigned her teaching post in order to accept a full-time position as director of the mindfulness program. In this capacity, she has worked toward developing the program in other elementary schools as well. Describing her motivation, Ms. Grossman said:

I have searched high and low for social justice and educational equity for children of low income families. A few years ago I found some people who knew about mindfulness and asked them to help launch a pilot program, believing that mindfulness could make an impact on kids' lives ([www.mindfulschools.org](http://www.mindfulschools.org)).

In her effort to launch the desired pilot program, Laurie Grossman found several like-minded elementary school teachers in the Bay Area of Northern California, and asked them to work with her toward this objective. This group of teachers gained the support of the administration, and the program was initiated and implemented during the 2007-2008 school year.

At the end of the pilot program, the participating teachers concluded that the mindfulness practices had a positive impact on children's learning. The efficacy of this program was assessed by the child version of the computerized Attention Network test



(ANT-C), which measures a child's executive control performance and other aspects of attention. Overall, children's attention span improved significantly over the course of the intervention and was sustained 3-months post-intervention ([www.mindfulschools.org](http://www.mindfulschools.org)). The success of the pilot study was shared with other elementary school teachers in the Bay Area through school newsletters, emails, teachers' meetings and personal contact ([www.mindfulschools.org](http://www.mindfulschools.org)). The opportunity was then offered to the schools interested in the program to sign up for teachers' training as well as for classroom training with the students.

In spring 2008, the mindfulness-based intervention was officially implemented in 12 elementary schools in Northern California. Currently, there are 53 elementary schools in the Bay Area implementing the program. The Mindful Schools Program teaches students self-awareness, focus, impulse control, and empathy in a 16-session program. In a series of engaging mindfulness exercises, students learn to focus on sound, listening, breathing, and stress reduction (including reduction of students' test taking anxiety in grades three and above). Some exercises are also designed to foster students' development of empathy and compassion for self and others. According to the organization's website, "The program is school-wide so that students, teachers, administrators, and parents benefit simultaneously, creating a school culture of calm, focus, and connection" ([www.mindfulschools.org](http://www.mindfulschools.org)). See Appendix B for an overview of the mindfulness curriculum.

## **Data Collection and Analysis**

### **Data Collection Procedure**

Prior to starting the interview, each teacher was given a consent form to read and sign. It included information about the purpose of the study, information about participating in the study, and a request for permission to audiotape the interview. Interviews were conducted as conversations with the teachers to explore their experiences and beliefs regarding the mindfulness-based program at their schools. In the effort to create a relaxed interviewing environment, the researcher used her membership in the Mindfulness-Together-Online-Community website to help establish rapport with the teachers. Seven interviews were conducted face-to-face in the teacher's classroom, either during the teacher's lunch break or after school. Because of scheduling issues, one interview was conducted by telephone in the early evening. A digital audio recorder was used to record the face-to-face interviews, and an I-Pod recorder and two speaker phones were used to record the telephone interview. Interview length ranged from 30 to 45 minutes.

### **The Interview Protocol**

Interview questions for this study were designed to elicit information pertaining to the elementary school teachers' experiences with the mindfulness program in their

schools as well as information about their beliefs regarding the value of the mindfulness practices. To this end, interview questions were divided into four sections. Questions in the first section of the interview focused on how the teacher was introduced to and trained in the mindfulness program. Questions in the second section asked about the content, structure, and goals of the program. The third section was aimed at eliciting the teacher's beliefs and feelings about the school's implementation of the mindfulness program, their own use of mindfulness practices in the classroom, and the benefits and challenges of incorporating the practices in the classroom. Finally, questions in the fourth section asked about the extent to which parents and the school community accepted and valued the program at their school. (See Appendix A for the entire interview protocol.)

### **Qualitative Analysis Procedure**

Two undergraduate research assistants transcribed the audio-taped interviews, and I then analyzed the transcripts for shared themes and issues in three main areas. First, the interview transcripts were analyzed to identify key themes regarding the content and structure of the mindfulness-based program as well as teacher training in the program. The second set of analyses focused on shared themes regarding teachers' incorporation of mindfulness concepts and practices into academic subject matter and their adaptation of the exercises to their students' developmental level. Third, the transcripts were examined for teachers' shared perceptions of the mindfulness program's benefits for students and teachers.

For each of these steps, the relevant information was coded on the interview transcripts, and then summary sheets were created for each teacher. The summary sheets and coded interviews were then used to identify shared themes and salient patterns in the three analysis areas. The overall goal was to identify the beliefs, values and practices that were shared and not shared among the eight elementary school teachers.

### **Role of the Researcher**

My personal enthusiasm for this study stems from a long career in early childhood education. My experiences in the classroom with young children began in the infant room of a Maria Montessori school in Sacramento, California. After several years in this position, I went on to work for six years in a private preschool serving upper income families, including the families of government employees, and elected government officials. Finally, to gain experience working with low-income families, I became a classroom teacher with the Head Start Program. This eventually led to a position as a Child Development Specialist for Sacramento County Department of Human Assistance (Welfare Department). From these experiences, I learned that children from all socio-economic backgrounds need guidance in developing self-control and the skill for regulating their emotions in order to thrive in their relationships, families and schools.

As I continued in my career of working with young children, I became interested in mindfulness practices as an approach to teaching self-regulation skills. Having learned about a school-based mindfulness program in Sacramento, California, I found myself

intrigued and wanting 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 center my master's thesis work on mindfulness practices for children and specifically the perception elementary school teachers hold for this practice. The mindfulness program was discontinued in the one Sacramento elementary school in which I observed. Therefore, I located my study in the Oakland area of Northern California

As a member of the Mindfulness-Together-Online-Community, I am dedicated to sharing secular mindful awareness with educators and nurturing the inner lives of children. I have been a student of mindfulness meditation practices for 10 years, and have made several trips to the World University of Mindfulness Practice in Mount Abu, India for study. These experiences enabled me to quickly establish common ground and an easy rapport with the teachers, as well as create a relaxed environment for the interview conversations.

## Chapter 4

### RESULTS

In this chapter, the results of qualitative analyses are presented in three sections. The first section gives information about Mindful Schools and the pilot program, as gathered from the organization's website. This section also discusses the teachers' introduction to and training in their school's mindfulness program. The second section addresses the teachers' implementation of the program in the classroom. Specifically, it focuses on how the teachers have adapted the program to their students' grade level, and how they have incorporated the program into their classroom routine. The third section examines teachers' beliefs about the benefits of the program, including their perceptions about student behavior changes and academic improvement.

For privacy purposes, pseudonyms are used when referring to individual teachers in the sections below. The teachers were a diverse group in terms of their personal experience with mindfulness practices, as shown in Table 1 below. This table is presented here as a background guide for reading about individual teacher's interview responses.

Table 1

*Participants' Teaching Experience and Personal Experience with Mindfulness*


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| <u>Teacher Pseudonyms</u> | <u>Grade Level</u> | <u>Years of Teaching</u> | <u>Prior Years of Mindfulness Experience</u> |
|---------------------------|--------------------|--------------------------|--|
| Barbara                   | Kindergarten       | 10                       | 5  |
| Lydia                     | First Grade        | 8                        | 2  |
| Sarah                     | First Grade        | 25                       | 8  |
| Victoria                  | First Grade        | 9                        | 3  |
| Judy                      | Second Grade       | 10                       | 2  |
| Kathy                     | Third Grade        | 5                        | 0  |
| Rhonda                    | Third Grade        | 23                       | 1  |
| Paul                      | Fourth Grade       | 15                       | 0  |

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## **The Schools' Mindfulness Program**

### **Teachers' Introduction to Mindfulness Practices**

The eight teachers in the present study were initially introduced to the program in a variety of ways. For example, five teachers in this study were elementary school teachers at Park Day School, the site where the Mindful School pilot began. They received fliers in their mailboxes with a website for looking up information about the program online. Regarding the other three teachers, one said that she had read an article about Park Day School's work with mindfulness training. The other two teachers reported that they had heard about the program's pilot from another teacher at their school and/or at a different school.

All eight teachers already knew about mindfulness practices prior to its introduction at their school sites, and six teachers had been using mindfulness as a meditation practice and as an approach to stress reduction. For example, kindergarten teacher Barbara recalled:

I do a lot of reading and research on mindfulness and meditation practices on my own. About 10 years ago, I was invited to participate in a research project called East meets West from the University of San Francisco, at which time, I became interested in the mindfulness practice for young children.

Also, first grade teacher Victoria mentioned that she had her own mindfulness practice before starting it with her students. She reported taking an 8-week training course with



Kabat-Zinn's Whole Mindfulness for Stress Reduction Program. Victoria also reported attending a mindfulness weekend silent retreat, and stated:

It was fantastic, so I know that for me it made a difference in what I was doing. I thought it must make a difference for my students. I know enough about being mindful and the effects of focusing on the breath, the value and the effects of calming children's hectic lives, that when the pilot was mentioned, I was impressed with it and wanted to try it with greater emphases in my classroom.

Teachers' responses in this area suggested that the majority of them were searching for a classroom intervention that would better prepare children for more successful learning experiences. Teacher Barbara reported that the topic on mindfulness came up in a teacher conversation during recess in the schoolyard of Marin Elementary. She said, "It was a popular topic because implementation was just beginning in a few elementary schools and positive results were reported." During this time, it was revealed that six teachers were already practicing a form of mindfulness with their students based on their personal experiences with the practice. They were pulling elements from it without calling it mindfulness and were using it with the classroom curriculum, usually with what they viewed as highly satisfactory results. Teacher Barbara said, "When the whole mindfulness program was brought to the school, which was much more extensive than what was being done already, it changed the day for everyone immensely. The students were more relaxed and there was noticeable improvement in the students' behavior."

### **The Teachers' Initial Training in the Mindfulness Program**

All eight teachers in this study received training in mindfulness techniques at their respective schools. Because participation in the school's mindfulness program was on a volunteer basis, the teachers requested the training. The mindfulness training was provided by a training team from the Mindful Awareness Research Center at the University of California, Los Angeles. The training session for the teachers was usually on a Saturday and involved approximately six hours of training for implementing the program in their classrooms. This included a general description of the fundamentals of mindfulness and an introduction to the mindfulness curriculum.

During the initial teachers' training, the trainers discussed and demonstrated techniques for helping children focus, become attentive and calm the mind and emotions. For example, the trainers discussed the mindfulness activity of "following the breath," stating that when children are encouraged to breathe with awareness, it can help them to relax. A question and answer session was provided at the end of the training. After the initial training, the teachers were given the opportunity to request a trainer for classroom training with their students. Seven teachers did the next step in the training. Teacher Paul was the one teacher who opted out of the classroom training. Because this fourth-grade teacher taught a higher grade than the other teachers, he felt that his students did not need another training, and that he could build upon the students' previous experiences with the program.

## **Classroom Training with the Teacher and Students**

For the students' classroom training in mindfulness, a trainer came to the teachers' classrooms and taught 15-minute lessons twice a week, for eight weeks. According to the materials provided by the trainer, the students received training in the following mindfulness-based activities: listening, breathing, movement, walking, eating, seeing, emotions, test taking, activities for daily living, body awareness, the promotion of kindness and caring. In all of these activities, the emphasis was on mindfulness and strengthening attention to the present moment ([www.mindfulschools.org](http://www.mindfulschools.org)).

Five of the teachers described the classroom training in similar ways, stating that the presentation of the program addressed each grade level appropriately. These teachers felt that the trainer addressed different aspects of mindfulness and applied mindfulness practices to many areas of student life. Kindergarten teacher Barbara said, "I was amazed at how well the trainer was able to manage the class of young children in such a professional manner." Third grade teacher Rhonda, who teaches at Park Day School said, "Our whole school was trained. I think, about eight weeks of different lessons were presented by a trainer and modeled for us. We were then able to continue from there."

Teacher Lydia said:

On the first day of classroom training, the trainer introduced the curriculum, the Tibetan bowl and the journal notebooks to the children. He knew how to talk to the kids, he knew what he was talking about and he had a very nice manner with the children; very patient, and talked about things that were real in the kids' lives. So, I took cues from the trainer. The children were not judged, and were allowed to share as much as they wanted even if they were not completely still during the session.

When the teachers were asked to describe a typical mindfulness session with the trainer and what exactly the trainer did with the children, the majority of them mentioned the breathing exercises. Teacher Kathy suggested, and other teachers made similar statements, that paying attention to the breath is the foundation exercise upon which all the others hinge. A second training theme mentioned by most teachers was that the trainer created an environment in which it is okay to take risks and feel safe about subject matter. It is a way of saying, "We are a community." A third theme, also stressed in the curriculum guide, was that mindfulness practices should involve everything the children do. For example, the trainer encouraged children to be mindful of how they speak to their friends, mindful not to disturb other classes when walking in the hallways, mindful of the tastes of the foods they eat for lunch, mindful of all the different sounds heard around them and also mindful of themselves as they breathe mindfully.

A typical classroom training session involved the following steps. When the trainer came to the classroom, the children were instructed to get into the mindful position: that is, sitting on the rug with backs straight, legs crossed and hands on their laps. The trainer then discussed the mindfulness homework that had been assigned during the previous session. Afterwards, the trainer conducted a one to three minute breathing exercise, with length of time depending on grade level. To signal this point in the session, the trainer gently struck a Tibetan bowl, which made a soft ringing sound. Upon hearing the sound of the Tibetan bowl, the children placed their hands on their diaphragms and felt the in and out breaths. When the children heard the sound of the bowl again, they

relaxed. The children were then given the opportunity to express their feelings about the exercise and what they experienced. Teacher Lydia praised this training:

Having the opportunity to experience, ourselves, some of the practices we will be teaching the children taught us what the practice was all about. So when the trainer came in and ran the program with the children, we were able to participate and observe. And that's the best teacher in my mind, to get an experience of how the program works.

All of the seven teachers indicated that the classroom training was effective both for themselves and their students, in the sense that there was a clear understanding of how to implement the practice according to their students' grade level. All of the teachers perceived the training as being meaningful for their students, as well as actually utilized by the students. For example, teacher Barbara said:

I feel like mindfulness training is the perfect fit for the idea of giving kids tools and awareness. Be mindful in your interactions with others; then conflicts don't escalate. You have tools for resolving them better. I think that is a big piece of what I see mindfulness classroom training able to do. The trainers have developed a really good program, I think.

### **Adequacy of the Training for Teachers to Implement the Practice**

Although some teachers had personal experience and knowledge of mindfulness practices, it was vital that they be trained as a community for the purpose of implementing the schools' version of the program. Overall, the seven teachers who invited a trainer into the classroom felt that the training was thorough, and they were confident after the training to implement the program on their own. They also felt that the trainers were very professional and knowledgeable. For example, teacher Lydia believed

that the training helped her expand and diversify what she already did in the classroom by applying it in different ways. She said:

It was enough for me. I'm not a mindfulness expert or anything, but I practice it in my own life, so I know and see more value in it than others who may not have the experience. I felt like it was important for me. I wanted to continue it because I felt like it was a good thing for the kids in every aspect of classroom learning and beyond.

The teachers expressed a range of opinions about the adequacy of the training for their own implementation of mindfulness practices in the classroom. First, the three teachers of upper grades (third and fourth grade) felt that the training was adequate. Although, neither of them had prior training in mindfulness, they felt secure in implementing the program based on the teachers training session and the fact that most of their current students had been exposed to the program in previous grades. For example, Teacher Paul suggested that the students' attentiveness, behavior and learning ability reflected the work of other mindfulness teachers, and he expressed appreciation for this. Second, the three teachers of the younger grades (kindergarten, first and second grade) felt that the training was very good, agreeing that the trainers were very professional and also knowledgeable about the development of each age group.

The teachers also made some suggestions for ways to improve or continue the training. First, the teachers of the younger grades felt that more training could offered that helps teachers learn ways to integrate the whole idea of mindfulness throughout the classroom and throughout the day. Second, Teacher Victoria felt that additional training could be offered that enables teachers to integrate the concepts so that parents are

educated about the benefits of mindfulness, allowing it to flow throughout family life and the whole way of being.

Third, some of the teachers mentioned that the current training program probably would not be adequate for a new teacher or for an experienced teacher who was new to mindfulness practices. For example, Teacher Sarah felt that, without more extensive training, a teacher new to the concept of mindfulness would find it difficult to lead a series of mindfulness sessions independently in his or her classroom. She also noted, "Considering all the classroom dynamics, as well as social problems that some kids bring to the mindfulness sessions, such as peer or sibling concerns or parents' stress over lost of a job, it may be difficult for a new teacher to integrate the mindfulness practice into the classroom curriculum. In order to operate the program effectively, a teacher must be well versed in the techniques he or she is trying to teach the students."

### **Teachers' Implementation of Mindfulness Practice in the Classroom**

The eight teachers were in agreement that the mindfulness program is implemented differently in every classroom, with adjustments made to accommodate differences among teachers, students and grade levels. Analysis of their interview responses revealed the following implementation categories: (a) taking the "whole-kids" mindfulness approach, and (b) adapting mindfulness practices to students' age and developmental changes.

### **Taking the "Whole-Kids" Mindfulness Approach**

All of the teachers expressed the firm belief that the practice of mindfulness in elementary schools has to be a "whole-kids" approach that is carried over into the rest of the child's day, not just during a fifteen minute mindfulness session. The majority of teachers were in agreement that mindfulness practices must be embedded in students' school and home experiences. Otherwise, it is not being reinforced in ways the children can see. For example, Teacher Sarah proposed, "So, being mindful has got to be everywhere all the time." This shared belief among all the teachers is consistent with the goals of the Mindful Schools Organization and with what they were taught by the trainers.

Because of the shared belief in the "whole-kids" approach, the majority of teachers also believed that mindfulness should be incorporated into all subject periods. Teacher Kathy stated, "Subject period begins with a short breathing session in the majority of classrooms, and all of us have expressed the aim of incorporating the practices throughout the school day, in all subjects. The children are encouraged to write in their journal notebooks provided by the trainer during the day and at home, and to refer back to their journals often." Teacher Sarah believed that such practice helps with writing skills and language development and also refreshes memory. She continued:

Every time we're doing math or language arts, or science or social studies, all those mindfulness components are incorporated and folded in because we are being mindful of what we see and what we are thinking about. Some children may need to stop to take a few deep breaths during subject matter. I know for myself the program resonates for me and it is part of who I am anyway. Because when you're a part of something, you are more enthusiastic about implementing it and



then especially seeing the results that you've been seeing from the children. That is awesome!

The majority of teachers agreed that the breathing exercise is at the heart of the mindfulness practice and is reinforced during all subject matter. For example, a lesson from the curriculum, *Mindfulness of Sound*, promotes attentiveness and may be used during mathematics or language arts periods. During social studies, along with being attentive to the breath, such lessons as *Body Awareness or Kind and Caring*, or *Sending Kind Thoughts* are utilized. Also, third grade teacher Rhonda suggested an example of how mindfulness can be applied to different subject matter and how it can be reinforced, and most of the teachers reported using similar methods. In this example, Teacher Rhonda described the use of mindfulness concepts in a mathematics lesson:

Did you know that mindfulness is like math? Well, it is. I'll show you how. Can you tell me what  $2+2$  is? (they will all know right away). Yes, and how long have you known that? (varies per grade). Do you think about that every day? No? Do you think you will ever forget that  $2+2$  equals 4? Well, mindfulness is just like that. What you have learned, you will never forget. You might not remember or think about it every day but when you do remember to be mindful, you will never forget how. You have it inside you. No one can take it away from you.

For the three upper grade teachers, the "whole-kids" goal included incorporating mindfulness practice into the administering of exams. There is a practice from the mindfulness curriculum, called *Mindful Test Taking*, which is recommended specifically for third grade children and higher. The upper grade teachers agreed that, before testing the children on any subject, they remind them to pay attention to their breathing with a five-minute pretest calming exercise. Specifically, the teachers asked the children to sit comfortably, place their hands on their laps, close their eyes and slowly take three, normal, natural, calming breaths. Teacher Paul said:

I remind the kids to think mindfully before taking an exam. I tell them, 'if you feel anxious, nervous or have tension in your body about taking an exam on any subject, just breath in one deep breath and as you breathe out, release and relax. Take your next breath while imagining yourself taking your test with ease, imagine ease in your body and in your mind through the entire test. Imagine putting your pencil down with ease at the end of the test because you are all smart, intelligent, wonderful students. Open your eyes when you are ready and begin.'

Despite the teachers' belief that mindfulness practices should be incorporated throughout the school day, every teacher in the study mentioned time constraints as the greatest challenge to this goal. The teachers agreed that, while every experience in a child's day should reinforce mindful awareness, there was not enough time between different subject periods to do a full mindfulness session. Many of the sessions from the mindfulness curriculum can take 10 to 25 minutes of class time for upper grades. For example, one of the lessons on *body awareness* can take at least 25 minutes of class time to implement. The other challenge was remembering to stop and do a full mindfulness session during the day. The eight teachers mentioned that they aimed to schedule at least two full sessions in their lesson plans each week. Teacher Sarah commented, "At the beginning, however a couple of teachers were wondering about finding the time to fit the practice into their already full curriculum and classroom schedule, and I'm thinking, how can you not find the time."

### **Adapting Mindfulness Practice to Students' Grade and Developmental Level**

The responses of the five teachers who taught lower grades (kindergarten, first and second) were compared with the responses of the three teachers who taught higher

grades (third and fourth). The comparison of the two groups of teachers revealed that the practice was easily adapted to grade level, with the upper grade teachers receiving 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, there are five extra practices that exclude the lower grades. These practices were suggested for upper grades because of the required length of time and maturity level.

**Adapting mindfulness to lower grades.** Two particular adaptation themes emerged for the lower grades. First, two of the first grade teachers mentioned that some young children are sometimes hesitant to participate in a mindfulness lesson because they are afraid of closing their eyes. Teacher Sarah stated, "So, I adjust this a little bit by saying they could leave their eyes open and just look down or whatever, but aside from the practices that are obviously not recommended for lower grades, I don't think there's too much adapting, age wise."

The second adaptation theme concerned the length of time in which younger children can sit quietly. Three of the five lower grade teachers mentioned that the reason they wanted to teach kindergarten and first grade was that the children's minds are fresh, pliable, and they are eager to learn new things. However, the challenge of working with younger children is that they have difficulty sitting still, composing their bodies enough to pay attention and listen. Also, the teachers reported that approximately half of the students in the lower grade classrooms have attention challenges, including attention deficit disorder (ADHD), and they often struggle with sitting still and not distracting their friends with silly behaviors.

Because of the above challenges, teachers of younger students shortened the time period for mindfulness lessons. First grade teacher Victoria 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 adapting. However in other ways, I think they're more receptive, but have a harder time maintaining the practice." When these teachers were asked about how long the sessions tended to be for younger children, and how they dealt with attention issues, the majority agreed that they divert children's attention by moving them to another seat or having the child sit next to the teacher. The agreement among these teachers on length of time was that it depends on the practice. For example, one teacher mentioned that the practice, *Mindfulness of Sound*, can be done in one or two minutes with younger students. However, when the children are involved in a practice such as *Sending Kind Thoughts*, which they enjoy, the session may last for five or six minutes or even longer. First grade teacher Sarah believed that young children enjoy this practice because of the interaction and sharing. Teacher Victoria mentioned that the children enjoy taking turns sending kind thoughts to other students who may seem to be sad, or someone who may have been unkind to them. Victoria added, that some students send kind thoughts to their grandmother who was not be feeling well, others may include their siblings or their animals. So, the session may go on for longer periods of time. The suggestion was that length of time for a session will depend on the intention and student interest. Kindergarten Teacher Barbara said, "Many teachers of younger children use vibrations a lot; feeling the pulse and classroom energy to determine the length of a practice."

Despite the challenges that the young children have, they are eventually able to sit quietly for a sufficient period of time. The five lower grade teachers agreed that mindfulness does actually help children to sit quietly, over time. First grade Teacher Lydia felt that the challenges that many children face at this developmental level were not that unusual. This teacher taught children from mostly low-income families, and stated, "There are children with a lot of stress in their lives, who are very restless. Some kids can sit on the rug and others will sit on a chair, but everybody is responsible for finding their best place to participate. It may take until November before a lot of the wiggles are worked out and even kids for whom focus and attention were issues are doing it now."

**Adapting mindfulness to upper grades.** Sitting time was not an issue for the upper grades. All three teachers of the third and fourth grades believed that the majority of their students at this developmental level are able to sit for 10 to 20 minute mindfulness sessions. Instead, adaptations were needed to prevent student boredom. The three upper level teachers agreed that some of their students can become bored with a practice because most have had the experience in previous classes. The second reason for the boredom was that the teachers did a lot of repetition of certain practices so that the children maintained the mindfulness skills and benefits. Teacher Paul said that he finds ways to change a practice to fit the subject period and this 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 or something like that, you know. I just do what comes naturally in the situation."

A second adaptation theme for the upper grades was related to the challenge of some students refusing to do a mindfulness session, and then disrupting the whole class by making noise and distracting other kids. Third grade Teacher Kathy mentioned that, from her experience with upper grades, there are always a couple of students in a classroom who are not particularly interested at certain times, and they just decide they do not want to do a session. She added, "I have not yet found that balance that feels comfortable to me to sort of push them beyond their comfort zone to try or just let them sit there and doodle." All three teachers mentioned that they sometimes allowed these disruptive students to select the practice of choice for a session, which encouraged their participation. These teachers agreed that when their students seem to have grasped the concept of a particular practice, they move on, but do periodic reviews of the practice.

The teachers suggested a couple reasons for why the older students may need fewer adaptations than the younger students. One reason is that they have prior experience with mindfulness from earlier grades. Secondly, these students are more mentally and physically mature and are better able to adapt. The majority of teachers agreed that at this grade level their students have greater control over their emotions and have the ability to separate feelings from actions. Third grade Teacher Rhonda said, "Periodically, my students and I recite aloud, 'If we can be mindful of our feelings, then we can decide if we want to act on them, instead of just automatically reacting.' I think this helps when a child feels he or she may not want to participate in a session."

## **Perceived Benefits of Mindfulness Practices for Students and Teachers**

Despite teachers' discussion of challenges to implementing the mindfulness program in their classrooms, they also enthusiastically discussed the benefits of the program for their students and themselves. Three main benefit categories emerged in the analysis of the interview data: (a) self-awareness and self-regulation benefits, (b) social-emotional benefits and (c) teacher benefits. These benefit categories were viewed by the teachers as being essential to students' development and academic performance.

### **Self-Awareness and Self-Regulation Benefits**

The majority of teachers in this study shared the firm belief that self-awareness and self-regulation skills are very important parts of growing up, and are closely related to each other. This belief is consistent with the claims of mindfulness. According to Greenberg et al. (2003), *self-awareness* refers to the ability to accurately assess personal feelings, interests, values, and strengths. *Self-regulation*, according to McClelland and Ponitz (2012), 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 academic and social success.

All of the teachers reported that they actively used the mindfulness curriculum to increase their students' self-awareness and self-regulation skills. Three teachers mentioned that twice a week they devoted a 10 to 20 minute period to the specific self-

awareness and self-regulation exercises from the mindfulness curriculum. For example, Teacher Sarah used the *Body Awareness and Mindfulness of Breath* exercises from the curriculum to support these skills. Teacher Paul also used these same exercises to increase students' feelings of self-efficacy as well as self-awareness:

As children move into higher grades, their feelings of self-efficacy becomes even more important, therefore self-awareness is strongly emphasized during subject periods throughout the day. How can a child fix something if he is not sure what is wrong? So, I use a specific exercise for this, which is Body Awareness and Mindfulness of Breath in one way or another at least twice a week. My students are much better at test taking because they can concentrate and stay focus.

The teachers believed that the mindfulness program was having a positive influence on their students' self-awareness. Two upper grade teachers stated that they had noticed a few students doing the practices on their own. Teacher Judy said, "Hearing the children using the term "mindful" among themselves is very interesting. It is as if the children are reminding themselves and each other to be aware and in control of the self." Teacher Barbara, similar to other teachers, exclaimed that the mindfulness practice was dramatically improving students' concentration and teaching them how to be more mindful of their thoughts and actions.

The eight teachers also believed that the mindfulness program was increasing their students' self-regulation skills. Children who learn to control themselves make better social and academic choices than do children who are overly angry, aggressive or impulsive (Morrison, Ponitz & McClelland, 2011). In line with this proposal, five teachers mentioned that self-regulation skills help elementary school children stay focused and calm, and therefore manage their reactions and behaviors for more positive peer relations and effective completion of academic tasks. The majority of teachers



believed that the mindfulness program helped them model self-regulation behaviors for their students to observe. These teachers said that they had noticed how mindfulness practices had transformed the children's anxious movement and energy to calmer, quieter and more peaceful states in the classroom and during classroom transitions. These teachers overwhelmingly agreed that the regular practices of mindfulness and the idea of being mindful reminds children to calm down and get ready to shift or transition to another classroom or for recess. Furthermore, three teachers noticed that children diagnosed with attention deficit hyperactivity disorder (ADHD) had improved their self-regulation skills, and they were now able to calm down and relax, especially toward the end of the school day.

### **Social -Emotional Benefits**

The social-emotional benefits that the majority of teachers focused on were (a) emotion regulation and coping, (b) social skills and pro-social behaviors with peers and (c) conflict management skills. Research indicates that social-emotional skills such as cooperation, assertion, responsibility, empathy, and self-control are essential to children's academic and social success. The researchers in this area argue that these skills should be taught along with academics throughout the school day (Denham, 2006; Greenberg et al., 2003).

**Emotion-regulation and coping.** First, the majority of teachers mentioned the importance of emotional coping and regulation skills for smooth classroom operation.

These teachers believed that children's inability to interpret others' emotions can create a lot of confusion in the classroom and can interfere with learning. Teacher Rhonda felt that social-emotional development is of utmost importance during the elementary school years, and it underlies the mindfulness classroom approach of how children learn to treat one another. Teacher Paul mentioned, that he has noticed children on the playground are controlling their negative emotions in productive ways, suggesting that they are aware of the feelings, can monitor those feelings, and can modify them for positive social interactions. He gave an example of the pushing and shoving among the boys on the basketball court, stating that, "The children do not get angry and fight; nor do they show displeasure with one another." Teacher Paul credits the lesson on emotions from the curriculum for building coping skills in various situations. Other teachers shared Teacher Paul's belief that the mindfulness program was having a positive effect on students' emotion regulation and coping.

Teacher Victoria explained that she applied the mindfulness lesson on emotions to emotion- regulation and coping skills by emphasizing the importance of students being able to separate feelings from actions. She believed that 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 automatically reacting. Teacher Victoria said, "During lessons on building emotion skills, I sometimes ask these questions: What would your heartbeat be like if you were angry? Would it be fast or slow? Would your body feel tense or would it be relaxed? What is happening in your mind? Are there nice thoughts or mean thoughts? I am impressed with the answers the children give. This example works very well with my students."

**Social skills and prosocial behavior.** Second, the teachers mentioned increased social skills and pro-social behaviors as very important benefits of the mindfulness program. Denham (2006) defines 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. Numerous skills are crucial at this level, including making positive overtures to play with others, initiating and maintaining conversations, cooperating, listening, taking turns, seeking help and developing friendship skills (Denham, 2006). Practices from the mindfulness program teach young children how to solve social problems, analyze social situations, and solve differences that arise within their peer group. These areas are specifically addressed in the mindfulness curriculum lesson on *Heartfulness-Sending Kind Thoughts to Others*. Teacher Kathy stated:

There is a whole classroom meeting every Monday afternoon; we have a minute of mindfulness before we give appreciations to one another and share some gratitude. It sort of launches us into talking about some harder stuff and behavior stuff in a different mindset in sort of a more open hearted sort of way. So before we talk about behavior and other things that have come up in our class meeting book, it is just nice to open our class meeting with mindfulness.

The majority of teachers reported noticing a decrease in delinquency and anti-social behaviors at school, which they attributed to the school's mindfulness program. Seven teachers mentioned that many parents have reported that their children look forward to coming to school and seeing their friends. The kindergarten and first grade teachers felt that this was particularly beneficial for very young children who may be still attached to their home life. The common belief held by these teachers was that the mindfulness practices create a calm, peaceful and harmonious environment, where the

children enjoy interacting with each other and their teachers. Teacher Judy believed that such attitudes increased academic learning as well as personal growth.

**Conflict management.** Third, the teachers believed that the mindfulness program helped their students to manage peer conflicts. Four teachers mentioned the significance of children being able to problem solve among themselves, believing that classroom time is saved and vocabulary increases through such peer interactions. They mentioned several points about mindfulness and conflict management. First, Teachers Sarah and Lydia mentioned using a specific lesson from the curriculum guide, called *Kind and Caring on the Playground*, with their students before going outside. Second, Teacher Victoria suggested that, when children are taught through mindfulness practices how to interact with others, then conflicts do not escalate to the same degree because they have the tools to regulate themselves. Third, Teacher Barbara stated that, when students fight about something or disagree, she gives them each a moment to take a deep breath, and it changes the whole tone of the problem solving session. Fourth, two teachers mentioned having regular class meetings in which they checked in with the students regarding problems they may be experiencing with classmates or other students. If problems on the playground are mentioned, the students are encouraged to personally talk to each other and try to do the problem solving first before bringing it to the teacher. Teacher Rhonda said:

But sometimes there's a problem that involves the whole class or maybe another grade where they're trying to share the field outside or the basketball court, or a student maybe really upset from something that happened at lunch and we want to help support him or her so we have a group problem solving session in a class meeting format. Then after that we'll do some mindfulness and send loving kindness to others.

Teacher Rhonda believed that building pro-social behavior with peers is essential at the elementary school level. She referred to the mindfulness exercises as building social skills, emotion regulation and managing conflict in a very powerful way that the students can grasp. She believed her job to be that of helping the children get what is needed to be successful. Both the lower and upper grade teachers mentioned that they often see examples of how their students have learned to negotiate acceptable outcomes to emotionally charged situations in more effective ways.

### **Benefits for Teachers**

All eight teachers believed that, in addition to the benefits of the mindfulness program for students, there were equal benefits for themselves. The teachers reported teacher benefits in the following areas: (a) classroom management effectiveness, (b) positive feelings about teaching and (c) teacher unity and collaboration.

Improved classroom management was the benefit most teachers mentioned. The eight teachers were in agreement that the mindfulness program improved their classroom management abilities in many ways. Teachers Lydia, Kathy and Rhonda felt that the children have learned to take responsibility for themselves and each other to avoid conflicts. These teachers also reported noticing students having developed the skills of remembering instructions, of stopping themselves and paying attention to the situation. Teacher Kathy added, "Because of these new skills, it is easier for teachers to manage the classroom, thereby increasing classroom effectiveness." For example, second grade

Teacher Judy mentioned having a classroom conflict managers' team in her class. She said:

Two students take turns playing this role for a day. One morning, I observed two kids having a heated discussion over an art object; I pretended not to notice in order to see how the two conflict managers would handle the situation. I heard one child say, "We have to be in control of our feelings of anger, remember? So let's all take a moment and breathe together. We will all feel better about this and we won't disturb Miss Judy." The problem was solved and I continued my work with other students. Now if this is not mindfulness improving classroom management, then I don't know what is.

A majority of teachers held the belief that the mindfulness practice is another tool in the children's toolbox of crayons, pencils and rulers that they have learned to use appropriately to collect themselves when feeling out of control, therefore a lot of class time is saved. Six teachers mentioned that the mindfulness tool helps to create a classroom culture that improves the environment making it easier to establish and maintain supportive relations with their students. Three teachers felt that through such relationships, more learning can take place, which is the main objective of the program.

A second benefit was an increase in positive feelings about teaching. For example, Teacher Barbara mentioned how encouraging it was to see students doing the practice on their own and to hear them use the term "mindful" with their peers. She stated, "I personally receive benefits from the program. I think it is just a wonderful program, a really wonderful practice for young children as well as teachers of young children. I never realized how important it was becoming for me too. My days are absolutely better because of mindfulness." Six teachers expressed excitement about having the opportunity to be a part of the mindfulness movement at this time and to understand the value of it. Teachers Paul and Victoria mentioned peer support as being a

valued benefit, stating that by having positive relationships with school staff create a very positive school environment and a sense of belonging. These teachers believed that such enthusiastic energy about education affects students' academic outcome.

Finally, the teachers also believed that the mindfulness program increased teacher unity and collaboration. Teacher Paul mentioned that the excitement of the practice among many of the teachers is contagious, stating that teachers enjoy sharing the improvement of students who may have had certain issues in previous grades. Teacher Kathy said, "We as a staff want to encourage each other by sharing the results from our experiences with a particular practice from the curriculum, such as what practice works well at certain times of the day and in certain situations. This is very much appreciated, so most of us take great pleasure in our interactions with each other and promoting the benefits we are receiving from the program at every opportunity such as staff meetings, on the playground, at recess and at any available time." Also, the teachers who have had previous mindfulness training enjoy sharing the benefits of their personal experiences with other teachers.

## Chapter 5

### DISCUSSION

Teachers' perceptions and endorsement of new school programs and classroom practices ultimately determine how beneficial and productive these programs and practices will be (Brown, 2009). Furthermore, the way in which a given curriculum is enacted may vary based on individual teachers' beliefs, values and perceptions. The qualitative results of the present study highlight the ways in which elementary school teachers perceive their role in incorporating their school's mindfulness program in their classrooms. The eight teachers in this study taught kindergarten through fourth grade and represented three elementary schools in the California Bay Area (Oakland and Albany). The study specifically focused on (a) the teachers' training experiences for the mindfulness program at their schools; (b) their experiences, challenges and beliefs regarding implementing mindfulness practices in their classrooms and adapting them to their students' grade level and (c) their perceptions of the benefits of their school's mindfulness program. Results in these three areas are discussed below.



## **The Schools' Mindfulness Program**

### **Characteristics of the Mindfulness Program**

One main focus of the teacher interview was to learn about the mindfulness programs at the eight teachers' schools. The mindfulness programs were introduced through the help of the Mindful Schools Organization, and the training for teachers and students was done by trainers from the Mindful Awareness Research Center at the University of California, Los Angeles. The school mindfulness programs emphasize children's development of concentration, flexible attention, conflict management skills, and empathy and compassion toward others. The kinds of activities used to accomplish these goals include breathing exercises, body awareness activities, mindful walking activities, journaling and "loving kindness" meditations. Children are encouraged to become mindful of sounds and sights around them and to think kindly of others.

The school mindfulness programs are similar to adult mindfulness programs in that they are based on Kabat Zinn's Mindfulness Based Stress Reduction (MBSR) program. However, adult mindfulness programs tend to focus on physical health, pain reduction, and stress reduction (Brown, Ryan, & Creswell, 2007; Kostanski & Hassad, 2008). In contrast, mindfulness programs for elementary school children tend to focus on the "whole child," including social, emotional, cognitive and academic development (Coffey et al., 2010). Also, the school programs involve adaptations that make the mindfulness activities more concrete, physical, and fun for elementary school children (Greenland, 2010; Hooker & Fodor, 2008).

The teachers' school mindfulness programs, guided by the Mindful Schools Organization in the Bay Area, are consistent with a positive education, in that they promote not just achievement, but also confidence, contentment, kindness, empathy and life-satisfaction ([www.mindfulschools.org](http://www.mindfulschools.org)). Seligman et al. (2009) refers to these characteristics as positive education training for well-being and for happiness. Research on mindfulness suggests that children learn best when they are happy and have a positive disposition ([www.mindfulschools.org](http://www.mindfulschools.org)). Substantial evidence shows that such skills as resilience, positive emotion, engagement and meaning can be successfully taught to children at an early age.

### **Training for the Mindfulness Programs**

Another focus of the interview was to learn about the teachers' preparation for using mindfulness programs in their classrooms. The eight teachers' training for their school's mindfulness program began with a 6-hour Saturday workshop on mindfulness techniques and was followed by an 8-week training period for teachers and students, with the trainers visiting the classrooms twice a week. The teachers also had the option of requesting more training. The teachers' overall satisfaction with the training was positive.

Although the teachers were satisfied with their training, they still had several suggestions for improving the training component of their schools' mindfulness program. First, a majority of teachers felt that more training is necessary for teachers who have had no previous mindfulness training. All of the teachers in the current sample were already

familiar with mindfulness practices or had been personally using these practices prior to the initiation of the mindfulness program at their school. They already were familiar with some of the practices and vocabulary of mindfulness programs. The teachers felt that, if a teacher did not have this prior experience with mindfulness, he or she might need more training time and introduction to mindfulness.

A second suggestion was that teachers with very little classroom experience might need more training or consideration in implementing mindfulness practices in their classrooms. The teachers in the current study had an average of 14 years of teaching experiences (ranging from 5 to 29 years of experience). For example, one teacher mentioned that new teachers might become overwhelmed by the addition of the mindfulness activities to their other teaching duties. Current research indicates that teaching is a very stressful occupation and that many teachers suffer from stress burnout in the first few years of teaching (Roeser et al., 2012). Although mindfulness training has the potential to help teachers reduce stress, new teachers' ability to implement the new program in their classroom might be difficult when there is only minimal training support for them.

Regarding teacher stress, some mindfulness programs have been established that focus on teachers and help them with occupational stress and burnout (Grossman et al., 2004). An invaluable component of the mindfulness practice is to teach individuals how to monitor their internal reactions to emotional stress. By developing such skills and mind-sets, teachers' stress may be reduced and their resilience increased. The practice of mindfulness encourages teachers, specifically to cultivate an attitude of kindness and

compassion toward themselves in moments of stress (Roeser et al., 2013). Such moments of difficulty may be common for new teachers or for teachers who are implementing new school programs.

A third suggestion made by the teachers was to include parents in the training activities so that they would understand the mindfulness program better and would also encourage children to do the mindfulness activities at home. The teachers also believed that parent and teacher involvement could improve family life and increase the benefits of mindfulness practice. Research suggests that parents' training in mindfulness can improve the quality of their parenting, which could then have positive benefits for children's development and education (Duncan et al., 2009). Fourth, some teachers suggested that additional training could be provided that would help them to find ways to integrate mindfulness practices throughout the day. This suggestion, as well as the third suggestion, is related to the ideal of a "whole-kids" approach to teaching mindfulness to students, which is discussed in the next section. This is an important concern because both the involvement of parents in the mindfulness program and further training for implementing a whole-kids approach could potentially help the teachers be successful in their implementation. Also, there is an emerging body of evidence that supports new classroom techniques for developing better, well-rounded students, similar to the "whole-kid" approach (Seligman et al., 2009).

## **Teachers' Implementation of Mindfulness Practice in the Classroom**

A second main focus of the teacher interview was on teachers' experiences and perceptions related to implementing mindfulness practices in their classrooms. Analysis of the interview responses showed two implementation themes: taking the "whole-kids" mindfulness approach and adapting mindfulness practices to students' developmental level.

### **The "Whole Kids" Approach**

The "whole-kids" mindfulness approach is a key theme in the schools' mindfulness program. It is similar to Kabat-Zinn's (2003) proposal that mindfulness be incorporated in all aspects of life. It is also similar to adult intervention studies in which participants are encouraged to practice the "whole-individual" mindfulness approach, particularly by engaging in self-regulation of attention from moment to moment (Kabat-Zinn, 1994). Participants are encouraged to attend to the internal experiences occurring in each moment, including bodily sensations, thoughts and emotions as well as aspects of the environment across their everyday life.

The teachers in the present study believed that it was important to encourage mindfulness behaviors in every aspect of their students' day. They wanted their students to be mindful on the playground, at home with siblings, in church as well as in the dentist' chair, so that it became a habit and a mindset. Also, the teachers believed it was

important to incorporate mindfulness into all academic subject periods. Despite their belief in the whole-kids approach to mindfulness training, all eight teachers mentioned time constraints as a challenge to achieving this approach. This suggests that, even when teachers are highly supportive of a new curriculum or program in their school, their successful implementation of the curriculum or program can be hindered by institutional limitations. Darling-Hammond and McLaughlin (1995) suggest that more collaboration in support of professional development is needed. A collaborative model would support communication among teachers as well as reflection on the best ways to support student progress.

### **Adapting Mindfulness Practices to Grade Level**

During the training phase, the teachers were given some instruction about adapting mindfulness practices to the particular grade level of their class. However, the teachers mentioned some challenges of adapting mindfulness practices to their particular group of children. Teachers of lower grades (kindergarten through second grade) reported different challenges than the teachers of the higher grades (third and fourth grades).

The teachers of lower grades felt that younger children are more receptive to the 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 even one minute at first. Despite the challenges, the five teachers of lower grades agreed that by the end of the school year their students were excited to

participate in a favorite practice or sit quietly and listen to a story for approximately ten minutes.

The teachers of upper grades all agreed that they had an advantage because most of their students had previous training in mindfulness in the lower grades. These teachers also felt that their students were more mentally and physically mature and had greater control over their emotions, compared to students in younger grades. However, the one basic challenge to implementation of mindfulness practices with the older students was boredom and resistance, which may take many forms such as student resistance to participation in the mindfulness activities. Rempel (2012) offers some suggestions as to why students at this age level might become bored or resistant. The author suggested that many children and adolescents are experiencing high levels of stress and pressure living in today's world of unpleasant events (e.g., parents' divorce or loss of job). As a result, increasing stress may manifest as anxiety, anger, depression and conduct disorders. Some students may also try to interrupt the teacher by asking to be excused to use the restroom. An appropriate mindfulness practice that encourages children to verbalize their feelings and experiences can be used to counteract this.

The mindfulness practice for older students is not that different from the adult exercises. All of the exercises can be adapted to fit different ages and abilities. Hooker and Fodor's (2008) suggestion for doing mindfulness activities with children is to be cognizant of what the experience of a child is like. An important aspect of teaching mindfulness to children is that the teacher should teach with enthusiasm and confidence as well as being an example and role model of what they teach throughout the day. A

successful way of introducing a 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).

### **Benefits of Mindfulness Practices for Students and Teachers**

The majority of teachers in this study agreed that the benefits of mindfulness practices for their students were also beneficial for themselves as teachers. The teachers mentioned three kinds of benefits. The first benefit area was increased self-awareness and self-regulation. All of the teachers agreed that self-awareness and self-regulation are closely related benefits of mindfulness and important in the development of young children. They believed that their school's mindfulness training had helped their students to be aware of their personal feelings, interests and strengths, and to better control their feelings, thoughts and actions in the classroom. The teachers' perceptions of their students' increased self-awareness and self-regulation is consistent with research focusing on the role of mindfulness training in children's development (Flook et al., 2010; Napoli et al., 2005).

The second benefit area mentioned by the teachers was increased social-emotional competence. They were in agreement that social-emotional competence is essential to the maintenance of smooth classroom operations, and research suggests that it is fundamental to academic learning (Denham, 2006). The teachers noted, for example, that the



mindfulness curriculum teaches children how to solve social problems, analyze social situations, and solve differences that arise within their peer group. The teachers believed that mindfulness lessons as well as the breathing exercises were creating more positive peer relationships at school. Seven teachers even mentioned that they had heard from parents that their children now looked forward to coming to school and seeing their friends. Also, some teachers reported what they perceived to be a decrease in antisocial behavior at school. The teachers' perceptions of social-emotional benefits of mindfulness training for their students are consistent with research that shows increased social skills and social-emotional well-being in children who participate in mindfulness training (Napoli et al., 2005; Saltzman & Goldin, 2008).

The third benefit area involved benefits for teachers. The majority of teachers mentioned that their enthusiasm for teaching increased due to the mindfulness program at their school. Furthermore, the majority also felt that the mindfulness program was beneficial in promoting unity and collaboration among the teaching staff. They also agreed that, because of the school mindfulness program, unity among the entire school community, administration and parents had increased. The teachers' perceptions of these benefits are consistent with mindfulness applications that focus on teachers' professional development (Roeser et al., 2012). Work in this area has also used mindfulness training as a way to reduce teacher stress and burnout (Roeser et al., 2013). In Roeser et al.'s (2012) study, teachers reported more teaching satisfaction and well-being as result of mindfulness training that was aimed at professional development. It is believed that such

changes help teachers to establish and sustain supportive relationships with their students and work toward a more positive school climate (Roeser et al., 2012).

The perceived benefits from the mindfulness practice are related to "positive education." Albrecht et al. (2012) argue that the strategy of mindfulness has shown to have a positive impact on teacher's daily life. As a result, teachers are better able to cope with daily teaching routines and impart the practice to their students with more confidence. While mindfulness is increasing and receiving acceptance worldwide it is important to understand the positive impact the practice has on teacher and student well-being.

### **Limitations of the Study**

It is important to note the limitations of this study. There were several limitations involving the sample of teachers. First, the sample size was small. Although small sample sizes are appropriate in qualitative interview studies, there still needs to be caution in making conclusions based on the reported results. Second, the sample of teachers represents just three schools in the Bay Area of Northern California. There are 53 Bay Area elementary schools that are currently implementing the mindfulness program. Teachers who are in other Bay Area schools, as well as teachers in other regions of California or in other states, may have different experiences and perceptions of school mindfulness programs. For example, the organizations that offer mindfulness training and curriculum for schools might create different experiences and challenges than the

Mindful Schools Organization in the Bay Area. Third, this study provides data on teachers of kindergarten through fourth grade; therefore, more research is needed to learn about the perceptions and experiences of teachers of older students. Fourth, most of the eight teachers were already familiar with and personally using mindfulness practices before being introduced to their school's program. Therefore, the sample is limited to teachers who were experienced in mindfulness and who were very positive about their school's mindfulness program. As the teachers suggested in the interviews, teachers who are new to mindfulness or new to teaching might have more challenges with implementation of the school's program. This study also does not give information about teachers who were dissatisfied with their school's mindfulness program.

Other limitations involved the teachers' schools. First, most of the teachers taught at the one private school, which offers considerably more resources than the public schools do. Second, while there was representation of upper-, middle- and low-income students in the three elementary schools, the majority of teachers taught middle- to upper-income students. Only two teachers taught at schools with low-income students. Therefore, the research does not reveal much about teachers who work in low-income public schools with fewer resources and more student issues. It is important to know more about teachers who work with low-income students because the majority of these students are in great need of mindfulness practices. Considering the limitations related to teacher sample and school representation, future research on teachers' participation in school mindfulness programs should collect data across a larger and more diverse population of teachers, including teachers of a larger range of grades. Future research

should also examine mindfulness programs in a variety of school settings, including more schools with low-income students.

Finally, there were limitations involving the interview method. First, the study involved only interviews with the teachers; there were no observations of the teachers interacting with their students or conducting mindfulness lessons with the students. Therefore, it is not known how closely the teachers' beliefs match their actions in the classrooms. Furthermore, observation of teacher-student mindfulness sessions in the classroom would provide additional information about the implementation of mindfulness practices in the classroom. Second, the interviews were conducted during the teacher's lunch or after-school periods, which may not have been the most relaxed time for an interview. Also, the limited interview time did not allow for more in-depth questioning. Third, the teachers were interviewed just once. Future research that interviews teachers at different points in the school year and at various stages of implementation of the school mindfulness program would result in more understanding of the processes involved in implementing new school programs such as mindfulness training.

### **Recommendations for School Mindfulness Programs**

Considering the growing interest in elementary school applications of mindfulness, this chapter concludes with some recommendations regarding teachers, parents, students and schools.

- (1) *Recommendation regarding teachers:* While the teachers in this study seemed to be very enthusiastic about implementing the program, they did mention time constraints as challenging and the realization of the “whole-kids” approach as challenging. It may be beneficial for teachers to invite parents to observe certain mindfulness sessions in the classroom, with the goal of increasing parent interest in mindfulness practices and getting their support in sustaining children’s participation in mindfulness activities.
- (2) *Further recommendation regarding parents:* While mindfulness training is available to teachers upon request in school districts that have mindfulness programs, parents would also benefit from the training. A strong recommendation is to invite parents to the initial teachers' training as well as the classroom training with teacher and students; or special training sessions for parents could be offered. Such training would increase consistency between students’ home and school lives and would also improve parent-teacher relationships.
- (3) *Recommendation regarding students:* Given the benefits of mindfulness training for children as young as kindergarten, a strong recommendation is that mindfulness practices be offered to children at the preschool level. In the same way that the mindfulness curriculum is scaled up or down to grade and cognitive levels, the program may be easily adapted to preschool children's level of learning. It is quite possible that mindfulness practices could be combined with school readiness goals.

(4) *Recommendations regarding schools:* Because of increasing research that suggests benefits of school mindfulness programs for students and teachers, more schools should be introduced to mindfulness programs. Possibly, the media could be used to spread information about mindfulness to more teachers, school administrators and parents across the country. Media exposure could include television spots, newspaper articles, church bulletins, and ads on public transportation. Such media exposure would be beneficial to the advancement of school mindfulness programs as well as the advancement of society.

## APPENDICES

APPENDIX A

ELEMENTARY SCHOOL TEACHER INTERVIEW PROTOCOL



## Appendix A

### Elementary School Teacher Interview Protocol

#### **A. The School's Mindfulness Program**

##### **1. Teacher's Introduction to the Program:**

1a. When did the mindfulness program begin at your school? What was the driving force behind the implementation of this program?

1b. When did you start using mindfulness practices in your classes?

1c. Did you know about mindfulness practices before your school implemented the program?

1d. What were your initial reactions to the notion of mindfulness and the mindfulness exercises?

##### **2. Content, Structure, and Goals of the School Mindfulness Program:**

2a. What are the goals of your school's mindfulness program?

2b. What can you tell me about the general curriculum and content of this program?

2c. What kinds of materials are used for this program?

##### **3. Training for the Program:**

3a. How much and what kind of mindfulness training did you receive from the school?

3b. Do you feel it adequately prepared you to incorporate mindfulness practices in your classroom?

3c. Since receiving the training, do you practice mindfulness in your everyday life? Why or why not?

3d. Have you received any other kinds of training in mindfulness practices (e.g., outside the school?)

## **B. Teacher Implementation of Mindfulness Practices in the Classroom**

### **1. Teacher Practices in the Classroom:**

1a. When do you typically do mindfulness exercises with your students? How often do they occur during a typical school week?

1b. What is the typical length of time of a mindfulness session?

1c. Would you walk me through what you do in a typical mindfulness session in your classroom?

1d. How have you geared the exercises to your students' age and grade level?

1e. With emphasize on developmental appropriateness, how have you adapted the materials to the students' grade levels?

### **2. Challenges to implementation:**

2a. Have you encountered any student challenges when you do these exercises? Would you tell me about some of these challenges? How do you deal with these situations?

2b. Have you experienced challenges in working these exercises into the regular school day? How so?

## **C. Benefits and Challenges of Mindfulness Practices for the Students**

### **1. Receptiveness to the Program:**

1a. In general, how receptive have your students been to the mindfulness exercises? Why do think they have or have not been receptive?

2b. What do the students say about the program?

2c. How about the students parents? Have they been receptive to the mindfulness program?

2d. What do the parents say about the program?

**2. Changes in Students:**

2a. Have you noticed some specific benefits and positive outcomes of the mindfulness program for your students? Would you tell me about them?

2b. Have their attitudes toward school changed? Have their school behaviors changed since doing mindfulness exercises?

2c. *If positive changes:* Why do you think the mindfulness exercises have led to these positive benefits? *If no positive changes:* Why do you think there has been little change in students' attitudes and behaviors?

**D. Interview Wrap-Up**

**1. Widespread Acceptance:**

Overall, do you think there is widespread acceptance and valuing of the mindfulness program in your school? Why or why not?

**2. Suggestions:**

2a. Would you recommend any changes to the mindfulness program—either in its content or implementation?

2b. Is there anything else you would like to say about the inclusion of mindfulness-based programs in schools?

APPENDIX B

ELEMENTARY SCHOOL CURRICULUM (K-5)

## **Appendix B**

### **Community Partnership for Mindfulness in Education**

#### **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

##### **Extras: (for third grade and up)**

Mindful Test Taking

First Thought  
Creating Space  
Emotions  
Golden Beam of Light

## **Class 1**

### **Introduction - Mindful Bodies and Sound**

I am here today to teach you something called mindfulness. Has anyone ever heard the word Mindfulness? Mindfulness is paying attention to what is happening in the present moment. Mindfulness can help us learn to pay close attention to many things. It can also help us calm down when we are angry, sad, frustrated, or any difficult emotion. (Adjust this for what is appropriate for the grade level. Little kids do not need a lot of explanation. Older kids might like to understand more.)

I am going to visit your class for a few weeks, for just 15 minutes at a time. Every time, I will teach you something new about mindfulness.

There are a couple of very important things that help us be mindful. (Ask the children to turn their entire chair, not just their bodies, toward you if they are not already.)

Often, little ones (k-2) do better on the floor, if possible. When a group is on the floor generally sitting in rows rather than a circle is better; it helps kids not look at each other or giggle.

Ok. The first thing that will help us during mindfulness is to keep our bodies very still...can you all show me your absolutely stillest body?

The second thing automatically happens when we get still. What is the noise like in here right now, when you get still? (Let someone comment on the quiet) Yes, we have still bodies and quiet bodies. That's what I call our mindful bodies. Can you show me your most still, most quiet mindful body? (Let them practice that.)

We do not have to be this still and quiet the whole time, but often I will remind you to get your mindful bodies on and this is what you can do.

(This first class is very important. If you set them up to view mindfulness as a special time and they know how to be prepared when you come in, every class will go better. Do not move on until they understand this.)

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