



A Consideration of the Use of Mindfulness Meditation in Public Education

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A Consideration of the Use of Mindfulness Meditation in Public Education

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A Thesis in the Field of Religion
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Abstract

With roots in the Buddhist religious tradition, a secularized version of mindfulness meditation is now being embraced by many as a way to significantly improve their quality of life. Mindfulness is a form of meditation that teaches one to focus with present-moment awareness. Advocates extol the virtues of mindfulness and its positive impact upon one's physical and mental health such as stress reduction and the ability to regulate one's emotions. It is increasingly being taught in hospitals, corporate settings, and now in schools. The purported benefits of the contemplative practice of mindfulness have propelled it into the curriculum of an ever-growing number of public school systems, yet there are those who claim there is potential for harm.

Critics of mindfulness programs in schools object for a number of reasons. They believe it encourages children to unwittingly adopt Buddhist religious beliefs and an undesirable worldview. Indeed, aspects of mindfulness training include "acceptance" and "non-judgment," which seem to conflict with the goal of doing one's best in the classroom and differentiating between right and wrong. Detractors assert that although supporters of mindfulness point to scientifically-proven benefits, there are no studies of the long-term impact of mindfulness on school children. Most research has focused on the physical, emotional, and health benefits of adults who practice mindfulness. Others see mindfulness in schools as simply a waste of valuable classroom time.

Although inspired by Buddhist mindfulness practices, the secularized version of mindfulness does not teach Buddhism, a religion with vast writings and cosmology. Mindfulness has been the subject of numerous scientific studies involving both adults and

school children that demonstrate its benefits. Studies of mindfulness have proven that it reduces stress and related cortisol levels which are responsible for a variety of physical and mental health problems. Mindfulness meditation has been shown to improve cognitive functioning and shrink the amygdala, a brain region associated with fear and stress, as well as increase the size of the hippocampus, a brain region associated with learning and memory. It has been demonstrated to improve focus and emotional regulation as well as to build resilience. Mindfulness meditation has been practiced for thousands of years by people of all ages, which dispels concern over any unknown long-term consequences. However, as is the case with all subject matter taught in the classroom, it is important that teachers of mindfulness have been properly trained to guide students through it. There is overwhelming evidence for expanding its use in secular settings, particularly in public education where young people can learn at an early age how to practice mindfulness to develop their ability to focus attention, manage stress, and regulate their emotions in the classroom.

Dedication

This thesis is dedicated to my wife, Maureen. She was always there to give me her support, even when I would come home late at night after classes and would spend weekends writing papers. Her patience and understanding allowed me to pursue this goal. She always believed in me and inspired me.

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In addition, I owe much of what I have accomplished to the values instilled upon me by my parents, Edwin and Ruth Knoblock. These include my mother's insistence to treat others as you would have them treat you, that anything worth doing is worth doing well, and that honesty is the best policy; these words echo in my mind. My father was truly a role model for me to follow, and although he is no longer among us, he is with me every day.

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Chapter I

Introduction

Mindfulness meditation is derived from ancient Buddhist teachings, but has inspired a secularized version that is currently practiced in a variety of contexts. It is offered as treatment in numerous hospitals and clinics and is found in the work place as a way to relieve stress. Mindfulness is now being included in a number of public school curricula to help students improve focus, reduce stress, as well as regulate their emotions. Although mindfulness meditation is said to provide scientifically-proven secular benefits, there are a number of questions and concerns regarding the utilization of this practice in a public school setting. These include teaching Buddhism surreptitiously, presenting an undesirable world view, having unknown long-term consequences, as well as simply being a waste of time. This thesis investigates the various sides of the contemporary debate surrounding the potential value as well as the putative problems of practicing mindfulness meditation in public education. It does not delve into any potential legal issues some may believe exists. Despite the concerns of its critics, there is overwhelming evidence for expanding the use of mindfulness meditation in public schools where young people can learn at an early age how to develop their ability to focus attention, manage stress, and regulate their emotions in the classroom.

This investigation begins with a review of the origins of mindfulness in Buddhism followed by a discussion of the secularization of mindfulness practices leading to its use in public schools. The potential for harm in teaching mindfulness to school children claimed by its critics will then be addressed.

There are a number of scientific studies of mindfulness that will be presented that point to its potential benefits. Based on mindfulness curricula currently in place in public schools, a closer look at what has actually been experienced is discussed. Finally, an analysis of the criticisms of mindfulness in relation to its benefits is made, followed by a summary and conclusions.

Chapter II

The Buddhist Origins of Mindfulness

The Buddha, the Four Noble Truths, and the Eight-Fold Path

Around twenty-five hundred years ago, Siddhartha Gautama, later known as the Buddha or “awakened one,” recognized that everyone experiences varying degrees of suffering. This notion of suffering encompasses a wide range of difficulties and dissatisfaction. From unfulfilled feelings of desire to great physical pain or emotional trauma, suffering is generally recognized as a fact of life. In Buddhism, overcoming suffering is stressed throughout much of its teachings. The “Four Noble Truths” reveal that suffering exists, suffering has a cause, suffering can be ended, and that the way to end it is by following the “Eight-Fold Path” (Goldstein, *Mindfulness* 288). Buddhism’s understanding of suffering is that although it occurs throughout one’s lifetime, it can be effectively dealt with.

Suffering is felt in various ways by an individual. As defined by Joseph Goldstein, co-founder of the Insight Meditation Society and the Barre Center for Buddhist Studies, suffering in the context of Buddhism is often used in reference to the Pali word “duhka” and generally encompasses “words like unsatisfying, unreliable, uneasyful, and stressful” (Goldstein, *Mindfulness* 288-289). This translation of duhka as suffering can be thought of in broader terms than what one may commonly think, such as with physical pain. In fact, there are three different types of duhka that illustrate its manifestations within a person. According to Goldstein, the first involves painful

experiences that are both physical and emotional in nature, due to things that involve injury, illness, and aging (291). Everyone has known physical pain at one time or another that leads one to suffer. Along with this notion of painful experiences are “feelings of fear, jealousy, anger, hatred, anxiety, grief, envy, frustration, loneliness” (291). These are emotional pains that one endures. A second type of suffering comes from the fact that all things change due to impermanence (291). Everything is in a state of flux; nothing can be relied upon to stay the same. People grow old, fresh paint fades, and new clothing becomes tattered and worn. A third kind of suffering discussed by Goldstein is that of the burden of meeting the basic needs of living day to day (295). Every day requires that we must seek food, water, and shelter to survive. Suffering, or “duhka,” is pervasive in our lives.

The Eight-Fold Path to end suffering is comprised of right view, right thought, right speech, right action, and right livelihood, right effort, right mindfulness, and right concentration (Goldstein, *Mindfulness* 320). Right view is also referred to as right understanding and means that one should see things as they really are without preconceived notions (Maguire 92). The meaning of right thought is that one should have good intentions behind their actions (92). Right speech relates to not lying or speaking badly about someone (92). Right action or conduct prohibits killing, stealing, sexual misconduct, and intoxication which are further elaborated upon in what is known as “The Five Precepts” (92). The teaching of right livelihood means that one should engage in work that is healthy and beneficial to others and does not bring harm (94). Right effort relates to the manner in which one performs activities according to a particular situation (94). The teaching of right mindfulness means that one should have

present-moment awareness in all that one does and is discussed at length in The *Satipatthana Sutta*, which is described in the next section. The last step of the Eight-Fold Path is right concentration and refers to quieting one's mind to attain an inner calm and focus (94). Although the use of the word "path" implies a linear sequence to following these teachings, all eight of these steps are seen as having equal importance and should be considered simultaneously in life (91). By following these teachings, suffering can be avoided.

The eight steps in the prescribed path can be grouped into three categories. These groups are "the morality group of Right Speech, Right Action, and Right Livelihood; the concentration group of Right Effort, Right Mindfulness, and Right Concentration; and the wisdom group of Right View and Right Thought" (Goldstein, *Mindfulness* 320). Of the eight teachings found within the Eight-Fold Path, mindfulness is listed as the seventh step and concentration as the eighth step, and are included in the concentration group. Right mindfulness combined with right concentration comprises what is often referred to as "mindfulness meditation." The terms "mindfulness" and "mindfulness meditation" are often used synonymously.

The Satipatthana Sutta and the Foundations of Mindfulness

An ancient Buddhist text known as *The Satipatthana Sutta* presents important teachings in mindfulness (Goldstein, *Mindfulness* 45). Goldstein tells us that "The most common understanding of mindfulness is that of present-moment awareness, presence of mind, wakefulness . . ." (13). We can think of mindfulness in Buddhism as being aware and present in the moment.

Mindfulness addresses the fact that our minds tend to focus on the suffering we experience. However, this only leads to further suffering. As related by Goldstein, “The Buddha uses the example of being struck by two kinds of darts. The painful feeling itself is the first dart, and when we’re not mindful, the unpleasant mental reaction to it is the second. Two darts, striking twice, with the second causing more suffering than the first” (*Mindfulness* 82). The first dart causes the initial pain, but it is the second dart that causes even more pain as we fixate on it in our minds. Although the first dart may be inevitable, the pain of the second dart can be alleviated by training one’s mind. It is the recognition of the causes of suffering and not reacting to them in a way that perpetuates that suffering that is the focus of mindfulness.

Mindfulness in Buddhism is said to be comprised of four foundations, including body, feelings, mind, and dhammas (Goldstein, *Mindfulness* 21). The term “dhammas” in this context refers to observed phenomenon (21). These four elements taken from *The Satipatthana Sutta* are focal points to establish awareness (45). By concentrating on each of these elements, one gains an understanding of how to become aware and present in the moment through mindfulness. In doing so, one can allow the causes of suffering discussed in the four foundations to dissipate by not reacting and being left with only peace of mind. A closer examination of these four foundations is warranted to illustrate the richness of this important Buddhist teaching.

The first foundation, mindfulness of the body, considers a focus on the body “as being the simplest and most direct way for overcoming the onslaughts of Mara, the forces of ignorance and delusion in the mind . . .” (Goldstein, *Mindfulness* 45). Everyone has a body and it is relatively easy for a person to concentrate on various aspects of the body to

become present in the moment. Physical pain and discomfort felt by a person can be relieved in mindfulness practice by acknowledging it while recognizing that we can avoid the second dart of suffering by simply noting such pain and letting go.

Feelings, which is the second foundation, refers to emotions and sensations. As related by Goldstein, “When we’re not mindful, pleasant feelings habitually condition desire and clinging, unpleasant feelings condition dislike and aversion, and neutral feelings condition delusion . . .” (*Mindfulness* 82). Good feelings can create clinging and attachment, which can later cause suffering since they are impermanent. Bad feelings create suffering directly and neutral feelings tend to maintain ignorance, which also ultimately results in suffering. Mindfulness practice teaches that by being present in the moment and not attaching to feelings associated with the past that we have experienced or anticipate in the future we can avoid suffering.

Mindfulness of the mind is an important third foundation of mindfulness. Goldstein tells us that “the Buddha emphasizes knowing the presence or absence of what are known as the three unwholesome roots of mind and how they color or condition our minds. These three roots are greed or lust; hatred, which includes ill will and anger; and delusion or ignorance . . .” (*Mindfulness* 101). Also known as the “three poisons of the mind,” these unwholesome factors cause us to suffer rather than finding happiness. The benefit of questioning and recognizing these states of mind for someone experiencing difficulties is that by simply being aware of these states of mind we can avoid clinging or aversion (103). Being mindful of the mind results in dissipating the unwholesome thoughts one may have.

The fourth foundation of mindfulness is mindfulness of “mental objects” or what

can be described as “categories of phenomenon” (Goldstein, *Mindfulness* 121). This fourth foundation includes a discussion of what the Buddha referred to as the hindrances, the aggregates, the sense spheres, the factors for awakening, as well as the four noble truths (121). *The Satipatthana Sutta* describes each of these elements of the Buddha’s teachings in detail.

The hindrances referenced in the fourth foundation of mindfulness are stated as “the five hindrances.” These five hindrances are comprised of desire, ill will, restlessness and compunction, sloth and torpor, as well as doubt (Kozak 60). Desire is the attraction toward something that causes the mind to lose focus on the present moment. Ill will is aversion against something, be it physical pain or thoughts as well as situations that are unpleasant (Goldstein, *Mindfulness* 132). Restlessness is the feeling of agitation, worry, or anxiety one has when contemplating what may have been unskillful actions in the past or concern about the future (155). Sloth and torpor refer to a feeling of dullness of consciousness or sleepiness (141). Lastly, doubt is a lack of certainty in one’s ability to practice mindfulness or in the teachings of the Buddha in general (165). These are obstacles to mindfulness that prevent one from achieving present-moment awareness to avoid or find relief from suffering.

The fourth foundation of mindfulness goes on to examine the notion of the self in “what are called ‘the five aggregates’ (khandhas, in Pali) of experience: material elements, feelings, perceptions, formations, and consciousness . . . to deconstruct the deeply held concept of self” (Goldstein, *Mindfulness* 171). The self as we know it is composed of these five parts and should not be considered as a single entity. Goldstein indicates that “In *The Satipatthana Sutta* and in many other discourses as well, the

Buddha doesn't refer to just the five aggregates, but often uses the expanded phrase 'the five aggregates of clinging . . . and it is this clinging to the aggregates that is the underlying cause of suffering' (172). People often cling to the components of the self, causing suffering as does clinging to anything else. For example, clinging to the material elements, the parts of the body, will only cause suffering as we age. Formations are referred to as "mental factors [and] are the building blocks of all mental activity, including thoughts, emotions, moods, and mind states" and are constantly in flux (183). This idea of self in the five aggregates is also subject to impermanency. People suffer as a result of clinging to these five aspects of what they see as their self since they change over time along with everything else. However, Goldstein instructs us that "From contemplating the impermanent, unsatisfying nature of the aggregates, we open to the deepest experience of them as non-self" (197). This is to suggest that by looking closer at the five parts of what one considers to be their self, it can be seen that there is no single self to identify with. What one thinks of as self is merely an aggregate of various components. Further, by viewing the self in this way we can achieve freedom from clinging to the idea of the self as a whole (202). By losing our attachment to these deconstructed pieces of the self, we avoid suffering as a result.

The sense spheres presented in the fourth foundation are divided into six internal and six external factors (Goldstein, *Mindfulness* 225). The six internal spheres are the sense organs of "eye, ear, nose, tongue, body, and mind" whereas the six external spheres are the objects of the sense organs and include "visible forms, sounds, odors, tastes, tactile sensations, and mind objects" (225). Each of the sense spheres contribute to how the world is experienced and is a part of our present-moment awareness.

The Satipatthana Sutta also discusses “the seven factors for awakening,” known as the “seven treasures,” which include “mindfulness, discrimination of states, energy, rapture, calm, concentration, and equanimity” (Goldstein, *Mindfulness* 225). These teachings for awakening during mindfulness practice all contribute to allowing a person to focus on wholesome states and avoid suffering. By focusing on each of these elements, one gains an understanding of how to become aware and present in the moment through mindfulness.

Buddhist Mindfulness Practices Today

There are three major schools of Buddhism: Theravada, Mahayana, and Vajrayana Buddhism. After the death of Siddhartha Gautama in 486 B.C.E., what was known as Theravada Buddhism, or “teachings of the elders,” was established to promulgate his wisdoms (Maguire 34). In the first century C.E., a second school of Buddhist thought emerged. It was referred to as Mahayana, or the “greater vehicle,” and contrasted itself with Theravada by its followers derisively deeming it Hinayana Buddhism, or the “lessor vehicle” (35). Whereas followers of Theravada Buddhism focus on achieving personal enlightenment, followers of Mahayana Buddhism recognize the interdependence of people and strive to “alleviate the suffering of all sentient beings” (Snelling 31). Today Theravada Buddhism is found in Cambodia, Myanmar, Sri Lanka, and Thailand while Mahayana predominates in China, Japan, Korea, and Vietnam (Maguire 35). A third school of Buddhism known as Vajrayana arose from Mahayana in the third century C.E. (36). It is noted for reliance on a personal guru who will guide them toward enlightenment. This is referred to as the “diamond vehicle,” so called “for

the indestructibility of its message . . .” (36). Vajrayana Buddhists, led by the Dalai Lama, were concentrated in Tibet, but after the Chinese invasion in the mid-twentieth century these Buddhists fled to Northern India. Vajrayana Buddhism, however, is still often referred to as Tibetan Buddhism.

In these schools of Buddhism one finds specific teachings related to mindfulness. They each offer their own interpretation of mindfulness practice. In the Theravada school, “samatha,” translated from the original Pali language as “calm abiding” as well as “vipassana,” translated as “insight” meditation, are practiced (Snelling 30-31). While both samatha and vipassana meditations are to be used to develop focus and concentration, samatha is conducted “without undue exertion on a chosen object and with calming and stabilizing the mind so that it is no longer disturbed by deluding excitations . . .” (30). On the other hand, vipassana meditation uses the skills developed in samatha to then “inquire penetratively into the true nature of things. Intense observation and analysis of phenomena encountered will . . . reveal that all are subject to dukha [suffering], anitya [impermanence], and anatman [nonself] . . . (31). Samatha meditation is described as calming the mind to allow it to focus and become aware, but vipassana meditation takes it further to concentrate upon the nature of phenomena. This in turn leads to enlightenment and Nirvana (31). It can be said that enlightenment and Nirvana are the ultimate goals of vipassana meditation.

Teachers of samatha and vipassana meditation instruct one to develop present-moment awareness by strengthening mental focus. The meditator should “Sit comfortably, with your back straight but not stiff or tense. Gently close your eyes and feel the sensations of the breath as air passes the nostrils or upper lip” (Goldstein,

Vipassana 116). Your hands should rest comfortably on your knees or in your lap (Goldstein, *One Dharma* 92). Mindfulness meditation should be done in a relaxed manner while sitting up straight and with eyes closed.

Once the physical posture is assumed, mindfulness meditation can then be pursued with certain guidance for mental conditioning. Goldstein suggests that “It can be helpful in the beginning to focus primarily, although not exclusively, on the breath. Focusing in this way helps stabilize attention, keeping us mindful and alert” (*Vipassana* 117). Focus on the breath is an important way to train one’s mind. He also discusses the concepts of mental noting and labeling. As one meditates, the awareness of any sensation such as pain, sounds, or images can simply be mentally noted as a way to develop nonreactive awareness (119). Labeling sensations is “like putting a frame around a picture, helps you recognize the object more clearly and gives greater focus and precision to your observation” (118). By mentally noting and labeling sensations that arise, one can foster present-moment awareness. It allows one to recognize a sensation but set it aside and return to the breath. This builds the capacity for a person to mentally focus and be aware.

Zen, a school of Mahayana Buddhism, teaches “zazen” or “just sitting” meditation (Snelling 33-34). According to Snelling, zazen meditation emphasizes sitting with no thoughts, “It is not a conscious endeavor of any kind. There should be no expectations” (34). Performing Zen meditation in this way allows one to achieve enlightenment. In contrast to the relaxed approach prescribed in vipassana meditation, Zen masters are very specific when it comes to the state of the physical body. Zen master Zenji Dogen, founder of the Soto school of Buddhism in Japan, tells us that a cushion

should be used to sit on and that one should assume either a full lotus position where each foot is placed on the opposite thigh or half lotus in which only the left foot is placed on the right thigh (Dogen 111). Further, one should “place the right hand on the left leg, and the left hand on the right hand, with palms facing upward. The two thumbs face each other and hold each other up” (112). He goes on to say, “sit upright, with your body straight . . . The tongue should rest on the upper palate, the teeth and lips should be closed. The eyes should always be open” (112). The physical posture prescribed in zazen is very detailed.

According to Dogen, after assuming the physical position, meditation is conducted by “letting go of all mental objects, taking a respite from all concerns, not thinking of good or evil, not being concerned with right or wrong, halt the operation of the mind, intellect, and consciousness, stop assessment by thought, imagination, and view” (Dogen 111). The nature of Zen meditation is that of detaching oneself from all thoughts. It is said that Zen “cannot be apprehended by intellectual means, and cannot be conceived or interpreted even after the most unequivocal and incontestable experiences: one knows it by not knowing it” (Herrigel 6). Zen transcends a text book approach; one sits with a clear mind, with complete awareness, but without thought. As Herrigel tells us, “no reasonable person would expect the Zen adept to do more than hint at the experiences which have liberated and changed him, or to attempt to describe the unimaginable and ineffable ‘Truth’ by which he now lives” (8). Zen meditation cannot be taught, it can only be learned through direct experience. With the attitude of a novice who does not obsess about what to do and what not to do, a person practicing Zen simply does.

Meditation in Tibetan Buddhism is discussed by Tenzin Gyatso, the 14th Dalai Lama. Regarding one's posture, "arrange the legs in the most comfortable position; set the backbone as straight as an arrow. Place your hands in the position of meditative equipoise, four fingers widths below the navel, with the left hand on the bottom, right hand on top, and thumbs touching to form a triangle" (Gyatso 113). He goes on to say "bending the neck down slightly, allow the mouth and teeth to be as usual, with the top of the tongue touching the roof of the mouth near the top teeth. Let the eyes gaze downwards loosely . . . do not open the eyes too wide nor forcefully close them; leave them open a little. Sometimes they will close of their own accord, that is all right" (113). Although more specific than samatha or vipassana meditation, Tibetan meditation is less rigid than zazen.

The Dalai Lama also provides guidance on the state of one's mind during the practice of Tibetan meditation. He instructs that one should not think of the past or the future, and that one should avoid mental conceptions (Gyatso 114). He states that one should "let the mind flow of its own accord without conceptual overlay. Let the mind rest in a natural state, and observe it" (115). One should simply strive to observe one's own consciousness.

Beyond these teachings of mindfulness meditation, there are a number of other schools of Buddhism within the three major branches that each have their own interpretations of it. For example, also found in Mahayana Buddhism is Pure Land meditation which places "primary emphasis on the Nembutsu: the repetition of the name of Amitabha (Japanese Amida). Such a practice must pacify thoughts and establish mental calmness mindfulness and concentration" (Snelling 32). Tantric meditation is

used in Vajrayana Buddhism and “aims at bringing about enlightenment very speedily by special yogic means (35). Masters from each of these schools provide specific instructions regarding the physical posture, the nature of the meditation, and its goal.

Perspectives on Buddhist Teachings

There are those that find that the practice of mindfulness does not define one as Buddhist. They point out that what are considered to be Buddhist practices are available to those practicing other religions. Mong writes “we do not have to be Buddhists or stop being Christians or Hindus to follow the teaching of Buddha” (101). In his estimation, the Buddhist practice of mindfulness can be adopted by a faithful Christian without becoming a Buddhist (101). There are also other teachings in Buddhism that are found outside of the Buddhist religion. The Buddhist teachings of proper speech and not taking what is not given found in The Five Precepts are also prohibitions found in The Ten Commandments of the Abrahamic traditions of Judaism, Christianity, and Islam. These Abrahamic traditions teach that The Ten Commandments are the word of a supreme being, God (theistic), whereas the Buddhist tradition has no such supreme being (nontheistic), yet teaches adherence to The Five Precepts as a means to achieve good karma and a favorable reincarnation. In fact, secular law statutes prohibit slander and stealing as well. Teachings found in Buddhism are found in other religions as well as in secular society.

Batchelor believes that certain Buddhist teachings can be ignored while still following other teachings. He points to reincarnation as a teaching he rejects while finding value in other Buddhist teachings (36). Batchelor claims that one can pick and

choose teachings found in Buddhism to follow that are meaningful, including mindfulness. Moreover, there are many Buddhist lay followers that do not practice mindfulness meditation. Traditionally, mindfulness meditation was the province of Buddhist monks while others in the Buddhist laity did not participate in this practice (Kozak 73). The practice of mindfulness can be used by non-Buddhists, yet is not necessarily used by Buddhists.

Chapter III

Secular Mindfulness

The Development of Mindfulness-Based Stress Reduction (MBSR)

There were a series of events that took place in the latter half of the twentieth century that led to the fuller appreciation of mindfulness meditation in America. In time, its Buddhist origins were set aside as its benefits were recognized in a secularized version of mindfulness practice. First, the Beatles, a wildly popular rock band, travelled to India in 1968 to study Transcendental Meditation (TM) with Maharishi Mahesh Yogi (Harrington 209). This meditative technique involves the use of a mantra, a special word given to each person, which is to be repeated over and over again to achieve a heightened sense of awareness (211). The Maharishi was soon after featured on the cover of *Time* magazine and achieved something of rock star status himself in America. The practice of meditation was brought to the attention of many Americans by the publicity surrounding the Beatles and the Maharishi.

In 1969, soon after the Beatles studied Transcendental Meditation with Maharishi Mahesh Yogi, Robert Wallace, a University of California at Los Angeles graduate student, decided to test the actual physical effects of TM (Harrington 213). By studying the effects of TM on student volunteers, he found “significant changes in their physiological state: reductions in oxygen consumption, reductions in resting heart rate, and changes in skin resistance” (213). Beyond this, he found that electroencephalographic (EEG) recordings showed changes in the brain wave activity of the participants (213). Robert Wallace had succeeded in proving that TM produced

physical changes in those that practiced it, validating the legitimacy of TM.

Attention again turned to the East in 1972 when President Richard Nixon travelled to China to meet with the Chinese leader, Chairman Mao (Harrington 228). At the conclusion of their meeting, Americans were informed of cultural exchanges to take place between the two nations to further their mutual understanding. In 1973, the film *Enter the Dragon*, starring Bruce Lee as a hero skilled in martial arts, was released and quickly became very popular (224). It elevated the level of respect and admiration for the Chinese culture. In 1979, David Eisenberg was recognized as the first exchange student to China since 1949 and the Communist revolution (228). Americans were now seeing China as a place of great interest as well as that the Chinese people had much to offer.

With the attention placed on Eastern culture and practices, another person that became interested in testing TM at that time was Herbert Benson, M.D., a cardiologist with Harvard Medical School (Harrington 214). As a cardiologist, he was concerned with the effect that meditation might have on the heart. He had been approached by some TM practitioners with the notion that meditation could be used to reduce stress and therefore impact blood pressure (215). Benson had heard of the work by Robert Wallace and proposed that they collaborate together along with another colleague, Archie Wilson (216). These three undertook a scientific analysis of meditation to verify what, if any, effects meditative practice would have on the mind and body. After their study, they “found clear evidence for widespread physiological effects of meditation on both brain and body” (216). Meditation was demonstrated to be a means of reducing stress and relieving pain. This confirmed that the practice of TM could be used to deliberately impact one’s body in a positive way by evoking a state of mind.

As Herbert Benson considered the implications of his study of Transcendental Meditation, he became concerned with its religious context and how publication of his results would be received (Harrington 217). Benson published a book in 1974 to describe his study simply named *The Relaxation Response* in an effort to disassociate his study of meditation from any unnecessary religious baggage (218). In doing so, he began what can be seen as an effort to secularize meditation. This would allow people of faiths other than Hindu or Buddhist to embrace meditation without feeling that they were somehow compromising their own religious tradition. It would open the door to the use of meditation to a largely Christian America.

The Dalai Lama, the exiled spiritual leader of Tibet, arrived in the United States for a forty-nine day tour to speak about Buddhism in 1979 (Harrington 230). While visiting Harvard University, Herbert Benson was able to speak with the Dalai Lama about doing research into Buddhist meditation (232). Benson eventually tested the Tibetan meditative practice, referred to as “g Tum-mo,” in which “advanced practitioners were said to be able to regulate their heat production in ways that allowed them to stay warm even in frigid weather conditions” (232). He found that Tibetan meditation could allow people to control what were considered to be involuntary body functions with their mind. Richard Davidson, a professor of psychology from the University of Wisconsin, also had the opportunity to test meditation working with the Mind Body Institute and a Tibetan Buddhist monk named Matthieu Ricard (239). After attaching 128 electrodes to Ricard’s head and asking him to meditate, researchers recorded powerful gamma wave activity unlike what they had seen except for patients under anesthesia, proving the power of meditation (241). Like Wallace, Benson and Davidson demonstrated the power of the

mind through the scientific analysis of meditation.

Chinese medical practices were introduced to the West by Bill Moyers, a well-known American journalist, and David Eisenberg on the Public Broadcasting System in 1993 with a five part series titled *Healing and the Mind* (Harrington 222). It included discussions of herbal remedies and acupuncture along with the notion of “qi,” described as “an invisible life force” (223). It was believed that qi could be strengthened and directed using the mental exercise known as “gigong” (223). By this training of the mind, the Chinese claimed to benefit their physical health. This furthered the perceived connection between the mind and body for people of the West.

Jon Kabat-Zinn was another student of meditation, but of the Buddhist “vipassana” meditation, which relies upon focused attention rather than transcendental meditation (Harrington 220). He too recognized the positive physiological effects of meditation on people. Having a Ph.D. in molecular biology, in 1979 he was able to establish a program at the University of Massachusetts Medical Center in Worcester, MA in which patients suffering from pain and other chronic illnesses could learn a reinvented version of mindfulness meditation (220). Like Benson, he was concerned about the perception of mindfulness as an Eastern religious practice, so he too positioned it as simply a way of relieving stress. He named his program Mindfulness-Based Stress Reduction (MBSR) and published a book discussing the use of his MBSR practice titled *Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness* (221). Jon Kabat-Zinn was able to take mindfulness meditation from its religious context and secularize it for use as a healing practice to alleviate stress and pain for people in the West.

Today this secularized version of mindfulness is used by an ever growing number of people to help them cope with stress and other difficulties in their lives. These are people that would not consider themselves to be Buddhists, yet they have been able to use the reworked practice of mindfulness to find an inner strength to deal with challenging events in their life. Jon Kabat-Zinn's MBSR program has spread to over seven hundred twenty hospitals and clinics around the world (Kabat-Zinn xlvii). Over the years, more and more people have recognized that mindfulness can help them avoid and overcome both physical and emotional pain. There are now numerous organizations that exist as centers for mindfulness meditation. An internet search can provide the names and locations of such organizations as well as access to publications and audio recordings of guided meditations. As Kabat-Zinn defines it, "mindfulness is moment-to-moment non-judgmental awareness . . . It is a systematic approach to developing new kinds of agency, control, and wisdom in our lives, based on our inner capacity for paying attention and on the awareness, insight, and compassion that naturally arise from paying attention in specific ways" (xlvix). Mindfulness can be described as a tool to develop control and wisdom through awareness and methods of simply "paying attention." This secularized version of mindfulness was originally inspired by a particular Buddhist teaching, but has now been embraced by many to improve their well-being.

The Seven Pillars of Mindfulness in MBSR

In the MBSR clinics, there are established techniques for promoting the ability to deal with stress and difficulty using this secularized version of mindfulness. Kabat-Zinn takes the concept of mindfulness found amongst the vast teachings of Buddhism and

removes it from its context in the Eight-Fold Path. He developed his understanding of mindfulness as the “seven pillars” of mindfulness in his MBSR clinic. As related by Kabat-Zinn, “Seven attitudinal factors constitute the major pillars of mindfulness practice . . . they are non-judging, patience, a beginner’s mind, trust, non-striving, acceptance, and letting go” (21). Teaching the practice of mindfulness in the MBSR clinics is founded on core principles that provide one with the ability to cope with adversity in life.

MBSR is based upon the realization that there are attitudes people have that can either help or hurt one’s ability to deal with personal challenges. The teaching of “non-judging” means that one should not approach each experience with preconceived opinions about it (Kabat-Zinn 21). Having “patience” allows one to appreciate the unfolding of each moment without being anxious or tense (23). A “beginners mind” refers to the ability to have an open mind to see things as they really are (24). The notion of “trust” is to say that one should believe in their own instincts and intuition and not simply rely on others (27). By “non-striving,” this is to say that when one engages in the practice of mindfulness meditation, unlike other endeavors, they should not be goal oriented. While most of life’s activities are geared toward achieving a goal, mindfulness meditation should simply be allowed to take its own course when focusing on the present-moment (26). The MBSR pillar of “acceptance” means that one should deal with things as they currently are. Instead of ruminating on thoughts of how something was or should be, acceptance means coming to terms with its current state. As Kabat-Zinn indicates, “Often acceptance is reached only after we have gone through very emotion-filled periods of denial and then anger” (27). By accepting things as they are, one can avoid much emotional pain. The pillar of “letting go” teaches us that we should not hold

onto things or try to push them away (30). This concept of letting go is based on the understanding that obsessing about unpleasant or painful thoughts only causes more difficulty. Through mindfulness one learns to maintain a focus in the present-moment and not on what was or could have been.

When participating in an MBSR session, one is given instructions to either sit erect on a chair or the floor using a thick cushion (Kabat-Zinn 57). According to Jon Kabat-Zinn, “It helps a lot to adopt an erect and dignified posture, with your head, neck, and back aligned vertically. This allows the breath to flow most easily. It is also the physical counterpart of the inner attitudes of self-reliance, self-acceptance, and alert attention that we are cultivating” (57). Further, the shoulders should be relaxed and one’s hands should rest on their knees or lap comfortably (58). The practice of mindfulness in MBSR includes guidance in one’s proper posture while focusing on one’s breath.

Beyond the seven pillars that comprise the attitudes that are the foundations of the mindfulness practice prescribed in the MBSR clinics, there are additional qualities seen as important elements in secular mindfulness. Kabat-Zinn lists these “as deepening the embodiment of mindfulness in our lives. These include cultivating attitudes of non-harming, generosity, gratitude, forbearance, forgiveness, empathetic joy, and equanimity” (31). There are particular ways of thinking that are to be embraced in the practice of mindfulness. By being aware, or mindful, of the positive nature of these attitudes we can see events in our lives in a different light. We can encourage certain ways of viewing ourselves in relation to the world that allow us to be free from negative thinking that only accentuates the stress and difficulties we encounter in life. Mindfulness as a secular practice is a way to train one’s mind to perceive events with a positive outlook.

Mindfulness and Psychology

Dr. Ellen Langer, a Professor of Psychology at Harvard University, considers mindfulness from a purely psychological perspective. In her view, “the notion of mindfulness develops gradually by looking at mindlessness and then at the other side of the coin” (Langer 78). This is to say that rather than doing things without thinking or mindlessly, one should “pay attention.” Langer frames the issue of mindlessness as an unconscious process of placing information into categories and acting accordingly, which is problematic when faced with new information that does not quite fit (63). She finds that while “mindlessness is the rigid reliance on old categories, mindfulness means the continual creation of new ones” (63). Mindfulness allows people to be open and accepting of new information without reacting to it inappropriately or dismissing it entirely because of a previously held notion. Preconceived ideas and judgments keep us from realizing the potential of new information. By being mindful, we can develop new categories of information as necessary and act in a more appropriate way.

The concept of mindfulness extends to accepting differing points of view as well (Langer 68). Langer tells us that “once we become mindfully aware of views other than our own, we start to realize that there are as many different points of view as there are observers. Such awareness is potentially liberating” (68). When we are able to accept the fact that others may view something differently and be open to them, it allows us to reassess our own understanding and realize the other options available to us. She finds that “mindful awareness of different options gives us greater control” (202). When we are open to the views of others, we can have more flexibility in how we act.

Without any basis in religion, mindfulness can be seen as a positive psychological concept. According to Langer, mindfulness from a completely secular vantage point is simply paying attention, being aware, and accepting without judgment. While acknowledging that mindfulness is also found in Eastern religions, Langer notes that her “work on mindfulness has been conducted almost entirely within the Western scientific perspective” (78). By approaching the concept of mindfulness from a science based psychological vantage point, Langer reaches the same conclusion as others that mindfulness is beneficial to one’s well-being.

Religion and MBSR

Proponents of MBSR claim that it is a secularized version of mindfulness; that the religious origins have been stripped away. Some may question what it means to secularize a religious teaching. To address this, it is helpful to examine what is meant by the term “religion.” There have been many opinions as to what constitutes a “religion” over the years. The Oxford Dictionary defines this as “The belief in and worship of a superhuman controlling power, especially a personal God or gods . . . A particular system of faith and worship . . .” (Religion). A broader definition of religion describes it as “a spiritual or non-secular belief system, held by a group of adherents, which claims to explain mankind’s place in the universe and relationship with the infinite, and to teach its adherents how they are to live their lives in conformity with the spiritual understanding associated with the belief system” (Zucca 6). In these two definitions, we see a basic contrast in the understanding of religion, one that includes a supreme being as an essential focus and another that incorporates a set of beliefs and behaviors by a group of

people of a spiritual nature without reference to a deity. This is important in the case of Buddhism since there is no recognized deity in its belief system. This is why there are those that view Buddhism as a way of life or philosophy to live by rather than as a religion. For anyone who believes a supreme deity is an integral part of religious activity, Buddhism does not qualify as a religion.

According to Batchelor, “religions are united not by belief in God but by belief in life after death” (Batchelor 34). Religions may differ in significant ways regarding their system of beliefs, yet they all seem to hold an understanding that there is a continuation of one’s life in some form after physical death. Further, each religion appears to have its own beliefs that prescribe the proper behavior of a follower. Those that share this belief system and prescribed behaviors can be said to belong to a larger group of fellow believers. However, it is the understanding that there is some essence of one’s being that survives physical death that can be said to distinguish this group of believers as a religious group. Otherwise, the beliefs, behaviors, and sense of belonging to a larger group can simply be applied to groups such as sports teams and their fans. Although their fervor may approach that of a religious group, it cannot seriously be considered a religion. It is this concept of life after death that in turn becomes the impetus for adhering to the beliefs of a religion; that there are consequences to one’s actions during their lifetime after death.

In the Abrahamic traditions of Judaism, Christianity, and Islam there is the judgment by God that will determine the consequences of those actions. If the teachings in these religions are followed faithfully, there will be rewards in the afterlife. If one’s actions are counter to those teachings, then God will punish a person for their

transgressions. In a similar vein, Buddhists understand that one's actions have serious consequences after death. However, because Buddhism is nontheistic, having no God to judge one's actions, it relies on the laws of what is known as "karma" to determine the repercussions of how one lives their life. According to these laws of karma, after death one's essence will be reincarnated based on how they lived their life. In fact, according to Buddhist teachings there are six realms in which a person may be reborn, consisting of the god realm, the human realm, the realm of jealous gods, the animal realm, the realm of hungry ghosts, and the hell realm (Kozak 85). The Buddhist understanding is that although there is no God, there is an afterlife which is determined by how well one followed the teachings of Buddhism, based on the laws of karma.

Within MBSR, there are beliefs and behaviors that are shared by a group of participants. However, its teachings are not related to a belief in the continuation of life after death. The sole concern of MBSR is to diminish one's stress and other difficulties while increasing one's level of well-being. In light of this lack of an associated teaching of life after physical death, MBSR fails to meet this test of being religious in nature.

As a result of a belief in some form of life continuing after one's physical death, there is a code of conduct prescribed as part of the belief system of a religion so as to achieve a favorable outcome after death. This code of conduct generally includes teachings such as prohibiting murder, stealing, and lying to name a few. These are often referred to as "moral values." It is this sense of morality in the form of a code of conduct that is an essential part of any religion. In order to ascend to heaven instead of hell in Christianity, or have a rebirth in good circumstances as a human in Buddhism, one must follow the moral teachings of the respective religion. There appears to be a lack of

any such moral guidance in MBSR. MBSR fails to meet the characteristic of teaching religious values on these grounds. Whereas Buddhist mindfulness is couched in the Eight-Fold Path within the teachings of Buddhism, which includes numerous writings on morality, mindfulness presented in MBSR has no other associated guidance. MBSR as an independent practice is not religious in nature.

Mindfulness in the Classroom

With the success of MBSR in health care settings came the development of mindfulness training in other areas of public life, such as the workplace as well as in public schools. School children have been shown to have a great deal of stress in their lives as they compete in classes for grades, struggle with attention and focus on their work, navigate relationships with peers, and meet the challenges of varying degrees of difficulties outside of school. It was thought by advocates of mindfulness that by teaching how to reduce stress along with the virtues of focus and paying attention, which are the hallmarks of mindfulness, that students may do better academically and psychologically.

A growing number of organizations now exist to train students and teachers in mindfulness using curriculum they have developed (Davis 5). With the increasing interest in the use of mindfulness as a tool for teachers to help students focus, relieve stress, and regulate their emotions, organizations have emerged to fulfill this need. There are large international curriculum providers, regional providers, and smaller one's including individual schools that have developed mindfulness programs that offer it to educators. Each of these organizations have developed their own customized approach to

addressing the concepts behind mindfulness. As these providers have proliferated, there has been an evolution in the teaching of mindfulness from the original MBSR developed by Jon Kabat-Zinn.

One of the largest providers is California based Mindful Schools, which is considered to be on the forefront of the growing movement to include mindfulness in public education (Davis 5). According to their web site, Mindful Schools has reached more than 750,000 students since 2007 in all fifty states and over one-hundred countries (Mindful Schools). They see “toxic stress” in students, teachers, and parents as causing a variety of difficulties (Mindful Schools). Their “courses establish two forms of training as the foundation for teaching other methods of stress management, emotion regulation and interpersonal skills . . . The development of mindfulness, a moment-by-moment awareness of our thoughts, emotions, sensations and surrounding environment [and] the development of heartfulness - The intentional nurturing of positive mind states such as kindness and compassion” (Mindful Schools). Mindful Schools offers training in mindfulness as well as what they term as “heartfulness.” They provide teacher certification programs along with two sets of curriculum for children, having one for grades K-5 and one for grades 6-12 (Mindful Schools).

As stated in their “Guidelines for Secular Teaching of Mindfulness” found on the Mindful Schools web site, “When we share mindfulness, we are not attempting to impose a comprehensive belief system. Nor are we attempting to advance or inhibit any religious commitments that students or educators may hold. Our objective is simple: to support the well-being of students and educators by sharing simple practices and psychoeducation, and to develop an attitude of inquiry around how the mind works”

(Mindful Schools). Mindful Schools takes great care to specify that their curriculum is to be taught in a secular way. In addition, they list the following set of recommendations for teaching mindfulness:

1. “Mindfulness practices should be articulated in the primary instructional language or languages (in the case of bilingual education).
2. No classroom can be conducted in a completely value-neutral manner and it is reasonable to affirm humanistic values such as kindness, cooperation, empathy or concentration. However, mindfulness is not an attempt to teach a comprehensive ethical system.
3. Teach the practices in a direct, experiential manner whereby practitioners can examine the validity of the claims within their own subjective experience (e.g. when doing seated mindfulness practice, students can directly perceive the attention wandering away from the mindfulness anchor). The spirit is one of encouraging curiosity as if conducting an experiment with one’s own mind and body.
4. Do not assert or intimate claims about metaphysics (e.g. “the nature of the universe is love”). If such questions or comments arise from students, support their curiosity while clarifying the scope of mindfulness practice and redirect the conversation to the subjective or empirical realm.
5. Frame mindfulness as a practice about subjective experiences rather than about overarching truths of the universe.
6. Do not include symbols or artifacts closely linked to a particular religious tradition (e.g. making particular gestures with one’s hands, bowing, using religious props, etc.).
7. Do not substantiate the practices on the basis of religious figures or texts. At the same time, take care not to denigrate religious practices or texts.
8. Teach in a manner consistent with current scientific understandings of human biology and behavior.” (Mindful Schools)

Mindful Schools lists the directives above in order to ensure that their curriculum is not interpreted as having a religious connection by students or their parents. To reap the benefits of mindfulness in a school setting, it is essential that it does not entail the cosmology of a religious belief system; that it is conducted as an independent practice. Mindfulness stands on its own merit based on scientific understandings and to suggest otherwise undermines the benefits that can be derived.

The Hawn Foundation was started by actor Goldie Hawn as a reaction to the observation that children suffer from high levels of stress and desperately need tools to help them deal with the increasingly challenging world around them (MindUP). Consequently, the Hawn Foundation developed MindUP, a mindfulness training curriculum “serving nearly 1 million children in the US, Canada, UK, Serbia, Mexico, Hong Kong, Australia and New Zealand” (MindUP). It is centered on what is referred to as “Four Strategic Pillars: MindUP is grounded in neuroscience, activated by mindful awareness, inspired by positive psychology, [and is] a catalyst for social-emotional learning” (MindUP). As indicated on the MindUP web site, mindfulness practices are taught which help children “improve learning and academic performance and learn valuable social and emotional skills that build personal resilience for a lifetime” (MindUP). The MindUP curriculum promises to develop social and emotional skills as well as boost academic performance through the use of mindfulness techniques. There are materials available based on the grade level of the students: K-2, 3-5, and 6-8 (Maloney et al. 316). These include “15 lessons . . . [in which] each component of the program builds on previous skills learned, moving children from focusing on internal experiences (e.g., mindful smelling, mindful tasting) to cognitive experiences (e.g., taking others’ perspectives), to students practicing gratitude, and ending with students enacting acts of kindness to others in their home, classroom, and community” (316). MindUP provides a variety of mindfulness skills to elementary and middle school students.

In Massachusetts, Calmer Choice was founded in 2010 to serve the fifteen towns found on Cape Cod and its twenty-five-thousand grades K-12 students (Calmer Choice).

Their understanding is that, “it has become clear that most mental, emotional and behavioral challenges actually begin in childhood. Providing Calmer Choice to elementary students capitalizes on important developmental windows that can set the stage for a lifetime of healthy behaviors, opportunities that can have the potential to improve the health and well-being of an entire generation” (Calmer Choice). They see that issues faced by students can be addressed early on with tools provided through mindfulness leading to the successful management of them while in school and throughout the rest of their lives.

Calmer Choice claims that it has provided mindfulness programs directly to over six-thousand students using a variety of age appropriate training sessions (Calmer Choice). These programs “have been informed by many things including *Developmental Frames of Reference* (Bandura, Piaget, Vygotsky, etc.), *Cognitive Behavioral Therapy* (Butler, Chapman, & Beck 2006), *Systems Theory* (von Bertalanffy), *Interpersonal Neurobiology* (Siegle), *Emotional Intelligence* (Goleman), and *Mindfulness-Based Cognitive Therapy* (MBCT) (Zindel, Williams, Teasdale)” (Calmer Choice). Calmer Choice’s programs include components which specifically address the “Social and Emotional Health” aspects of the Massachusetts Curriculum Framework for Comprehensive Health (Calmer Choice). The mindfulness programs they offer are grounded in the scientific study of behavioral development. They now offer training programs directed toward teachers to allow them to conduct mindfulness sessions for students (Calmer Choice). As a result of their success in teaching mindfulness program to students, to meet the demands of Cape Cod schools Calmer Choice has expanded their offerings to include instruction on how to teach mindfulness to teachers.

Founded in 1999, Innovation Research & Training (iRT), based in North Carolina, is an organization that offers a variety of curriculum products for schools. Among them is “Master Mind,” a program designed to introduce mindfulness education and substance abuse prevention to children in elementary schools (Master Mind). According to their web site, its goals are three-fold:

- 1) “Encourage the development of positive health outcomes: Through class discussions, activities and group work, students develop mindfulness skills that help improve self-control,
- 2) Enhance decision-making skills: This program is designed to provide students with the skills necessary to evaluate risky situations surrounding substance use and to make healthy decisions to abstain from use in those situations,
- 3) Increase coping strategies: Students who complete the Master Mind program can develop effective strategies for coping with stress.” (Master Mind)

The Master Mind curriculum includes materials for both teacher and student training and is designed to be conducted for fifteen minutes each day at the beginning of class over a four week period (Master Mind). Its curriculum focuses on four foundations, including awareness of one’s “Body (e.g., attention to the present moment), Feelings (e.g., awareness and control over emotions), Thoughts (e.g., responding thoughtfully rather than reacting), and Relationships (e.g., effectively communicating with others)” (Master Mind). This is accomplished by teaching skills in “mindfulness meditation, mindful movement, breathing techniques, and application of skills to everyday life (e.g., how to effectively deal with challenging peer situations)” (Master Mind). The Master Mind program offers a comprehensive method to teach mindfulness in public schools.

Another curriculum provider is Stressed Teens, founded by Gina Biegel, a psychotherapist (Wallace). According to the Stressed Teens web site, “Stressed Teens is a Mindfulness-Based Stress Reduction for Teens (MBSR-T) program. The MBSR-T

intervention is closely related to the traditional MBSR program created by Kabat-Zinn and colleagues. The MBSR-T program is meant to be a program to use with adolescents vs. the traditional MBSR program for adults” (Biegel). Biegel believes that “Mindfulness is another way of looking at life skills. It’s really being present to what we’re doing” (Wallace). Further, “What mindfulness does is it helps teens build “from the forces they already have within” and this can boost self-confidence and self-esteem, and lead them to be less focused on judgment . . . if you look at how teens perceive things, perceive and appraise them as stressful, that shifts and changes with mindfulness . . .” (Wallace). According to Biegel, mindfulness can reduce the stress that teens experience and have more confidence in themselves.

The South Burlington School District in South Burlington, Vermont provides mindfulness instruction in its curricula for students and also offers it in the form of a training manual for sale to the public. They state that the mission of this program is to “promote wellness among our pre-K-12 students, staff, and families” (South Burlington). Mindfulness instruction is seen as a means to foster wellness not only in the students attending South Burlington schools, but also in their staff and the families of their students. Their web site notes that “Research indicates that healthy decision-making and resiliency develop from a foundation of self-awareness and self-regulation” (South Burlington). The use of mindfulness is seen as the means for students to achieve self-control and the ability to regulate their emotions, resulting in proper decision-making. The success of this program has led them to be confident enough to offer the materials they developed for sale on their website as a tool for others to teach mindfulness.

Chapter IV

Potential Harm: The Backlash Against Mindfulness in Public Education

The Mindfulness Backlash

To some people, the idea of mindfulness is greeted with suspicion. As Davis points out, “The lack of a universal definition for mindfulness, along with its increasing association with celebrity and vague implications of spirituality, health, and happiness leave some skeptics dismissing it as a superficial, hokey fad” (Davis 4). There seems to be a general lack of trust among people with anything unfamiliar, particularly in the case of mindfulness when it is framed by critics as just another health craze and a waste of time or possibly introducing the practice of some foreign religion. When this view is coupled with the use of mindfulness for children in public schools, to some this is a cause for alarm.

Despite the apparent success of mindfulness training in public education, there are those that are wary of this new curriculum for a number of specific reasons. Some believe that teaching mindfulness is in fact teaching Buddhism, yet in covert manner. Others find that the notions of acceptance and non-judgment typically taught in mindfulness undermine the traditional lessons of doing one’s best and distinguishing right from wrong. With the relatively recent introduction of mindfulness in schools, there is fear of any unknown long-term consequences from it. Parents sometimes feel that with the limited time available to cover essential course material in the school day, teaching mindfulness cuts into this valuable resource. There are rare instances of stories of adults

that have suffered adverse effects from mindfulness meditation, raising questions of the potential for harm in children. Although stress is acknowledged to be prevalent among school children, some see mindfulness as a panacea which does not address the actual causes of stress. Finally, there are Buddhists that find that mindfulness used in a secular context is an affront to their sacred tradition. Each of these concerns need to be explored in further detail.

Teaches Buddhism Surreptitiously

There are those that find mindfulness to be a disguised promotion of Buddhist religious concepts, but with changed terminology. John Kabt-Zinn learned about the practice of mindfulness meditation in Buddhism before developing MBSR (Harrington 220). People representing organizations behind the introduction of mindfulness programs may have backgrounds in Buddhism (Brown, *Mindfulness*). For example, one such organization, “Peace in Schools, is the ‘brainchild’ of European-American Caverly Morgan, who ‘trained at a Zen Buddhist monastery for eight years’” (*Mindfulness*). Candy Gunther Brown finds that it is difficult to suggest that a program on mindfulness is secular when it is produced by Buddhists.

As posed by Brown, “what does it mean to ‘secularize’ mindfulness? It boils down to a simple change of vocabulary” (*Mindfulness*). She sees that the roots of mindfulness meditation in Buddhist teachings seem to be camouflaged. According to Brown, providers of alternative approaches to medicine need to disclose any religious origins for “those patients who desire to protect religious purity, such as evangelical Christians . . .” (*Healing* 202). Teaching mindfulness as an alternative medical treatment

may impinge on one's Christian religious devotion when they are not made aware of its Buddhist roots.

Some see that MBSR can be classified as an alternative medical practice with dubious merit. Brown points to the Mayo Clinic Book of Alternative Medicine in which it is revealed that "the goal is cultivating 'values of peace, forgiveness, compassion, selflessness, integrity, and love' that will 'unfold the deeper, kinder person that is within all of us' . . ." (*Healing* 26). Further, "mindfulness restores appreciation of the 'beautiful world' and cultivates 'a higher meaning to life, gratitude, and interconnectedness'" (26). According to Brown, "References to concepts such as higher purpose, meaning, and values such as love and compassion blur the distinctions between medicines and religion" (26). Brown indicates that including a sense of values within mindfulness is teaching what she considers to be the province of religion and excluded from a discussion of healing. Beyond this, she claims that such alternative medical practices impact the religious views of the participants unwittingly (200). Brown finds "that choosing [alternative medical practices] influences religious decisions" (200). She sees this as important because "making religious choices without intending to do so disrupts informed decision making necessary for the economic and political health of society" (200). Brown argues that one's freedom to choose is curtailed when people are not fully informed that there are choices available and they unintentionally make decisions without their knowledge.

Presents an Undesirable World View

Some take exception to teaching mindfulness to students due to the values that

would be instilled in them. In a letter dated February 2, 2016 to the Dennis-Yarmouth Regional School District School Committee from Dean Broyles, Esq., President of The National Center for Law and Policy, he takes issue with the introduction of mindfulness in this school district on behalf of his client, Michelle Conover, whose children attend an elementary school there. He states that “The curriculum promotes an undifferentiated validation of feelings, passivity in the face of injustice, personalization of ethics, internalization of a worldview, and inculcation of an ongoing practice” (Broyles). Broyles asserts that mindfulness meditation advocates acceptance of both good and bad without taking action while telling students to not distinguish between right and wrong, and encourages them to continue the practice of mindfulness.

Unknown Long-term Consequences

While it is acknowledged that there are numerous studies that have been conducted on adults after mindfulness meditation, there are skeptics that claim that studies of its effects on children is sorely lacking. They believe that there is little known of the long-term consequences to children that have been exposed to mindfulness (Brown, *Mindfulness*). Based on studies involving adults, researchers have “found structural differences between the brains of experienced meditation practitioners and individuals with no history of meditation, observing thickening of the cerebral cortex in areas associated with attention and emotional integration” (McGreevey). Neuroscientists have confirmed that mindfulness can have an impact on the physical nature of one’s brain. Although such studies are purported by mindfulness proponents to be beneficial to one’s health and emotional well-being when observed in an adult, it is unknown as to

whether or not this is good for the brain of a child that is still in the process of development. More concerning is the lack of understanding of the long-term effects of such changes in children.

A Waste of School Time

The Warstler Elementary School in Plain Township, Ohio was forced to end their mindfulness program after one year (Gregoire). This was done partly in response to the view of mindfulness as pertaining to Eastern religions, but also because it was seen as taking away from valuable time for school instruction (Gregoire). People in the community felt that the class time used for mindfulness was as much of a concern as exposing their children to teachings found in Eastern religions. Parents “questioned whether the school should be devoting the students’ time to these practices, with the vice president of the school’s Parent-Teacher Organization complaining that she might pull her kindergartener out of the school if the programs continued to be a focus” (Gregoire). Aside from the perceived religious nature of mindfulness, there was the belief among parents that it was simply a waste of time.

Some Adults Claim Adverse Effects

Another possible concern is that there are reports of ill effects by some adults that have been exposed to mindfulness. Foster found that a recent book by psychologists Miguel Farias and Catherine Wikholm titled *The Buddha Pill* provides accounts of those who have had adverse effects from mindfulness (Foster). One example is that of a woman referred to as Louise who, having been practicing yoga for many years, went on a meditation retreat but found that “she felt dissociated from herself and became worried”

(Foster). After returning home, “her body felt completely numb and she didn’t want to get out of bed. Her husband took her to the doctor, who referred her to a psychiatrist. For the next 15 years she was treated for psychotic depression” (Foster). Farias notes that a small study in 1992 “by David Shapiro, a professor at the University of California, Irvine, found that 63% of the group studied, who had varying degrees of experience in meditation and had each tried mindfulness, had suffered at least one negative effect from meditation retreats, while 7% reported profoundly adverse effects including panic, depression, pain and anxiety” (Foster). Although the exact size or circumstances of Shapiro’s study years ago were not made clear, Farias claims that there was one or more negative side-effects experienced by a majority of the participants.

Foster goes on to discuss psychiatric research findings by Kate Williams, Ph.D. at the University of Manchester who is also a mindfulness instructor (Foster). She classifies negative experiences into one of two categories: “a natural emotional reaction to self-exploration” and a more extreme situation where it induces “paranoia, delusions, confusion, mania, or depression” (Foster). Williams admits that she has encountered negative effects in her own mindfulness practice, but that by having experience teaching mindfulness they have had no long-term impact (Foster). She points to a woman in her mid-thirties, Rachel, as having experienced these negative effects. Rachel had been following guided meditations for several months, but began “feeling increasingly anxious” (Foster). She reports that rather than calming her, Rachel found herself overanalyzing everything and acting “very erratically,” culminating in “panic attacks” which led to a trip to the hospital after one episode in which she blacked out (Foster). These are adults that have claimed that mindfulness has not helped them, but instead has

been a cause of mental distress.

Mindfulness Does Not Address the Cause of Stress

There are those that see mindfulness as simply a quick fix to alleviate stress and anxiety without addressing the real causes of it. According to Will Davies, the author of *The Happiness Industry*, mindfulness is used as an attempt to reduce stress without removing the source of stress (Foster). In particular, Davies believes employers embrace mindfulness as an inexpensive way to address stress in the workplace without dealing with “unfeasible workloads, poor management or low morale” (Foster). When employees are given the opportunity to meditate, it removes any responsibility of the employer to find out what the underlying causes of stress are and take steps to resolve them. According to Davis, mindfulness is merely a panacea and does nothing to remove the sources of stress. Although stress may be experienced by school children, mindfulness does not deal with the causes of such stress.

Buddhist Criticism of Secular Mindfulness

Aside from criticisms of the use of mindfulness in public education due to its roots in Buddhism, some Buddhists have come to object to the widening use of mindfulness as a secular practice. Davis notes that “practicing Buddhists and others who believe strongly in the spiritual roots of mindfulness are concerned that the meditation techniques are being poorly adopted without a proper understanding of the principles behind them, and the long-term commitment they require—a phenomenon they call ‘McMindfulness’” (Davis 4). Some Buddhists see the practice of mindfulness in a

secular setting as devaluing their sacred practice. The practice of mindfulness meditation which they may have spent years developing and are devoted to continuing for the rest of their lives is seen as something casually performed for as long as it is convenient by non-Buddhists. Without the understanding of the Buddhist teachings behind mindfulness, it becomes detached from its true meaning. The benefits of mindfulness without the knowledge of its place as the seventh step of the Eight-Fold Path are seen as severely diminished and undermines what the Buddha taught.

With MBSR in a clinical setting has come a number of Mindfulness-Based Programs (MBPs) and Mindfulness-Based Interventions (MBIs) such as Mindfulness-Based Cognitive Therapy, Mindfulness-Based Art Therapy, and Mindfulness-Based Eating Awareness Therapy, to name just a few, and are further discussed in the following chapter. As a result, “MBPs are said to be diluting the Dharma, watering down the radical teachings of the Buddha into some sort of ‘Dharma-lite’ and offering a ‘one-fold path,’ without reference to the other limbs of the Eight-Fold Path” (Wilks). By focusing solely on the teaching of mindfulness, the other seven steps of the Buddha’s Eight-Fold Path are ignored and raises the question of how well this stripped down version can provide its intended benefit. In addition, “conservative reactions to the MBIs on the part of some traditional Buddhist leaders have led to a campaign to discredit mindfulness as another artifact of self-absorbed Western consumerism” (Knickelbine). In response to the proliferation of mindfulness practices in the West, there are Buddhist leaders that find it is being used simply as a narcissistic indulgence without recognition of its deep significance and should be discouraged.

Chapter V

Potential Benefits – Mindfulness Studies and Well-being

Mindfulness and Stress

Advocates of mindfulness meditation point to its many benefits to an individual's health, resilience, and general level of happiness. Key among these benefits is the reported reduction in stress. When we are stressed, a series of hormone's are automatically released into the bloodstream by the adrenal medulla and pituitary gland in response to "signals from the hypothalamus via sympathetic nerve pathways" (Kabat-Zinn 316). Stress has been associated with increased levels of cortisol, which is beneficial in the short term as a "fight or flight" response, yet long-term can lead to a variety of ailments (316). It is known that "The cortisol hormone, i.e. "stress hormone" that's secreted by the Hypothalamic-Pituitary-Adrenal (HPA) affects our body in both physical and mental ways that can be detrimental to our overall health" (Kandhalu 15). For example, "ailments caused by increased cortisol levels include a suppressed immune system, insomnia, severe mood swings, depression and severe hypotension. Glucocorticoids inhibit inflammatory response; specifically, cortisol suppresses the synthesis and secretion of arachnidonic acid, a key precursor for a number of mediators of inflammation" (14). Long-term stress activates "genes that produce pro-inflammatory cytokines, which themselves promote a whole range of diseases of inflammation if chronically stimulated. Chronic arousal also shortens our telomeres . . . and thus accelerates the aging process at the cellular level" (Kabat-Zinn 318). Stress in our lives is responsible for a host of ailments when experienced over time.

However, numerous studies have shown mindfulness meditation to be effective for reducing stress and increasing both the psychological and physical well-being of people. As reported by the U.S. Department of Health and Human Services, “many studies have investigated meditation for different conditions, and there’s evidence that it may reduce blood pressure as well as symptoms of irritable bowel syndrome and flare-ups in people who have had ulcerative colitis. It may ease symptoms of anxiety and depression, and may help people with insomnia. Meditation also may lower the incidence, duration, and severity of acute respiratory illnesses” (NIH). The United States Department of Health and Human Services has noted the positive impact that meditation can have on one’s health. Mindfulness meditation reduces the stress we experience that has been correlated with a variety of ailments.

There are many possible causes of stress, but it is how we react to it that determines the ultimate outcome. Stress in a person’s life has been shown to have a dramatic effect on their ability to cope with a changed situation. This new situation and its accompanying stress can be the result of what would be considered to be a negative change as well as a positive change. Events such as failing a class, the death of a loved one, or experiencing a natural disaster are all easily recognizable as causing stress. Yet even events that would be associated with positive emotions can cause stress in one’s life in what Hans Selye refers to as “eustress” or a good form of stress (Kabat-Zinn 303). Stress can result from graduating from school, starting a new job, or buying a house. These events all require adaptation to the changes that have taken place. However, stress in one’s life can cause a deregulation in the physiological systems of a person, resulting in ill health (300). Depending on how these changes are understood and processed

mentally, one can find that their physical well-being is compromised. According to Kabat-Zinn, “The ultimate effect on our health of the stress we experience depends in large measure on how we come to perceive change itself, in all its various forms, and how skillful we are in adapting to continual change while maintaining our own inner balance and sense of coherence” (305). The changes we experience may be considered to be inevitable, but it is how we react to them that makes all the difference. Indeed, regardless of the nature of the change, there can be stress that ensues which in turn affects one’s health.

As a way to mitigate the potential for negative outcomes resulting from stress, mindfulness can be employed. Kabat-Zinn discusses the stress typically experienced as the “combination of internal and external stressors that trigger a cascade of feelings and behaviors we have been calling the habitual or automatic stress reaction” (Kabat-Zinn 334). This typical stress reaction is described as causing detrimental physical results which would diminishes one’s ability to thrive. Yet, through the MBSR program one is able to cultivate what is called a “mindfulness-mediated stress response . . . as the generally healthier alternative to the more unconscious stress reaction” (335).

Mindfulness allows a person to focus awareness on the present-moment to maintain a sense of control over the situation. The MBSR clinics teach “how to work with all our reactions, emotional and physical, so that we may be less controlled by them and see more clearly what we should do and how we might respond more effectively” (348).

Instead of reacting in an unconscious manner with feelings of helplessness and depression, mindfulness teaches the ability to develop alternative ways of dealing with a stressful situation. After a stress evoking event, it is not unusual to be reminded to “just

stop and take a breath.” This is a common sense approach to be able to step back and reevaluate one’s response before reacting. Mindfulness teaches us to purposely stop and be aware of the situation and options available.

Mindfulness and the Brain

In a study by Sara Lazar of Harvard University, she and her colleagues showed that “mindfulness training decreased the volume of the amygdala, a region involved in fear processing, for those participants who showed the most noticeable reductions in stress over the course of the training“ (Lutz et al. 45). This is an important finding because stress activates the amygdala which impacts the prefrontal cortex, impairing the executive functioning of the brain to make intelligent decisions (Kabat-Zinn 322). This was also found in a study by McGreevey where “Participant-reported reductions in stress also were correlated with decreased gray-matter density in the amygdala, which is known to play an important role in anxiety and stress” (McGreevey). These studies linked a reduction in stress through mindfulness with a corresponding reduction in an area of the brain associated with fear and anxiety that would in turn improve executive functioning.

Other studies confirm that there are actual physical changes in one’s brain as the result of mindfulness meditation. Lutz and his colleagues performed a study at the University of Wisconsin using electroencephalography (EEG) to measure the brain’s electrical activity during meditation (Lutz et al. 45). They found that long-term meditators “were able, at will, to sustain a particular EEG pattern . . . The coordination of brain oscillations may play a potentially crucial role in the brain’s building of temporary networks that can integrate cognitive and affective functions during learning and

conscious perception, a process that can bring about lasting changes in brain circuitry” (45). Mindfulness meditation is shown to impact the brain’s cognitive functioning and the learning process. Additionally, as reported by Lutz, “meditation brings about changes not just in well-defined cognitive and emotional processes but also in the volume of certain brain areas, possibly reflecting alterations in the number of connections among brain cells” (45). Specifically, “among longtime meditators . . . the volume of the brain’s darker tissue, its gray matter, differed in the insula and prefrontal cortices . . . which are frequently activated during various forms of meditation” (45). Changes in both brain activity and mass were correlated with mindfulness meditation.

Research by Hölzel and her colleagues investigated the impact of meditation on brain tissue as well. They found that over the past several decades the efficacy of mindfulness has been established in treating disorders such as anxiety, depression, chronic pain, substance abuse, and eating disorders (Hölzel et al. 36). However, they note that in recent years attention has turned to neuroimaging studies to determine the effect of mindfulness on the brain. They point to a number of previous studies that have demonstrated that neural systems can be changed and that there are increases in certain brain gray matter a result of meditation (37). In a study they conducted, sixteen individuals from the University of Massachusetts Medical School’s Center for Mindfulness participated along with seventeen in a control group. In addition to eight weekly group meetings, the participants were given guided mindfulness meditation audio recordings to use at home and were encouraged to practice mindfulness while performing normal daily tasks such as eating and washing dishes (37). All participants, including those in the control group, had brain scans using Magnetic Resonance Imaging (MRI)

two weeks before and two weeks after the program (38). They recorded that after the eight week MBSR training program there were significant increases in the hippocampus gray matter (40). After further analysis, they concluded that “participation in MBSR is associated with changes in gray matter concentration in brain regions involved in learning and memory processes, emotion regulation, self-referential processing, and perspective taking” (36). These researchers confirmed that MBSR training produced positive changes to the brain’s hippocampus that are associated with a variety of beneficial processes.

As we age, our brains lose both weight and volume beginning in our mid-twenties (Luder et al. 1). With the increase in the life span of humans over the last fifty years, there is concern regarding these decreases as we get older. This concern led to a study that was conducted to determine the impact of mindfulness meditation on the brain as we age and if expected changes can be mitigated (1). It was thought that “Meditation might be a possible candidate in the quest for such a positive approach as there is ample evidence for its beneficial effects for a number of cognitive domains, including attention, memory, verbal fluency, executive function, processing speed, overall cognitive flexibility as well as conflict monitoring and even creativity” (1). In their study, fifty meditators having between four and forty-six years of meditation practice and fifty control subjects participated from the Los Angeles area (2). Participants ranged from 24 to 77 years old with meditators and non-meditators paired based on their age. According to the researchers, results of MRI brain scans showed that “When correlating global and local gray matter with age, we detected negative correlations within both controls and meditators, suggesting a decline overtime. However, the slopes of the regression lines

were steeper and the correlation coefficients were stronger in controls than in meditators”

(1). Although decreases in gray matter were found in both meditators and non-meditators alike, there was less of a decrease found in the participants using meditation. This means that the long-term use of meditation may be beneficial to counteract the negative effects of aging on one’s brain.

Mindfulness and Mental Cognition

Some researches acknowledge the benefits of mindfulness on people that have undergone MBSR training or are long-term meditators, but were interested in the impact of mindfulness training of a shorter duration. Zeidan and her colleagues note that people with “extensive meditation training have shown improvements on cognitive performance . . .” (Zeidan et al. 1). This is the conclusion of a number of studies they reference, such as one that demonstrated an improved “ability to sustain attention during a dichotic listening task as evidenced by faster reaction times . . . and reduced attentional blink responses . . .” (1). They also point to other studies of long-term meditators having “heightened activation in executive attention networks that was correlated with improvements in sustained attention and error monitoring. These findings provide growing evidence of mindfulness meditation’s (MM) promotion of higher-order cognitive processing; specifically facets of conflict monitoring and cognitive control processes” (1). Further studies confirm that “It is well documented that consistent and extensive meditation training promotes lasting changes in cognition and well-being” (4). There are an increasing number of scientific studies that correlate mindfulness meditation with improved cognitive functioning among experienced meditators.

In order to investigate the benefits of mindfulness on short term meditators, students from the University of North Carolina having no prior meditation experience were chosen to receive four days of twenty minute sessions in mindfulness meditation training (Zeidan et al. 2). The students, having a median age of twenty years, were split into two groups with twenty-four assigned to the meditation group and twenty-five to a control group. (2). The meditators were told to sit quietly with eyes closed and to focus on their breath while the control group gathered in smaller groups to listen to JRR Tolkien's *The Hobbit* on compact disc (3). In order to measure cognitive ability, "Standardized cognitive tasks, as well as a computer adaptive n-back task, were administered before (session 1) and after (session 4) the intervention" (3). After analyzing the results, it was determined that the meditators demonstrated improved sustained attention as well as "greater efficiency in working and long-term memory retrieval" (4). Although the authors of the study caution that such brief meditation training is not to be compared to long-term meditation, they write that "Our findings show that there are immediate, short-term benefits to practicing mindfulness meditation" (8). This study established that after just four days of meditation there were improvements in cognitive ability.

Mindfulness and Personal Resilience

The term "resilience" is often loosely used by people. With coverage of any number of disasters, we may find the survivors described as being resilient, which may be appropriate in the long term, but the use of this term immediately afterward is hard to justify. As Max Watson discusses, "when applied to a disappointed, defeated, but still

cheerfully determined football team in the World Cup, its use may be . . . questionable” (11). It seems that if a person is observed to return to their original state of being very quickly, either the adversity they suffered was relatively mild or they have not yet revealed their true state of mind. One may unwittingly see the appearance of someone’s emotional state as reflecting their resilience. However, “Emotions tend to change quickly and are typically experienced as more acute responses to circumstances with important significance to the individual” (Berlin 6). Emotions portray a state of mind at a particular point in time and are likely to soon change, whereas resilience can only be determined over a much longer period of time. People are known to “put on a brave face” after some tragedy in an effort to conceal how they really feel, usually for the benefit of others so that they might feel better. As such, observed emotions are not reliable indicators of a person’s ability to overcome adversity and exhibit resilience.

A longer term view of an individual’s status after dealing with adversity must be considered. Sivilli and Pace state that “resilience is defined by flexibility in response to changing situational demands, and the ability to bounce back from negative emotional experiences” (Sivilli and Pace 3). Resilience may more appropriately be used to convey the idea that a person has learned to deal with a particular adversity through flexibility, that they have developed a personal approach to their situation to successfully surmount challenges they faced. This is a view that resonates when Zautra, Hall and Murray define resilience as “an outcome of successful adaptation to adversity” (Zautra et al. 4). Positive outcomes after adapting to adversity are argued to be indicative of resilience. These authors support the idea that it is the process of adjusting to a changed environment which leads to a good state of being that shows resilience.

It may appear that someone's resilience is simply the result of their inherent personality traits, since it is these affective traits that predispose one toward particular emotional responses and their ability to adapt and exhibit flexibility in the face of adversity. This implies that either a person has the ability to be resilient or they do not. Yet, according to research by Seligman, there is "the potential for children to overcome adverse living situations or life conditions and excel in school when supplied with proper training in optimistic, strengths-based thinking about oneself and the world around them" (Berlin 3). This is to say that there are qualities that can be taught that contribute to one's capacity for resilience. It means that optimism is an example of a trait that can be intentionally fostered to empower a person to adapt as necessary.

Sivilli and Pace discuss the use of the contemplative practice of mindfulness meditation to develop and encourage positive traits (Sivilli and Pace 10). They state that "The mechanism through which contemplative practices promote resilience is through mental training: repetitive reinforcement of positive habits of mind, inducing favorable changes in brain activities and physiological processes in ways that positively impact psychological function and behavior outcomes" (10). By acknowledging the factors behind resilience, we can attempt to deliberately foster traits that can equip people with the ability to adapt to an adverse environment (Bluglass 23). Promoting positive personal traits such as hope, humor, confidence, and optimism provide people with the sense that they can adapt and be flexible enough to return from adverse circumstances to live their life, to be resilient. This tells us that the personal traits that allow one to be resilient can be nurtured through mindfulness meditation and that these result in beneficial physiological changes. By cultivating these positive traits, negative events can be

effectively dealt with in life, demonstrating resilience.

One important attitude contributing to resilience is that of self-efficacy. This is “a belief in your ability to exercise control over specific events in your life. It reflects confidence in your ability to actually do things, a belief in your ability to make things happen, even when you might have to face new, unpredictable, and stressful occurrences” (Kabat-Zinn 245). Self-efficacy is an attitude that you can achieve the necessary results through one’s direct actions. This is taught in the MBSR clinics by inspiring participants with success stories of others. For example, Kabat-Zinn notes that “when one person reports a positive experience with the body scan, say in regulating pain, it usually has a dramatic positive effect on the other people in the class . . .” (246). This means that the attitude of self-efficacy can be taught using mindfulness meditation, which in turn can contribute to a meaningful personal change in how one deals with difficult situations.

The concept of stress hardiness or psychological hardiness is also seen as a type of resilience. Dr. Suzanne Kobasa of the City University of New York asserts that “stress-hardy individuals show high levels of three psychological characteristics: control, commitment, and challenge” (Kabat-Zinn 247). The characteristic of control refers to the ability to influence results, commitment indicates engagement with one’s activities, and challenge allows people to see adversity as an opportunity for improvement (248). The idea of stress hardiness can be learned according to Kobasa. She indicates that “the best way to develop greater stress hardiness is to come to grips with your own life by being willing to ask yourself hard questions about where your life is going and how it might be enriched by specific choices and changes you could make . . .” (248). A practice of mindfulness would facilitate this by asking a person to pay attention to these issues. As

reported by Kabat-Zinn, stress hardiness was increased by a significant amount in individuals going through the MBSR program (249). By developing one's stress hardiness, this can in turn improve their resilience and ability to overcome adversity.

A sense of coherence is another attribute that facilitates resilience which can be developed through mindfulness. Dr. Aaron Antonovsky conducted research into people that have survived extreme conditions and found that they exhibit what he referred to as coherence (Kabat-Zinn 248). He states that a "sense of coherence is characterized by three components, which he termed comprehensibility, manageability, and meaningfulness" (248). Comprehensibility refers to the belief that a person can make sense of their experience, manageability indicates that they have the resources needed to deal with their situation, and meaningfulness relates to the idea that they can find meaning in the experience (249). These factors combine to form a sense of coherence, the ability to "continuously restore balance in response to its continued disruption" (248). A person's coherence is indicative of their capacity for resilience. As measured in people attending the MBSR program, their sense of coherence was increased by a substantial amount (249). This lends further support to the proposition that mindfulness can be used as a way to increase one's resilience.

Another important aspect of the ability for a person to adapt to an adverse environment through the process of resilience is that of physical and mental health. A person's physical health is a factor that contributes to their capacity to do whatever is necessary to surmount challenges they face. According to Kabat-Zinn, "there is convincing evidence that certain ways of looking at oneself and at the world can predispose a person to illness, while other ways seem to promote greater resilience and

health” (Kabat-Zinn 262). Mindfulness can influence how one understands the world. This tells us that the way in which we perceive ourselves and the environment has an impact on our physical health and directly relates to the use of mindfulness as a means to influence it. The mental health of an individual is also a determining factor in the ability for a person to deal with difficulties. In this context the mental health of a person is looked upon in terms of their emotional status and their connections with others. It has been shown that “social isolation and loneliness are now considered demonstrated risk factors for depression and cancer” (264). Studies have been conducted that draw the relationship between one’s emotional state and their mental and physical health. Those completing the MBSR program “showed improvements in anxiety and depression and an increase in self-esteem” (264). Through the use of mindfulness, people have been able to improve their mental health, which in turn reduces their susceptibility for illness and increases their ability to take actions as needed when confronted with a negative environment.

Mindfulness-Based Therapies

As a result of the successful use of MBSR to facilitate patient recovery in hospital settings, a number of Mindfulness-Based treatments have been developed for specific issues people face. These treatments are often referred to as Mindfulness-Based Therapies (MBT’s) or Mindfulness-Based Interventions (MBI’s). Among others, they include:

- MBCT – Mindfulness-Based Cognitive Therapy
- MBAT – Mindfulness-Based Art Therapy

- MBEAT – Mindfulness-Based Eating Awareness Therapy
- DBT – Dialectic Behavioral Therapy
- ACT – Acceptance and Commitment Therapy

Mindfulness-Based Cognitive Therapy (MBCT) was developed at the University of Massachusetts Medical School by changing the focus of MBSR to tailor it to treat depression. According to the University of Massachusetts web site, “As in MBSR, participants learn to recognize habitual, unhelpful reactions to difficulty and learn instead to bring an interested, accepting and non-judgmental attitude to all experience, including difficult sensations, emotions, thoughts and behavior. MBCT replaces some of the content of MBSR with a focus on specific patterns of negative thinking that people with depression are vulnerable to, but which we all experience from time to time” (UMass). Further, “Negative thinking leads to lower mood and this pattern escalates to bring on a relapse of depression” (UMass). It is the negative thinking that some people experience that can lead to depression. MBCT allows people to change “one’s relationship to unwanted thoughts, feelings and body sensations so that participants no longer try to avoid them or react to them automatically, but rather respond to them in an intentional and skillful manner” (UMass). MBCT uses mindfulness to focus on combating negative thoughts that leads to depression.

Mindfulness-Based Art Therapy (MBAT) was developed “to provide specific skills for cultivating self-regulation in a format that is not confined to verbal processing alone” (Monti et al. 364). Many women diagnosed with cancer develop a high level of stress coupled with negative self-image due to this illness (363). In response, an art-based intervention was developed that corresponds to the MBSR curriculum. It is

designed to provide these women with a meaningful way to express themselves in order to self-regulate their emotions.

Mindfulness-Based Eating Awareness Therapy (MBEAT) was developed to treat binge eating disorder (BED). It was found that BED individuals use food to cope with emotional distress rather than for satiety and nutrition (Kristeller and Wliver 52). The MBEAT intervention “is structured to gradually introduce, in parallel, elements of mindfulness meditation practice, mindful eating, and themes of self-awareness and self-acceptance” (52). People suffering from BED are taught to become mindful of their eating to avoid using food as a coping mechanism.

Dialectical Behavior Therapy (DBT) was developed by Marsha Linehan to treat “suicidal women, many of whom met criteria for borderline personality disorder (BPD)” (Chapman 309). DBT combines evidence based intervention techniques with mindfulness to help them accept themselves (309). DBT operates under the premise that reality is the synthesis of opposing forces, particularly acceptance versus change (Baer 127). Mindfulness facilitates this understanding.

Acceptance and Commitment Therapy (ACT) was developed by Steven Hayes based on an analysis of language and cognition (Chapman 309). ACT proposes that emotional suffering is due to language and cognitive processes that “trap people into behaving in ways that increase or maintain their suffering” (309). The cycle of such behavior can be broken through the use of mindfulness to foster awareness.

The proliferation of Mindfulness-Based therapies is a testament to the benefits of MBSR, such as being present in the moment and not ruminating on the past, as well as acceptance and letting go. The fact that these concepts have been found to be applicable

in a variety of settings strengthens the claims of their effectiveness to deal with thoughts that cause further suffering.

Mindfulness and Attention Deficit Disorder

Approximately 5% of children and adolescents are thought to have Attention Deficit Hyperactivity Disorder (ADHD) (Meppelink et al. 2). ADHD is characterized by “inattentive, impulsive, and hyperactive behavior that interferes with their (social) functioning or development” (2). It is defined in the diagnostic criteria of the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) to include “difficulties with organizing and planning tasks or activities and with maintaining attention over prolonged periods of time, such as wandering off during tasks or lacking persistence” (2). Medical treatment for ADHD is through the use of psychostimulants, particularly methylphenidate, with dextroamphetamine and atomoxetine prescribed as a second choice when methylphenidate is not effective (2).

However, there are a number of concerns with the use of medications to treat ADHD. This includes “side effects such as insomnia, loss of appetite, abdominal pain, headache, anxiety, stress, and nervousness” (Meppelink et al. 3). Medication only suppresses ADHD symptoms while someone is taking it and they return when it is stopped (3). Some children do not respond to medication while others do not adhere to the prescribed dosage regimen (3). ADHD medication may be problematic for people with “schizophrenia, hyperthyroidism, cardiac arrhythmias, angina pectoris, and glaucoma. Beyond this, extra caution needs to be taken in case of hypertension, depression, tics, epilepsy, anorexia, autism spectrum disorders . . .” (3). Finally, there is

limited information on the long-term effectiveness and side-effects of ADHD medications (3). There are a variety of issues and uncertainties surrounding the use of medications to treat ADHD which make them undesirable.

The use of mindfulness has surfaced as an alternative means of treatment for ADHD in recent years. As Meppelink and her colleagues note, “The ability to focus and sustain attention in the present-moment and to bring back the attention to the present-moment whenever it wandered off, which is trained during a mindfulness course, may be especially beneficial for children diagnosed with ADHD . . .” (Meppelink et al. 4). An important aspect of mindfulness training is learning to be attentive and aware of the present, which could directly benefit those with ADHD.

In response, there have been a series of studies involving children with ADHD and mindfulness training. While recognizing that the study of mindfulness training for children in the field of psychiatry is relatively new, a “meta-analysis conducted by Zoogman et al. included 20 studies on Mindfulness-Based interventions with youth . . .” (Meppelink et al. 4). Overall, the results indicate that “In sum, preliminary effectiveness of mindfulness training for children and adolescents with ADHD is clearly demonstrated in the above-mentioned studies” (6). Further, “These studies show preliminary evidence that Mindfulness-Based interventions are also beneficial for youth with a variety of psychological symptoms, as improvements were reported on measures of attention, internalizing and externalizing behavior problems, sleep, anxiety, and academic performance” (5). The use of mindfulness to address the symptoms of ADHD appears to be a valid alternative to avoid the problems associated with medications. However, Meppelink and her colleagues point out that more research is necessary with large

numbers of children in randomized clinical trials to firmly establish the efficacy of mindfulness (5). While studies thus far have supported using mindfulness techniques over medications to treat ADHD, additional studies are warranted to ensure confidence in this approach.

Chapter VI

Mindfulness in the Classroom

Mindfulness and Studies of School Children

Initially, scientific studies of mindfulness had generally centered on adult populations, but there are an increasing number of studies involving children in response to the recognition of its potential benefits. Mindfulness is now “widely considered effective in psychotherapy as a treatment not just for adults, but also for children and adolescents with aggression, ADHD, or mental-health problems like anxiety” (Davis 5). Psychotherapists have found mindfulness to be an effective tool to help children, not just adults. Moreover, “This strong base of research, along with a growing body of supporters, are fueling the momentum behind mindfulness . . . It’s now spreading to schools, where it could potentially have an impact on students’ wellbeing; a quarter of American adolescents suffer from a mental disorder, according to a 2010 Johns Hopkins study” (5). Because of such success in the use of mindfulness to treat mental health issues in children by psychotherapists, mindfulness is increasingly being taught in schools to combat stress, aggression, and other issues faced by many students.

A recent study by Charlotte Vickery and Dusana Dorjee assessed the emotional well-being among children seven to nine years old from three primary schools after an eight week mindfulness program (Vickery 1). The program was conducted by school teachers as part of the normal school curricula to seventy-one children and was measured using questionnaires before, directly after, and three months later (1). The results showed that “Acceptability of the program was high with 76% of children in the training group

reporting ‘liking’ practicing mindfulness at school, with a strong link to wanting to continue practicing mindfulness at school” (1). The study concludes that school teachers are able to deliver mindfulness training, there is decreased negative affect, and improved meta-cognition (1). Negative affect, meaning a poor self-image, is seen to be reduced by mindfulness. It also demonstrates that the ability to incorporate one’s overall knowledge to consider a problem, meta-cognition, increases. According to the authors, “mindfulness-based programs delivered within school curricula have the potential to promote self-regulation and improve children’s emotional well-being” (11). In addition to improving a child’s problem solving skills, mindfulness increases a child’s emotional control which is important to success in an educational setting.

A study of mindfulness that was conducted by Ross Bernay and his colleagues involved one-hundred-twenty-four students ages nine through twelve in three elementary schools (Bernay et al. 90). This was done in response to concerns in which “Studies report that children today suffer from unprecedented levels of stress, resulting in anger, behavioral problems, depression, and anxiety as well as lowered self-esteem and confidence” (90). Children have been found to have high levels of stress, which in turn causes a number of negative consequences. It is believed that mindfulness can “facilitate well-being and greater mental stability by reducing emotional reactivity, which in turn leads to changes in thought patterns, and eventually self-management and acceptance” (92). To avert negative emotional reactions and promote emotional control in school aged children, it was thought that mindfulness training may be beneficial. During an eight week program, measurements were made through teacher observations noted in journal entries, student interviews, as well as by using questionnaires before, directly

after, and three months later. Results of this study show that “Scores on the well-being measure significantly increased, but had returned to pre-program levels by three-month follow-up” (99). Improvements to students’ sense of well-being were found directly after the study, although within a few months those improvements were no longer apparent. Similarly, the measurement of students’ subjective emotional state showed improvement directly following the program, but had dissipated when measured three months later (99). All students reported that the mindfulness program had a positive impact on their ability to control their emotions and to use breathing techniques to calm themselves (100). For example, one student “felt that learning to manage her moods helped her to have ‘better behavior’ and as a result, she had made more friends” (100). Students reported that the tools used in mindfulness were beneficial. From the perspective of teachers, they “reported fewer classroom disruptions, improved focus in class, and more positive peer relationships, including less name-calling” (100). Not only did the students see benefits, but teachers did as well. However, these benefits were not sustained after the mindfulness program ended.

A study involving four schools was performed by Louis Sanger and Dusana Dorjee in which two schools with an average student age of 16.6 years conducted mindfulness training and two schools with an average student age of 17.1 years were used as a control group (Sanger 2). Measurements of mindfulness and meta-cognition were made using questionnaires to record student assessments of their behaviors and mental abilities as well as their level of attention (3-4). This was done before and after an eight week period of fifty minute sessions taught by their regular classroom teachers (3-4). It also involved a task designed to measure attentiveness involving identification of

shapes and colors using a computer based analysis (3-4). This study was designed to measure the neurological impact of mindfulness training. The results of this study showed that mindfulness training was acceptable to the students involved, decreased their reported “mind-wandering,” and increased their concentration (9). It also demonstrated that the control group had more problems with concentration and more negative beliefs about their understanding than those exposed to mindfulness training (9). Sanger and Dorjee conclude that “Overall, our findings suggest that mindfulness training for adolescents, delivered by schoolteachers, can have a positive impact on attention processing” (9). In fact, “initial evidence of mindfulness practice encouraging adolescents to more efficiently inhibit irrelevant stimuli, together with enabling them to reduce critical self-judgment, may have implications for academic performance and learning . . . our findings provide further support to the hypothesis that mindfulness practice can contribute to the development of metacognitive awareness and well-being in young adults, potentially supporting their self-efficacy and academic success” (10). There are a number of benefits to adolescents from mindfulness, including their ability to focus and develop self-confidence, which have implications for future success in the classroom.

One group of researchers was interested in studying the impact of the MindUP program to teach mindfulness to students. They recognized that mindfulness training facilitates “Social and emotional learning (SEL) . . . a growing field in education that aims to foster core social and emotional competencies, such as self-awareness, self-regulation, initiating and maintaining healthy relationships, and treating others with respect and care” (Maloney et al. 314). With the benefits of SEL in mind, it was believed

that mindfulness may play a key role in this process. They note that during childhood and early adolescence a child undergoes many changes, such as entering puberty, emotional and cognitive development, as well as changes in their social dynamics as relationships with friends form and shifts from their parents (314). Unfortunately, “These years are also characterized by increases in various mental health problems” (314). As a child develops, there are a number of issues they are confronted with that may impact their mental health. In response, the MindUP program “was informed by leading experts in the fields of cognitive developmental neuroscience, SEL, and positive psychology as well as from feedback provided by educators and students” (315). The MindUP curriculum was specifically designed to deal with the challenges faced by school children.

An evaluation of the MindUP program was conducted in which 246 fourth through seventh grade level students in twelve public school classrooms were selected (Maloney et al. 322). These students were given questionnaires before and after the program to assess their “social and emotional understanding (emotional awareness, reflection, and rumination), mindful attention and awareness, optimism, and self-concept” (322). Researchers found that compared to a control group, students who participated in the program showed “significant improvements on all four dimensions of teacher-rated school behaviors, including attentional control, aggression, behavioral dysregulation, and social competence. Significant improvements were also found for students’ self-reported optimism and mindful attention” (322). The questionnaires in this study support the use of mindfulness to improve student’s social and emotional control.

In another study, 99 fourth and fifth grade students from four classrooms were

chosen in which two of the classrooms participated in the MindUP program and two did not (Maloney et al. 322). Results showed that “Analyses of student-and peer-report data indicated that after exposure to MindUP, participants had significant increases in optimism, emotional control, empathy, perspective taking, prosocial goals, and mindful attention, along with decreased depressive symptoms compared to those in the active control group” (322). Again, results showed that the MindUP mindfulness program improved student well-being.

Researchers in a further study chose to examine the Master Mind program’s effectiveness with elementary school children. They realized that children may “lack the skills and resources to effectively deal with obstacles and stressors that might arise in school or with peers, which can take a toll on their physical and mental health” (Parker et al. 185). Children have stress in their lives that may cause both physical and mental health issues. Beyond this, the stress they undergo often results in poor decision making, including the use of alcohol and tobacco use (184). It is now believed that “mindfulness practice provides children with multiple opportunities to become consciously aware of their thoughts and feelings. This awareness may allow youth to thoughtfully respond in situations rather than react impulsively or enact a behavior that could be harmful to themselves such as drinking or smoking” (185). Mindfulness encourages awareness which may in turn help children avoid alcohol and tobacco use. Therefore, two goals of a randomized study were established:

“The first aim was to assess the Master Mind program’s potential for changing youth outcomes. Specifically, it was hypothesized that students who participated in the Master Mind program, in comparison to students who did not, would experience improvements in their cognitive, emotional, and behavioral regulatory abilities, and reductions in their intentions to use substances. The second aim was to evaluate the fidelity

and feasibility of the Master Mind program including determining whether teachers implemented the four-week, 15-minute daily lessons in the classroom, and whether teachers and students were satisfied with the program.” (Parker et al. 191)

Researchers sought to establish if mindfulness could help children regulate their behavior such that the use of alcohol and tobacco would be avoided and if teachers could successfully implement the program over a four week period.

The proposed study was conducted by selecting two elementary schools in which one school participated in the four week Master Mind program and one was used as a control group (Parker et al. 193). Prior to the program, teachers were given an eight hour training session in the curriculum and also received a teacher’s manual with twenty lesson plans as well as student workbooks, an audio CD, DVD, and web site access (193). Teachers completed surveys to document their understanding of the Master Mind program and also to provide a rating of student behaviors prior to the test period (193). Students in both schools completed questionnaires before and after the program (194). Results of the study showed that “As a function of participating in the Master Mind program, students in the intervention group had higher executive functioning skills at post-test as measured by their performance on an executive functioning task in contrast to students in the control group. In addition, students in the intervention group received lower ratings of social problems and aggressive behaviors by their teachers at post-test than students in the control group” (197). Further, both teachers and students rated the Master Mind program positively in terms of interest and enjoyment (197). The findings of this study support the use of the Master Mind program to increase students’ self-regulatory skills and demonstrated that it was well received by students and teachers alike.

It was noted that, “Although it was hypothesized that students would report a reduction in their intentions to use substances in the future as a function of participating in the Master Mind program, no significant differences were found between the intervention and control groups on students’ intentions to use alcohol or tobacco” (Parker et al. 198). There was no impact on student intentions to use alcohol or tobacco. Despite this, the authors of the study point out that 90% of the students reported a lack of intent to use these substances prior to the study, “suggesting a floor effect” (198). With a large majority of students not intending to use alcohol or tobacco to begin with, the impact of the Master Mind program would be minimal at best. Regardless, the results of this study do demonstrate that the Master Mind program increases students’ executive functioning skills to plan and achieve goals as well as their self-regulatory abilities.

Mindfulness and Teacher Burnout

Not only have an increasing number of students been involved in mindfulness training in recent years, but schools are also hoping to combat what is often referred to as “teacher burnout.” As noted by Bernay, “Being a teacher is a very stressful occupation. A number of studies have indicated that many teachers leave the profession within the first five years” (58). With the demands of instructing a classroom of, at times, unruly children to be adequately prepared for standardized tests and future studies, comes a degree of stress which can lead to teachers leaving the field altogether. This was the impetus for a study of new teachers to determine “the effect of mindfulness in reducing stress during the first year of teaching and in enhancing the ability of the teachers to cope with the demands of the classroom” (60). In order to reduce teacher burnout, it was thought that mindfulness may be beneficial. The study was conducted using teacher

education students in which forty-three students received mindfulness training with five volunteering to record their experiences as first year teachers. The results of the mindfulness practice by the new teachers was determined by a review of their journals and interviews (65). The outcome of the study was self-reported by these teachers. Researchers found that “participants highlighted their greater resilience by using mindfulness. Their stress levels were reduced, they could focus their full attention on the lesson planning and on their students, and they were more authentic in their teaching. In addition, they found they were responding rather than reacting emotionally to the children in their classrooms” (62). Mindfulness was reported to reduce teacher stress, increase their resilience and allowed them to be better teachers.

Another study was conducted by researchers “to test the feasibility and efficacy of a professional development program for teachers aimed at the reduction of job stress and symptoms of burnout through mindfulness training” (Roeser et al. 1). This study involved one-hundred-thirteen school teachers in which stress levels were measured initially, after the program, and then again three months after the study (1). It was conducted over the span of two trials in which teachers were randomly assigned to receive mindfulness training (MT) (1). Results were determined by reviewing the journals kept by fifty-two of sixty teachers initially selected, with eight failing to complete the study (8). It was found that “teachers in MT reported feeling subjectively less stressed out, anxious, depressed, exhausted, and burned out due to their jobs” (14). However, researchers found that “physiological indicators of stress we measured in teachers— blood pressure, resting heart rate, and cortisol levels— did not show statistically significant differences between the MT and control groups (14). Although

teachers support the use of mindfulness training in terms of a decrease in their stress level, there were no meaningful physical changes found. Overall, however, this study does appear to indicate that mindfulness training can be used by teachers to reduce feelings of burn-out.

Mindfulness Experiences in Schools

With the use of mindfulness increasingly in the public eye, there are now stories published on its use in schools across the country on a regular basis. The following are some of these stories. Additionally, this author has interviewed several teachers of mindfulness to gain an understanding of its use from their personal perspective. According to testimonials that are included in articles and by speaking with teachers directly, the use of mindfulness in the classroom has been a positive one.

Layne Millington, principle at Marblehead High School in Massachusetts, told CNN's Kelley Wallace that "the climate at the school is much better after implementing mindfulness. Students who participate seem much more relaxed and easier to talk to, and they can be more precise and more specific if there's something going on that they are concerned about . . ." (Wallace). Wallace notes that "The drive to get good grades and gain acceptance into elite colleges, combined with participation on sports teams and other after-school activities, and hours of homework mix together to make teenagers the most stressed group of people in America when school is in session, according to a 2014 American Psychological Association survey" (Wallace). Attending high school can be a very stressful time for teenagers. As reported by Wallace, one student at Marblehead High School claims, "'It helps so much. It really does,' said Lexi, 18, who has been diagnosed with anxiety disorders. 'I tend to be less anxious afterwards . . . I feel so much

better. No anxiety, no stress, just relaxed”” (Wallace). Mindfulness was found to be beneficial by those involved at Marblehead High School.

A four year program in mindfulness was conducted by the Center for Wellness and Achievement Education at the Visitation School, a junior-high school located in a poor area of San Francisco known for its violence (Desteno 6). There, mindfulness was instituted which called for student meditation twice each day, referred to as “Quiet Time” (6). Although it was noted that this was not deemed to be a scientific study, nonetheless, “a noticeable difference began to emerge . . . school records show that suspensions decreased by 79 percent” (6). There was a significant decrease in student suspensions related to bad behavior that occurred over the course of the mindfulness program at this school.

In the Bronx in New York City, Argos Gonzales teaches mindfulness to teenagers at the Arturo A. Schomburg Satellite Academy, a small high school for those who may have previously dropped out or are doing poorly in school (Davis 2). Students in this school may have experienced a range of difficulties or trauma prior to mindfulness training. According to Gonzales, “my intention as a mindfulness instructor is to give students some very simple and basic tools so they can learn to self-regulate. That’s the beginning and end of it” (10). Gonzales sees his use of mindfulness as a means to teach students emotional control. Davis notes that “Education reformers have long maintained that there is a fundamental connection between emotional imbalance and poor life prospects. As Paul Tough argued and popularized in *How Children Succeed*, stress early in life can prompt a cascade of negative effects, psychologically and neurologically—poor self-control and underdeveloped executive function, in particular” (6). Associated

with the stress and other difficulties children may face is emotional instability which in turn causes a host of other problems, ultimately resulting in diminished success later in life.

A school in an affluent area without the issues associated with poverty is the Middlesex School in Massachusetts, where it is known as “a prestigious boarding school” (Davis 6). In this school, all students entering as freshman are required to take a course in mindfulness. This program was originally created by former students who used it to counter stress associated with sporting competitions (6). Now that it is taught throughout the student body, “A vast majority—97 percent—of students surveyed in 2014 said they would recommend the course to others, reporting benefits ranging from better sleep and diminished stress to increased focus on schoolwork” (6). Nearly all students that have taken mindfulness training at the Middlesex School have found it to be beneficial in multiple ways.

In Reading, Massachusetts, first graders are taught mindfulness at the Birch Meadow Elementary School as well as at eight other schools in that town (Vaznis). Educators there believe “teaching students at every grade to manage their emotions can help them deal with a multitude of serious issues, including bullying, mental illness, substance abuse, or trauma” (Vaznis). The belief is that mindfulness is a tool to help students control their emotions and therefore impact the negative consequences of not maintaining control of their emotional responses. However, the results so far have been mixed. Although it is reported that the Reading school system has seen a decline in drug and alcohol use, there has been a small increase in cases of students experiencing depression according to a survey conducted of students in middle and high school

(Vaznis). According to John Doherty, the Reading School Superintendent, this is a reflection of the increased level of pressure that students face to achieve academically and get accepted into the best colleges (Vaznis). It can be difficult to truly assess the use of mindfulness absent the many other possible contributing factors that may come into play.

At the Robert W. Coleman Elementary School in Baltimore, an after-school program known as “Holistic Me” teaches yoga and meditation to pre-school through fifth grade children (Khorsandi). If a child is disruptive in class, they are taken to the Mindful Moment Room where a counselor instructs them in deep breathing exercises and discusses managing their emotions (Khorsandi). The results are encouraging. According to Principal Carlillian Thompson, there were no suspensions in the past school year whereas there had been four in the 2013-2014 school year (Khorsandi). The Holistic Me program was introduced by the Holistic Life Foundation, begun in 2001 by Atman Smith, Ali Smith, and Andres Gonzales (Khorsandi). They claim that “Their goal was to provide kids from a low-income and high-crime-rate neighborhood with the tools to cope with stress and anger. Over the past 15 years, students of the program have graduated and transitioned into mentor roles—former students now make up 50 percent of its workforce” (Khorsandi). Students that had previously participated in the program have been successful and have become advocates for it years later such that they now mentor others in the program.

Another example of mindfulness in public education is from the Chicago school district. There, Amanda Moreno, an assistant professor at the Erikson Institute, and a team of researchers are currently operating under a four year grant from the U.S.

Education Department are beginning a study using mindfulness at over thirty elementary schools (Deruy 2). With around two-thousand children of color from low-income families ranging from kindergarten through second grade participating, it focuses on whether mindfulness can improve academic achievement (2). With the perceived benefit of reducing stress levels, mindfulness is thought to be particularly relevant to this population. This is because “Children growing up in poverty are more likely than their affluent peers to be exposed to violence and to experience long-term stress that can derail their academic progress. Some research has suggested that children living in high-stress environments (drug-addicted parents, abusive caretakers, neighborhood gun violence) are constantly on edge, ready to fight or take flight, which can lead to outbursts in class that turn into suspensions and even expulsions, all detrimental for learning” (2). When a child lives in an area in which violence is common, they are forced to constantly be on guard, which leads to chronic stress.

Studying these children is important because “recent brain science suggests that exposure to stress can shorten periods of brain development, meaning it’s especially crucial to limit stress in the early years when brain growth is rapid” (Deruy 2). A stressful environment has a negative impact on the development of a child’s brain. The use of mindfulness can both relieve the level of stress they experience as well as teach these children to have more focus in class.

At this early stage, it is difficult to quantify the results of this mindfulness program. Despite this, eventually they plan to “get at the answer by both testing kids’ math and reading abilities, and by surveying them about their sense of belonging, looking at how teachers handle discipline, how much time students are spending on-task, and

assessing executive functioning . . . using something called the Flanker test, which helps give researchers a sense of cognitive flexibility, something Moreno and other researchers think mindfulness has a positive impact on” (Deruy 5). Although they are just one year into a four year study, researchers will apply a rigorous analysis of the use of mindfulness in the future. However, at this point, “Moreno said she’s heard from teachers with students who have gone from five or six tantrums a day to none because they know they can go to their classroom’s “calm spot” whenever they feel like they’re spiraling out of control” (3). When children have less stress and are better focused, they are less likely to act out during class.

Discussions with Mindfulness Teachers

Meghan Dutton has over fifteen years of experience in the practice of mindfulness, the last eight of which has involved mindfulness in a classroom setting. I recently spoke with Meghan to hear about her experience as a mindfulness instructor to school children. In her current position at Marblehead High School in Massachusetts, she is one of five teachers who rotate as facilitators in a meditation room at the school. Students may choose to go to this room rather than study hall, but the choice is always that of the students. She has found that after experiencing mindfulness themselves, students will then ask for it. Meghan had originally learned about mindfulness after reading a book by Thich Naht Hanh for a World Religions course at the University of Rhode Island and acknowledges its roots in Buddhism. When asked if there was any discussion of Buddhism involved during her mindfulness sessions, she replied “no, mindfulness is about the science of the mind, it’s not about religion.” Further, she noted

that meditative techniques “have been around for thousands of years, so there’s no need to discuss religion.” She understands that science and scientific evidence make claims that mindfulness helps youth to regulate their emotions. One student related to her that she was able to use mindfulness to combat anxiety while at the dentist office. Another told her that it helped them through an experience being trapped in an elevator. Overall, Meghan has found mindfulness to be very beneficial to students.

Maura Fox works as a part-time mindfulness instructor at the Big Cross School in Glens Falls, New York. She came to learn of mindfulness as an extension of her yoga practice. Although she teaches mindfulness sessions to kindergarten children just one day a week, she claims teachers have reported that students are calmer and exhibit more self-control. For example, they are better able to walk in a straight line as well as sit still. She sees that mindfulness training “allows children to know they have a choice as to how they react to things.” Further, people have emotional triggers they should be aware of so that they can respond appropriately. She sees this as a particular need for children growing up in today’s world of social media so that they can be more aware of how they react. In addition to her sessions with kindergarten children, Maura works as a speech pathologist at the Johnsburg High School in North Creek, New York. Part of her instruction to help students with communication issues includes mindfulness as a way for them to have better focus. As a result of her success in teaching mindfulness to those students, she has been asked to provide this training to the Nordic cross country ski team there as well. Maura understands mindfulness to be an important tool for students to learn to increase their focus and control.

Alan Brown has been a teacher for many years and is a Dean at Grace Church

School, a private school in New York, NY. Although this investigation has focused on public schools, it is worth noting the appeal of mindfulness in other institutions. When considering the use of mindfulness in private schools, even those with religious affiliations, Alan points out that “a sense of stillness exists in every religion to connect with the transcendent.” As a humanities teacher, he would often begin his classes by inviting his students to all take a few deep breaths to become focused. Since the kids in his classes were so receptive to this, he then took the teacher training course offered by Mindful Schools. He found that teaching mindfulness to high school students is simply teaching them to examine the state of their own emotions. When asked if Buddhism was ever discussed in the mindfulness instruction he received or that he teaches to students, Alan responded by saying that no, it is purely secular in nature, that mindfulness is not related to the practice of a religion nor does it attempt to influence how to think or how to worship. Due to the success of teaching mindfulness at the Grace Church School, an eight week introduction to mindfulness class is now required for all incoming freshman.

Chapter VII

Analysis of Criticisms of Mindfulness in Public Schools

Teaches Buddhism Surreptitiously

One of the key arguments made by critics of mindfulness in public education is that it teaches Buddhism and Buddhist beliefs to students. However, there is no one Buddhist religion, rather there are a number of branches of Buddhism, each with its own teachings. As Kozak indicates, “the three surviving traditions within Buddhism can be considered to be related but distinct religions: Theravada, Mahayana (for example, Zen), and Vajrayana (for example, Tibetan Buddhism)” (Kozak 102). He goes on to say “There is no one Buddhism, no essential Buddhism that can be taken apart from its tradition” (104). Each of the three major branches contains various schools within it. Within the Mahayana branch, for example, one finds “Madhyamika, Yogacara, Pure Land, and Zen Buddhism” (113). Within the Vajrayana branch, there are the six schools, including the Bon tradition, the Nyingma tradition, the Bound by Command school, the Sakya tradition, the Kagyu tradition, and the Gelug tradition (137). In fact, “according to Buddhist scholars Robinson, Johnson, and Thanissaro, it might be better to think of ‘Buddhist religions’ rather than a single Buddhist religion” (104). Similar to Christianity, there are many teachings of Buddhism. To say that mindfulness teaches Buddhism is to ignore that there is not one single Buddhist religion. Beyond this, there are a great many other teachings besides mindfulness in this complex religion. In fact, the secular use of mindfulness is criticized by some Buddhists because it does not adequately represent Buddhist teachings. It is derisively referred to as “McMindfulness” when removed from

its Buddhist context (Davis 4). They see this secularized version of mindfulness as detached from its meaning in Buddhism (Wilks).

The teaching of mindfulness in a public school setting does not include references to the Buddha, the schools of Buddhism, or the many teachings ascribed to the Buddha and his followers over the centuries. Teachers of mindfulness are told that “introducing names, words, or sounds that come from a religious or spiritual tradition . . . as a focus of attention during practice is inappropriate in the secular public school context” (Jennings). In order to avoid associating mindfulness taught in public schools with religion, Jennings admonishes teachers to not even use terminology that may be used in a religious tradition.

In Buddhist religions, meditation is not universal among practitioners. As Kozak informs us, “in traditional Buddhist societies (for example, Sri Lanka) there is little emphasis on meditation and more emphasis on generosity (dana) and morality (sila)” (Kozak 73). Further, “In Asia, the focus is on right conduct/action rather than on the meditative disciplines, and also visiting holy pilgrimage sites. In Tibet, prostrations and turning prayer wheels are central practices for the lay practitioner” (74). Not all Buddhists meditate, which means that mindfulness meditation does not define one as a Buddhist.

In response to those who may question the secular nature of mindfulness, Mindful Schools offers a paper written by Matthew Brensilver Ph.D., a Senior Program Developer, titled “The Secular Qualities of Mindfulness.” In this piece, several arguments are presented to address those who would cast mindfulness as being disqualified from public education based on a perceived religious association. First, he

notes that “the values of generosity and compassion are deeply embedded across world religions, but this fact is never cited as a cause to curtail the role of generosity and compassion in secular life” (Brensilver). It is stated that simply because a value being promoted is found in a religious tradition does not mean that the religious tradition itself is being promoted. He goes on to say that in teaching about mindfulness there are no authoritative texts involved and that there is no book regarding mindfulness that is above scrutiny (Brensilver). This is intended to make it clear that there is no sacred text or other works used in a discussion of mindfulness that cannot be challenged and assessed for its value. Further, he claims that “mindfulness is secular insofar as its central aim is not to instill a particular set of beliefs, but to support introspective practices that attenuate distress and enhance well-being” (Brensilver). This is to say that there is no central belief system associated with mindfulness, it is only comprised of practices designed to promote one’s physical and mental health.

In addition to the discussion of the secular nature of mindfulness, Brensilver addresses the idea that there are of topics that may only be considered in the context of religion. He points out that “Secularity need not cede conversations regarding the deepest human concerns to religious discourse. We can speak about kindness, compassion and the urgent wish to be happy in ways that do not trespass on the terrain of religion” (Brensilver). There is nothing regarding human values and emotions that should not be examined and discussed as a means to improve the well-being of students. The fact that human values are encompassed within religious teachings does not preclude their recognition in the secular world.

The use of mindfulness in a growing number of secular settings also gives

credence to the notion that mindfulness does not represent a religious practice. As noted by Davis, “Some parents and administrators have challenged its use in schools based on its religious roots . . . As mindfulness is used more routinely in the medical sphere, these belief-based critiques are becoming less common” (Davis 7). With the use of mindfulness as a tool in a variety of medical related therapies, there is less of an association of mindfulness with what is seen as its roots in religious practices.

Teaches an Undesirable World View

Some who criticize the teaching of mindfulness claim that it instructs children not to judge or distinguish between good and bad. As related by Kabat-Zinn, “Seven attitudinal factors constitute the major pillars of mindfulness practice . . . they are non-judging, patience, a beginner’s mind, trust, non-striving, acceptance, and letting go” (Kabat-Zinn 21). However, learning proper judgment is an important aspect of childhood development. Nevertheless, as Goldstein tells us, “mindfulness helps distinguish the good from the bad, the worthy from the unworthy” (Goldstein, *One Dharma* 89). Despite mindfulness advocating non-judging, it is also claimed to help determine good from bad. The key difference seems to be in the approach, that one should not address an issue with a preconceived notion that it is good or bad. One is better off to approach things with an open mind; a beginner’s mind. They should not pre-judge based on what may be erroneous or incomplete information; they should not be prejudiced. By acceptance, one is taught not to dwell on the past, but to accept things as they are. In doing so, this helps students to develop personal resilience to deal with a situation as it is and to not succumb to the pain and frustration over what may have happened. It does not mean that something that may be deemed as bad should be accepted as if it were good.

Unknown Long-term Consequences

Another criticism of mindfulness is that there is a lack of study of its long-term effects when taught to school children. While this may be true to a certain extent due to its relatively recent introduction into public schools, there are increasing numbers of school children that have been involved in mindfulness training over the years such that any significant issues would most likely have surfaced at this point. On the contrary, there have been studies that have shown that the effects of mindfulness tend to diminish relatively soon after the practice has ended to return to pre-study levels (Bernay et al. 99). Moreover, meditation has been practiced in various forms for thousands of years by people of all ages, including children. It would seem that there would certainly be some recognition of any possible adverse long-term effects of meditation by now.

A Waste of School Time

There are parents that see teaching mindfulness as taking valuable time out of the school day that would be better spent on other more traditional subject matter. However, with the benefits to children that have been established through studies thus far and reported directly by students and teachers alike, it can be claimed that mindfulness is a worthwhile endeavor. It appears that taking time for mindfulness meditation may in reality be an important tool to enhance students' ability to focus on their school work and ultimately perform better academically, thus making it a more valuable use of time.

Some Adults Claim Adverse Effects

Dr. Willoughby Britton, an assistant professor of psychiatry and human behavior

at the Brown University Medical School, operates a home in Providence, Rhode Island for people that have had ill effects from mindfulness (Rocha). Her research has focused on people that claim meditation has harmed them. As a result, “She receives regular phone calls, emails, and letters from people around the world in various states of impairment. Most of them worry no one will believe—let alone understand—their stories of meditation-induced affliction” (Rocha). Although meditation has been shown to be safe and beneficial for healthy people, “There have been rare reports that meditation could cause or worsen symptoms in people who have certain psychiatric problems, but this question has not been fully researched” (Rocha). Britton is interested in understanding cases where the benefits of meditation has been called into question. Nathan Fisher works with Britton in this study. He sees that challenges meditators may face can either be avoided through the guidance of experienced teachers or accepted as “useful signs of progress in contemplative development” (Rocha). While in rare situations some meditators may encounter difficulties, a teacher versed in dealing with such events can safely guide them through it. Fisher recognizes that there may be people that struggle with thoughts that surface during meditation, but that these thoughts may be indicators that personal growth is under way. This issue points to the need for a teachers of meditative practices to be adequately trained to deal with the possibility of troubling thoughts or pre-existing mental conditions brought forth in certain individuals.

Mindfulness Does Not Address the Causes of Stress

A key benefit of mindfulness meditation is said to be stress reduction, yet detractors of mindfulness point out that this practice does nothing to address the root causes of stress. While it is true that mindfulness may not remove the cause of stress

such as an upcoming exam or living in a violent neighborhood, mindfulness teaches students to not ruminate on stressors such as these and to accept them for what they are. By not ruminating on the causes of stress, it allows people to develop resilience in order to move forward with their lives.

Buddhist Criticisms of Secular Mindfulness

There are Buddhists that condemn the use of mindfulness in a secular setting. They see mindfulness, the seventh step of the Buddha's Eight-Fold Path, as being used out of context by non-Buddhists without its relationship to the broader teachings of Buddhism. What they recognize as a sacred teaching is reduced to a mere consumer product to be tried and discarded when convenient. However, mindfulness used in a secular setting, including that of public education, is not intended to disparage Buddhism. Its use is independent of Buddhism to simply provide benefits to people regardless of religion. Secular mindfulness is not a "watered down" version of the teachings of Buddhism, but rather inspired by a particular teaching borne out of Buddhism that now exists on its own merit as a scientifically-proven tool to promote well-being.

Chapter VIII

Summary and Conclusions

Increasingly, mindfulness has been brought into the public sphere in recent years. From its relatively unknown beginnings in America, mindfulness meditation has found its way into conversations in a variety of settings. This thesis has reviewed the history of mindfulness from its roots in Buddhism to its development as a secular practice, including its introduction into public schools. The criticisms against mindfulness in schools were discussed and the arguments for its continued use were presented.

The term “mindfulness” appears in Buddhism as the seventh step of the Buddha’s Eight-fold Path to end the suffering he saw in the world. It is described in detail in an ancient text known as *The Satipatthana Sutta* which contains the Four Foundations of Mindfulness. Over the centuries Buddhism spread from its founding in Northern India to Southeast Asia where it is known as Theravada Buddhism with a focus on personal awakening. From there it migrated north into China, Korea, and Japan where it became known as Mahayana Buddhism with a changed focus to that of interdependence and the saving of others. It also migrated into Tibet where it is referred to as Vajrayana Buddhism having personal gurus as teachers and the Dalai Lama leading them. In each of these schools of Buddhism, there are similar yet different teachings in the way in which mindfulness is practiced.

During the 1960’s and 70’s, interest in meditative practices took hold in the West. Robert Wallace and Herbert Benson were each early researchers into the effects of

meditation on one's mind and body. Jon Kabat-Zinn of the University of Massachusetts Medical School was among those who studied Buddhism and mindfulness meditation. He came to believe that the techniques found in mindfulness may be beneficial for his patients. By focusing on one's breath and the present moment, chronic pain could be diminished by using a reworked mindfulness removed from its context in Buddhism.

After introducing his secularized version of mindfulness to patients, Jon Kabat-Zinn confirmed that this could be a useful treatment. He framed this new patient treatment around what he termed as the Seven Pillars of Mindfulness: non-judging, patience, a beginner's mind, trust, non-striving, acceptance, and letting go. Mindfulness, stripped from its Buddhist origins, has been proven to be an effective tool in promoting well-being and is now offered as part of holistic treatment plans in over seven hundred hospitals and clinics around the world. Mindfulness is currently available in many progressive workplace environments to provide employees with stress relief and increased focus.

Mindfulness meditation has now found its way into public schools. It is seen as a tool for teachers to help students learn to focus, relieve stress, and regulate their emotions. Besides helping school children, teachers can also benefit through mindfulness to avoid teacher "burnout," resulting in a loss of experienced teachers. Mindfulness programs have been introduced in numerous schools through curriculum offered by organizations that operate at an international level as well as by smaller regional companies as well as being developed internally at individual schools.

Despite the benefits claimed by its proponents, there are those that object to the use of mindfulness meditation in public schools for a variety of reasons. These include a

seemingly covert introduction of Buddhist religious teachings to children, promoting an undesirable world view, a lack of study of the effect of mindfulness meditation on school children, unknown long-term consequences from teaching mindfulness, and that it is simply a waste of time. There are some adults that claim mindfulness has been detrimental to their well-being. Further, there are some Buddhists that decry the use of a sacred tradition in a secular setting.

Numerous studies have now shown mindfulness to be effective for the psychological as well as the physical well-being of adults. The use of meditation has been scientifically established as a way to reduce stress and build personal resilience. Researchers have performed a number of studies regarding the use of mindfulness by children in public education. These studies have shown that students exhibit better attention, more emotional control, less stress and anxiety, make better choices, as well as better academic performance. Some schools include mindfulness as an integral part of a Social Emotional Learning (SEL) program. Students and teachers alike have found mindfulness sessions to be beneficial and a welcome part of their day.

The specific criticisms of the use of mindfulness in public schools was addressed. There are those who object to mindfulness due to its origins in Buddhism. However, Buddhism is a complex religion with a great number of teachings, and to suggest that teaching secularized mindfulness is teaching Buddhism is not realistic. There are other Buddhist teachings such as the prohibition against stealing that are taught in Christianity as well as in a secular context. The notions of acceptance and non-judgment are included in MBSR, and while there are some parents that are concerned that this is contrary to the understanding of right and wrong that they instill in their children, the lessons of

acceptance and non-judgment in mindfulness deal with one's approach to thoughts that pass through their mind, not to discerning their merit. By acceptance, one is taught to not dwell on the past, but to accept things as they are so that students can develop personal resilience to deal with a situation as it is. One should not make judgments based on what may be erroneous or incomplete information; they should not be prejudiced. With the relatively recent introduction of mindfulness in schools, critics point out that there are unknown long-term consequences from its use. However, with the increasing numbers of school children that have been involved in mindfulness over the years coupled with the fact that meditation has been practiced in various forms over the centuries by people of all ages, any ill effects from this meditative practice would have inevitably been established by this time.

There are other concerns regarding mindfulness in the classroom as well. Although rare according to the available literature, there are stories of some adults that have suffered adverse effects from mindfulness meditation, raising questions as to the potential for harm in children. Despite the fact that mindfulness teaches one to be present in the moment and to not ruminate on the past, there are reportedly certain individuals who undertake mindfulness meditation only to find themselves drowning in repressed emotions from past trauma or questioning their own sense of identity. With this in mind, it points to the need for a teacher guiding a mindfulness meditation session that has been trained to recognize and deal with such issues should they arise. Some critics point out that mindfulness claims to reduce stress, but that it does not address the actual causes of stress. Stress in a child's life may come from a variety of sources which they may not have any control over, but one thing they do have control over is how they respond to

stress in their lives which is taught through mindfulness. Although some Buddhists find mindfulness used in a secular context as an affront to their sacred tradition, the fact that mindfulness meditation in public schools may have been inspired by Buddhist teachings is irrelevant and does not negate its positive effects. Mindfulness as a secular practice may claim independence from Buddhism. Some parents see teaching mindfulness as cutting into classroom time that would be better spent on traditional subject matter, yet the purpose of mindfulness is to increase students' focus, reduce stress, and teaches them to "pay attention" to allow them to be better students and increase their academic performance.

My own personal experience with mindfulness meditation has developed slowly over the last several years. Previously I had thought of meditation as the province of Eastern mystics or the Western counter culture. However, I have always been somewhat intrigued. It was not until I began my studies at Harvard University that I became acquainted with the underpinnings of meditation as a practice everyone can use to increase their well-being. Several classes included a short five minute period of mindfulness meditation that was either guided by the instructor or simply involved focusing on one's breath. As the classes I took were always held in the evening, I found this to be a great way to reset my attention from a busy day to the subject at hand.

I then found that I could participate in one hour long sessions on secular mindfulness as a healthcare benefit through work. It included discussions before and after each guided meditation which allowed those participating to relate how they felt about it. When a second follow up eight week session was offered I was eager to join that one as well.

Several years earlier I decided to take up long distance running. Having reached an age where one's physical abilities begin to decline, I thought this may be a good way to stave off the inevitable. My father had passed away from cancer due to smoking at the age I had then reached, so it seemed somehow appropriate to maintain my health in a life affirming way as something of a tribute to him. I decided to qualify for and complete the Boston Marathon. Being what I considered to be a fair weather jogger of maybe a mile or two up to that point, I really had no right to set this as my goal. However, I downloaded a training schedule and set about pursuing it. Along the way, I read that one should try to breathe in with a count of three and out with two. As I ran, I focused on my breath. My mantra was "qualify and complete." I found that when I lost this focus, my pace would suffer. By concentrating and paying attention, I gradually increased my speed. I did not qualify after running my first marathon. Nor did I qualify after my second. But with my fifth marathon I did manage to qualify and was then able to successfully complete the Boston Marathon. I now attribute this accomplishment to the focus I had developed by running mindfully.

As it turns out, I happen to live fairly close to "The Center for Mindfulness" at the University of Massachusetts Medical School where Jon Kabat-Zinn first developed MBSR. I now attend weekly one hour mindfulness meditation sessions there. Each session includes a half hour of meditation and a half hour of discussion. It is held in a large room on a lower level with approximately forty people generally participating. There is no guidance on how to sit other than to sit comfortably, either in a chair or on a cushion on the floor. The session is a guided meditation in which the leader, a member of the medical school staff, asks those in attendance to focus on each part of the body,

then on the breath. A suggestion is made such as to think about others with compassion or about one's values, which may then be used later as a topic of discussion. I have come to look forward to these weekly sessions with both enthusiasm and humility.

My commute to work each day involves taking the train into Boston. After scurrying to get ready in the morning, once on the train I try to make it a point to close my eyes and sit in mindfulness meditation for just ten minutes or so. It allows me to clear my mind and prepare for the day ahead with a renewed sense of focus and purpose. Mindfulness gives me a sense of calm. It has helped me to not react to events mindlessly, but to consider each situation more fully with increased clarity.

Mindfulness meditation has been proven to reduce stress and related cortisol levels, the cause of both mental and physical health issues, while improving focus and emotional regulation as well as personal resilience. It has been the subject of numerous scientific studies involving both adults and school children with many more studies underway. While it may be true that mindfulness meditation was first brought to the West by those exposed to its use in the Buddhist religious tradition, it is now taught in a way which exists outside of the vast teachings of Buddhism. The fact that Buddhist mindfulness may have been the inspiration for its secular use in no way diminishes its benefits. I find that the idea of teaching mindfulness being akin to teaching Buddhism can be likened to teaching someone about aerodynamics and airplanes. The development of airplanes was inspired by the flight of birds. However, learning about aerodynamics and airplanes cannot reasonably be construed to suggest that a person is learning to be a bird. There is now overwhelming evidence for expanding its use in secular settings, particularly in public education where young people can learn from an early age how to

focus their attention and self-regulate. As with all subject matter taught in the classroom, it is important that teachers of mindfulness have been properly trained. My investigation into mindfulness in the classroom has led me to believe that all school children can benefit from this valuable practice.

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