# A QUALITATIVE STUDY OF A MINDFULNESS-BASED COACHING INTERVENTION FOR PERCEPTION SHIFTS AND EMOTIONAL REGULATION AROUND WORKPLACE STRESSORS AND QUALITY OF WORKLIFE

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by

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## Abstract

A QUALITATIVE STUDY OF A MINDFULNESS-BASED COACHING INTERVENTION FOR PERCEPTION SHIFTS AND EMOTIONAL REGULATION AROUND WORKPLACE STRESSORS, AND QUALITY OF WORKLIFE

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This study examined the effects of a mindfulness-based coaching intervention on perception and emotional regulation shifts related to workplace stressors (internal and external), quality of worklife, interpersonal relationships, and general sense of well-being of high-level executives (HLE) who indicated a desire to improve these areas of their worklife.

Participants in this study were six HLEs, responsible for managing the direction and change strategies of the organization or department under their charge, who supervise, manage others, and work in dynamic environments. Participants identified negative stress response and emotional regulation as well as being focused on the past and the future to be a challenge in their daily work lives.

Kabat-Zinn (2012) posited that mindfulness practice can provide the practitioner with a true embracing of a deeper sense of self and others, which can permeate life and transform the relationship to how one thinks, feels and works. Marlatt and Kristeller (1999) described mindfulness as “bringing one’s complete attention to the present experience on a moment to moment basis” (p. 9).

The study included an 8-week mindfulness coaching intervention, pre and post questionnaires, semi-structured interviews. Mindfulness Based Stress Reduction (MBSR), HeartMath Mindful-Hearth Intelligence workbook, tools, exercises and practice were used within a coaching frame work.

A multiple case study design was used and a thematic analysis of the coaching intervention was conducted. The analysis detailed themes and patterns in shifts and changes in perception, emotional regulation around stress response, relationships, and general sense of well-being.

The study elucidated the impact of these interventions on HLEs. Several themes emerged as assets for participants during the intervention, specifically, work stress management, heightened awareness, and acceptance. Suggestion for further research would be to explore the hardiness of the process of acceptance in deepening the impact of the other central themes. An unanticipated result which was explored was the extent to which participants came to understand with kindness and curiosity the negative aspects of nondisclosure within their work culture.

## Acknowledgments

Rollo May (1953) in *Man's Search for Himself* explains,

> Freedom is man's capacity to take a hand is his own development. It is the capacity to mold ourselves. Freedom is the other side of consciousness of self: if we were not able to be aware of ourselves, we would be pushed along by instinct or the automatic march of history, like bees or mastodons. (p. 160)

There is a strong sense of freedom in having completed this research on awareness, personal and organizational transformation through mindfulness practice. I so appreciate the very special sentient beings that helped me on my journey to further develop and mold myself, and complete a dissertation that was meaningful, relevant and continues to excite me. Those wonderful beings to whom I refer include the high-level executives who so bravely committed to being participants of this research study and saw the intervention through to completion; Cassandra Rowe, who is a Masters level data analyst, so expertly assisted me during the analysis portion of this dissertation process; Jon Kabat-Zinn, who has been and continues to be one of my personal heroes in pursuit of mindful living; and Peter Senge, who provided me an opportunity to work with him many years ago through his Society for Organizational Learning. Peter is one of the foremost systems experts in looking at organizations as living, breathing organisms. Peter's understanding of a holistic approach to fixing broken systems and the people intrinsic to those systems is the reason why my professional calling lies in helping to create efficient running organizations using a healthy and integrative systems approach. Thank you, Peter, for continuing to inspire me.

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and discern with heightened awareness the talents and gifts that were uniquely mine. Because of her support and love, I became comfortable on my journey as a systems healer and with my rigorous academic pursuits at Saybrook. Jeanne was a ground-breaking scientist who was able to break difficult concepts down to their simplest properties. She worked tirelessly to create opportunities for optimal living for all people, helping them to recognize their potential for a magical life of wellness and self-love. I know she is with me and so proud of this significant milestone.

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# CHAPTER 1: INTRODUCTION

While we know that some level of stress is required to make appropriate responses to environmental stimuli, and even higher levels are sometimes useful for short bursts of increased performance (Barrios-Choplin, McCraty, & Cryer, 1997), over time, inappropriate stress responses can have dysfunctional mental and physiological consequences (p. 195). Stress can be defined as the discrepancy between the physical and psychological demands and the resources available for meeting those needs (Stockton, 2006). Stress has also been defined as any:

> Pressure, strain, or a sense of inner turmoil resulting from our perceptions and reactions to events or conditions….a state of negative emotional arousal, usually associated with feelings of discomfort or anxiety that we attribute to our circumstances or situation. (Childre & Martin, 1999, p. 270)

Stress occurs when our perception of events does not meet our expectations and we are not able to manage our reactions in a way that enhances quality of life and healthy relationships. The impact of a negative stress response on perceptions and emotional regulation and negative emotional reactions to events in the workplace have propelled this researcher's focus for her dissertation study.

HLEs are increasingly challenged by their work environment. Experiences of feeling overwhelmed, stressed, irritable, unhappy, tired, and inefficient are common. Due to the competitive nature of the business world and its shifting demands, the burden of managing and performing at peak levels lies squarely on the shoulders of these executives. According to Rizavi, Ahmed, and Ramazan (2011) these changes are creating an increased level of stress among executives.

While elevated stress is experienced by executives at all levels, those who are in high-level positions are most vulnerable to the effects of negative stressors and resulting

emotions as a result of their job demands and management responsibilities. For HLEs, increased role stress is associated with lower levels of perceived job performance and job satisfaction (Veloutsou & Panigyrakis, 2004). Perception of substandard job performance and job dissatisfaction often leads to employee absenteeism, which is directly related to stress (Barrios-Chopin et al., 1997).

Additionally, the direct and indirect costs of employee stress can be measured in both humanistic and financial terms. Therefore, financially healthy organizations are likely to be those which are successful in maintaining and retaining a workforce characterized by good physical, psychological, and mental health (Cooper & Cartwright, 1994).

In this study, perceptions and emotions are key elements of how executives manage work environments that are perceived as "high stress." This study will also examine how HLEs can build personal skills via a mindfulness intervention to constructively navigate emotions, and effectively channel and direct impulses in a way that is not self-destructive (Dane, 2011) while building awareness to attention and becoming more comfortable within their dynamic work environments.

Humanistic, transpersonal, mind-body medicine researchers and practitioners have conducted studies regarding the ability to internalize the process of self-regulation, which involves "the ability to intentionally control and appropriately respond to interpersonal stimuli" (Fitzsimons & Bargh, 2004, p. 151). Research has sought to deepen understanding about how perception is a critical aspect of producing stress conditions and how that understanding can be essential in the process of modifying behavior to alleviate deleterious consequences (Sher, 2005). Those conditions include rumination, responding

ineffectively to negative stressors, thus causing the workplace and relationships in the workplace to take on an almost intolerable orientation.

This dissertation explored shifts in the aforementioned processes within the context of an applied mindfulness-based coaching intervention inclusive of Mindfulness Based Stress Reduction (MBSR) and Heartmath Mindful/Heartful practice, with HLEs working in dynamic environments who have self-identified as feeling stressed and with a diminished sense of emotional regulation.

Research concerning both of these mindfulness modalities (MBSR and Heartmath) demonstrates the ability to engage in momentary awareness, better self-regulation, compassion, and the experience of a reduction in negative stress response and of an improved sense of life/work satisfaction (Childre & Rozman, 2005; Kabat-Zinn, 2005). This study examined the impact of this mindfulness intervention on shifts in perception, emotional regulation, and its role on an enhanced quality of worklife, relationships, and general sense of well-being.

## Purpose

The purpose of the study was to explore the impact of a mindfulness-based intervention on HLEs' perceived stress levels, ability to practice emotional regulation, and sense of well-being, including quality of worklife and interpersonal relations. The process used was to administer a mindfulness-based intervention, provided via a one-on-one mindfulness-based coaching intervention delivered to high-level executives who manage others in work environments they consider "highly stressful," and who acknowledge their difficulty in finding moments of homeostasis, and emotionally regulating themselves personally and while in relationship with others during moments

they perceive themselves to be highly stressed. The goals of this study were to describe: (a) in what ways changes and shifts occur in awareness and attention to stressors through the mindfulness intervention, including shifts in perception related to a sense of well-being and improved interpersonal relationships; and (b) how those changes and shifts impact individuals on a personal level and in their worklife with their peers, those they supervise, and those they report to.

Hede (2002) and Solomon (2007) described that when a person is able to develop capabilities for recognizing and dealing with their own emotions and those of others, they can become more effective in the complex interpersonal situations they confront on a daily basis.

## Background

> Whether we have reached the stage of wanting to look more closely into our inner world or are still firmly located in outer concerns, most of us are greatly in need of a serenity which can make us less vulnerable to the many problems that life puts in our path. (Fontana, 1998, p. 6)

This quote reflects Fontana's understanding of the desire of sentient beings to develop the ability to find ways by which to manage daily stressors in a way that can improve quality of life and experiences. One in five people experience high levels of stress at work and 44% say they feel under excessive pressure once or twice a week or more ("Managers Are Key," 2007). When an individual is experiencing negative stress responses and perceptions are negative in orientation, the quality of life of that individual is greatly diminished whether on the job or in their social/personal environments.

If an HLE is vulnerable to negativity in the workplace due to disruption of significant and negative stressors, that employee will more than likely be unable to manage effectively: "Stress occurs when pressure exceeds your perceived ability to cope"

(Cooper & Palmer, 2002, p. 5). Because HLEs are in many ways responsible for creating a culture of trust, safety, and well-being for their employees—if they are not functioning at their best, not only will their quality of life be diminished, their relationships with peers, those they supervise, and others they interact with will be impacted. Employee morale and productivity will be affected, and more than not, high staff turnover will occur, and communication may become dysfunctional ("Managers Are Key," 2007).

HLEs, by virtue of their positions, have always faced challenges in handling work-related stressors and emotions in themselves as well as in their subordinates. Issues concerning the ability to perform and be productive as well as the need to earn the respect of the team for which they are responsible, are paramount measures of success in the mind of high-level executives (Linger, 2012).

Hede (2002) and Solomon (2007) suggested that it is essential for HLEs to develop capabilities for recognizing and dealing with their own emotions and those of others; and that by doing so leaders can become more effective in the many complex interpersonal situations they confront on a daily basis. The inability to shift perceptions and to manage emotions and stress productively can prove destructive to the quality of life, sense of well-being, and relationships of both the HLEs and those they manage, as well as those they report to.

There has been a significant amount of research over the last 20 to 30 years on the effects of stress, what causes it, and various methods that might assist in the mitigation of stress in one's life. However, research concerning the efficacy and impact of some of these interventions as it relates to the lives of HLEs in their workplace is not abundant (Dane, 2011).

Given the primary researcher's ongoing interest in how several of these interventions might impact HLEs and their ability to alleviate negative stress responses, regulate themselves emotionally, and enhance their quality of life and relationships in the workplace, this dissertation focused on this topic with the purpose of adding to the current but limited body of knowledge and research in this area of study.

In the following section, several of these methods of stress reduction techniques are highlighted and reviewed that are used to mitigate stress and assist in regulation of emotions and shift perceptions from negative to positive. This review was not the primary intent of the dissertation research, but it assisted in setting the stage for the research and opens the door for focusing on the research topic.

**Types of Meditative Practices and Their Benefit**

Mindfulness practice and other forms of stress reduction practices including meditation are considered effective stress reduction modalities that can affect our physiology (Kabat-Zinn, 2012). There are generally three major types of mediation: concentrative, mindfulness, and expressive. Concentrative meditation consists of focused awareness on a particular object, such as an image or sound (Center for Mind-Body Medicine [CMBM], 2011, p. 24). The second type of meditation is called mindfulness or awareness meditation, which involves being relaxed and aware of thoughts, feelings, and sensations as they arise, without focusing on a particular object. Walking can be a mindfulness practice. Mindfulness practice can be facilitated while standing, sitting, and even driving in a car. One focuses on staying aware of thoughts, feelings, and sensations as they arise; as sights, smells, and emotions come into awareness, the individual simply names them and observes one's surroundings.

Mindfulness is a wonderful introduction into "being" (Kabat-Zinn, 1990; CMBM, 2011). Studies of mindfulness practice and meditation have emphasized its value as a stress management technique (Kabat-Zinn, 2009). The third type of meditation is expressive meditation. It is more than likely the oldest kind of meditation and one that indigenous healers around the world have used for thousands of years. It includes active techniques such as chanting, dancing, shaking, rapid breath work, and whirling (CMBM, 2011, p. 24). Claude Bernard, the 19th century French scientist, who is widely considered the father of modern physiology, suggested that the human body has the capacity to maintain homeostasis—a stable environment in the midst of a continually changing world (CMBM, 2011, p. 10). Physiological approaches to managing stress can include general mindfulness practice, mindfulness meditation, and other types of meditation. In fact, meditation is actually one of the oldest approaches to managing stress in one's life (Kornfield, 2008).

A common focus of mindfulness practice and meditation is that it is known to be a preventative measure that can assist in reducing stress, and can increase a sense of self-improvement. Numerous studies have been conducted on the benefits of mindfulness and the other forms of meditation. Studies show that concentrative and awareness meditation can change brain wave activity, increase parasympathetic activity, and increase heart rate variability (Kabat-Zinn, Lipworthy, & Burney, 1985, Childre & Martin 1999). Additionally, studies have shown that meditation can change the neurotransmitter levels, including increases in serotonin, endorphins, melatonin, and acetylcholine, while decreasing cortisol and norepinephrine levels (LeDoux, 1996; Rothbart & Sheese, 2004; Ryan & Jethá, 2005).

The regular periods of calmness that occur during mindfulness practice and/or formal meditation are thought to temper the cumulative effects of stress and assist the body and mind in their revitalization (Cotton, 1990). Yoga, which incorporates various components of meditation, has been recorded to have been practiced since 3,000 B.C.E. (Patanjali, 1970). Yoga allows the individual to strive for the achievement of one's utmost potential (Patel, 1984). A technique closely associated with meditation is the ability to control breathing. Being in a calm state and employing diaphragmatic breathing leads to mental relaxation. It appears that deep diaphragmatic breathing can be an important tool in reducing stress, as there seems to be a reciprocal relationship between the mind and the way we breathe (Reich, 2010). Deep, even breathing produces a natural effect that can strengthen the nervous system and create a sense of calm and relaxation (Benson & Klippner, 1976).

Music has also been shown to be a beneficial intervention as a stress management tool, as the use of music to treat health problems is firmly rooted in history (Boxberger, 1962). There are also cognitive approaches to managing stress that have their roots in the phenomenological approach to psychology. This approach posits that an "individual's view of him or herself and his or her world plays an essential role in determining behavior" (Cotton, 1990, p. 189). Additionally, Cotton (1990) suggested that:

> In the case of stress and stress-related problems, the individual's view is important in a variety of contexts: (1) the individual's interpretation of those events or situations which have been labeled as stressful; (2) his or her interpretation of the consequences of the stressor; (3) his or her view of his or her own ability to cope with the stressor or stress reaction. (p. 189)

Thus, in this researcher's opinion, the need to mediate the physical aspects of stress, as well as increasing the ability to assist in the enhanced state of emotional

regulation, and shifts in perceptions from a negative to a positive orientation, are critical to success in the workplace as it relates to high-level executives. Consequently, modalities such as Aaron Beck's cognitive therapy, Albert Ellis's rational–emotive therapy, and Donald Meichenbaum's cognitive behavior therapy and stress inoculation training have been proven effective in their consideration and strategies to address stress within individuals holistically (Cotton, 1990).

**Mindfulness practice.** Mindfulness practice, which is considered an awareness intervention, can be practiced virtually anywhere at any time and is not an intervention that is isolated to an exclusively meditative state. Studies that focus on the practice of mindfulness have emphasized its value as a stress management technique (Bazerman, 2006). As described by Jon Kabat-Zinn (1990), mindfulness is a process of bringing a certain quality of attention to moment-to-moment experience.

One can be mindful without formally meditating, as it is a way to live consciously in the world. At the core of mindfulness is a psychological state, the emergence of which does not require meditation (K. W. Brown & Ryan, 2003). Thich Nhat Hanh, a Vietnamese Buddhist monk, in his book, *Peace is Every Step*, described the idea that mindfulness is about being in harmony and in synchronicity, creating a peaceful existence no matter what condition our external environment happens to be at the moment. He posited that mindfulness is about "the path of mindfulness in everyday life" (Hanh, 1991, p. 5). Jon Kabat-Zinn (2012) suggested that:

> Anything and everything can become our teacher of the moment, reminding us of the possibility of being fully present: the gentle caress of air on our skin, the play of light, the look on someone's face, a passing contraction in the body, a fleeting thought in the mind. Anything. Everything. If it is met in awareness. (p. 15)

Mindfulness practice speaks to awareness, cultivated by paying attention in a sustained and particular way: on purpose, in the present moment, and nonjudgmentally (Kabat-Zinn, 2012). The main goal of the practice of mindfulness is to systemically regulate our attention and energy, influencing and possibly transforming the quality of our experience. The practice can assist in realizing the full range of our humanity and of our relationships to each other and the world (Kabat-Zinn, 2005).

**Biofeedback.** Biofeedback is also an intervention that addresses a holistic approach to reducing negative stress responses, improving ability to self-regulation because it allows ordinary human beings to notice the feedback of signals from their bodies and to control physical functions that were believed to be beyond their control. This includes the "fight or flight" response and its physiological consequences (CMBM, 2011). Dr. Neal Miller and his colleagues conducted a series of experiments with animals that demonstrated that with feedback of information about their biological functioning—signals from outside the animals—the dogs and rats he trained learned to control heart rate, salivation, and urinary incontinence without using any input or control from the voluntary muscular system. Yogis from India use biofeedback to raise and lower blood pressure by 10–30 points (CMBM, 2011).

Biofeedback involves the use of an instrument to tell the brain what is going on in the body. It is defined as the technique of making unconscious or involuntary bodily processes such as heartbeat or brain waves perceptible to the senses in order to manipulate them by conscious or mental control (Biofeedback, n.d., para. 1). When used in relation to a mindfulness or meditation technique, it is a method of stress reduction that can assist in emotional regulation, perception shifts, enhance abilities to increase

performance, and create a greater sense of confidence (DeWitt, 1980). Stress is a part of our lives and it will always be so; however, we can learn to manage stress and even reverse the damage it has caused to our mind, body, and spirit.

**HeartMath meditative and biofeedback tools.** Heartmath tools and technologies, which consist of meditative awareness building, biofeedback methods, and focus on the relationship between the heart, brain, and mindful awareness, "have been used in over 40 countries to help transform stress into productive energy" (Macquarie Institute, n.d., para. 4). The heart plays a significant role in the generation of our emotional states, and every beat of our heart transmits electromagnetic fields that radiate throughout our bodies including the brain (Reich, 2010). The heart is part of a communication system with major body organs as well as the brain.

The heart plays an integral part in hormonal and neurological effects on our body. In the body, the heart is positioned in a place that allows it to intersect and connect to many of the interactive systems that make it possible to serve as an opening point into the body's communication network. This network connects our mind, body, emotions, and spirit (Institute of HeartMath [IHM], 2005).

According to Green and Green (1977), the relationship between emotional and cognitive processes is considered the very core of human physiology. He described each change in the physiological state as always accompanied by an appropriate change in the mental–emotional state, whether it is conscious or unconscious. Additionally, every change in mental and emotional states is accompanied by an appropriate change in the physiological state (Green & Green, 1977, p. 58). This research describes a feedback system with various modes of carrying and exchanging information throughout the body.

HeartMath techniques combine intentional heart focus with the generation of sustained positive feelings that lead to a beneficial mode of physiological function termed *psychophysiological coherence* (Bedell & Kaszkin-Bettag, 2010; Childre & Martin, 1999). This type of coherence is described by the HeartMath Institute as having the following attributes: (a) increased parasympathetic activity; (b) increased entrainment and synchronization between physiological systems; (c) high heart rhythm coherence (sine wave-like rhythmic patterns); and (d) efficient and harmonious functioning of the cardiovascular, nervous, hormonal, and immune systems (McCraty, 2001, p. 16). Research has demonstrated that our inner systems are functioning with a higher degree of synchronization and efficiency if we are in a state of psychophysiological coherence (Childre & Martin, 1999).

Mindfulness practice and HeartMath techniques were used as an intervention within a coaching framework to observe shifts in the stress response, emotional regulation, and perceptions. Attempts were made to gauge the changes in the ability to manage stressors from a positive orientation, to improve quality of life and relationships in the workplace, and to enhance a sense of well-being. The intervention was conducted with HLEs who are responsible for managing others in dynamic work environments.

## Application to Human Science

Human science is the study of artifacts, experiences, interpretations, and personal constructs in relation to human beings for the purpose of developing cross-cultural bodies of knowledge. What constitutes the role of human science in creating paths toward knowledge is its “focus and commitment into the study of human life and how we can inquire into it” (Salner, 1986, p. 109). “Inquiry has a potency which enables us to

understand more than a series of particular experiences. Its power to disclose transcends time and space" (Salner, 1986, p. 107). The contribution of this study to human science is that it examined and sought to understand transpersonal aspects of knowing as they relate to the phenomenon of mindfulness practice/intervention.

The phenomenon of mindfulness practice in the context of this study is the practice and process of "bringing a certain quality of attention to moment-by-moment experience" (Kabat-Zinn, 1990, p. 4). The quality of attention that is brought to those experiences creates the framework by which practitioners can observe their higher selves, develop individualistic ways of knowing and perceiving experiences, and eventually transcend and/or change the way they currently view their internal and external environments. This study examined the impact of a repetitive mindfulness intervention on the perceptions, emotions, and sense of well-being of study participants. The participants self-identified as being HLEs with significant management and decision-making responsibilities, and who felt vulnerable to negative environments and stressors in the workplace. Further, those stressors and environments negatively impacted their sense of well-being, the ability to self-regulate emotions in a positive manner, and their on-the-job sense of accomplishment (productivity and interpersonally), as well as their overall quality of life.

This examination occurred via a system of inquiry which focused on the ways in which the participant's sense of identity or self extends beyond (trans) the individual or personal to encompass wider aspects of humankind, life, psyche, or cosmos (Walsh & Vaughan, 1993). The study examined changes in thought, feeling, and sensing that might occur in those studied, and the ways in which the participants experienced their

perceptions and emotions shifting from a negative orientation to positive one. Additionally, over the course of the 8-week study, participants observed and reported those phenomena related to the intervention, including if the individual believed that his or her "consciousness has expanded beyond the usual ego boundaries and the limitations of time and space" (Grof, 1993, p. 38). Further, if expansive thinking occurred around the participant's experience, the ways in which the expansion occurred was explored.

Human science is interested in expansive thinking approaches to knowledge and diverse entry points to human experience. It emphasizes the value in finding differences in experiences that are important to examine, it relishes the nature of integrative and wholeness of experience, it promotes the autonomy of ideas and freedom of choice in human action, and it supports the idea that human experience is an emergent quality (Polkinghorne, 1983).

At the core of mindfulness practice is the ability to observe oneself without judgment and create the ability to be aware of present-moment experiences, learning to value and align those experiences with developing a deeper sense of the transcendent self, and the self's connective properties to environment, physiology, spirituality, and the quality of being in relationship to others. Study participants shared if and how the repetitive intervention created a shift in the way they perceive their environment and relationships with others even if the environment and others have not changed. Furthermore, participants shared how, if shifts in perceptions have occurred, in what ways transpersonal change has activated potential opportunities for changes in the environment and others who are in relationship with the study participant.

This intervention relied on transpersonal introspective observation, sensing, and as a result, reflective reasoning by the study participant. Based on the peer-reviewed literature that investigated both mindfulness practice and human science, this researcher hypothesized that due to the transpersonal nature of the intervention, the process eventually results in ideas, beliefs, and values developed by the study participants about if and how shifts and changes occur within their experiences and connect to humankind and the world outside of their individual selves.

English philosopher and human scientist John Locke suggested that ideas are generated via sensations and that when an idea generated through sensation was sufficiently developed and exercised, the ability of reflective reasoning could allow for abstract thinking and the deducing of other ideas (Collen, n.d.).

Finally, in the spirit of the human science tradition, particular attention was paid over the course of this study to understanding each participant's value system and any changes that impacted those systems through the intervention. Heinrich Rickert, philosopher and human scientist, expressed the importance of "attending to understanding values." He suggested that "meaning cannot be understood except in terms of values" (as cited in Polkinghorne, 1983, p. 25). Consequently, at the center of this study was attention to the sacredness of the individual nature of each study participant's perceptions, perspectives, and values while this researcher investigated and researched the data that emerged. Values truly make life meaningful to individuals; they serve as a compass or manifestation to how life is lived and through what perceptual lenses experiences are "experienced," so that they can be reflected upon later, shared with others, and ultimately be of service to humankind.

## Rationale

Hanh (1976) theorized that mindfulness practice has the potential to help people become "alive" to the present moment. Being able to be attuned to one's own internal processes and states is at the core of mindfulness (Epstein, 1995). The process has to do with particular qualities of attention and awareness that can be cultivated and developed (Kabat-Zinn, 2005).

There is strong and impressive evidence that suggests that being mindful tends to increase physical and mental health, enrich interpersonal relationships, and improve behavioral regulation (K. W. Brown, Ryan, & Creswell, 2007). While there is bourgeoning interest in mindfulness among researchers and the general public, there is relatively little research with regard to whether mindfulness affects how individuals perform their work tasks and responsibilities (Dane, 2011). The majority of research on mindfulness has been focused on clinical interventions such as those offered within clinical psychology that are primarily concerned with well-being and mental health. Management has not been a significant focus for researchers who study the effects of mindfulness.

Considering the limited research on the benefits of mindfulness related to improved states of workplace relationships, improved ability to regulate behaviors within dynamic workplace environments, improved levels of curiosity, openness and acceptance of moment-to-moment experiences in those environments, it seems of paramount importance that additional research be conducted to analyze and evaluate how individuals focus their attention within their organizations and how that quality of attention impacts their perception of performance and the quality of relationships. This focus has the

potential to contribute to the body of knowledge on the impact of mindfulness in the workplace. The literature section below reviews the theoretical constructs of mindfulness and its application to improving awareness and attention, focus, openness, becoming nonjudgmental in observation, and reducing stress; all prerequisites to feeling comfortable on the job, successful job performance, and successful inter- and intrapersonal relationships.

## Research Questions

Questions that guided the research inquiry were as follows:

1. Does the 8-week mindfulness intervention create a significant shift in perceptions and emotional regulation for high-level executives as it relates to negative workplace stressors (both internal and environmental), interpersonal relationships, general quality of life, and sense of well-being?
2. How do participants describe any shifts in perceptions and/or emotional regulation and what is the impact of the shift(s)?

## Summary

Many HLEs are vulnerable to inordinate amounts of negative stress due to the dynamic and competitive nature of their work environment and the diverse challenges to manage, create, and innovate that lie therein. When these executives perceive their environments as difficult to navigate and highly stressful, their perception of their on-the-job performance, job satisfaction, relationships with others, and their ability to regulate emotions are negative and, therefore, the workplace becomes an uncomfortable and sometimes unbearable place to function. In fact, when executives succumb to negative stressors they perceive their contributions within the workplace to be of little importance (Veloutsou & Panigyrakis, 2004).

While the benefits of Mindfulness practice are becoming highly popular among secular populations and some major corporations such as Google have begun to offer

mindfulness courses into their human resources offerings (Kelly, 2012), its humanistic and transpersonal effects within work environments as it relates to shifts in emotions, perceptions, and other characteristics that may impact both employee and organizational success within dynamic environments, have largely not be studied or evaluated.

This study examined if and how a mindfulness coaching intervention, facilitated with executives considered "high level," who work within dynamic environments and have self-identified those environments as stressful, can assist those executives to constructively channel impulses, begin to see their perceived stressful environments as possessing opportunity for change, while building awareness of self and others; becoming more comfortable with people and conditions on a daily basis.

The following literature review examined the challenges HLEs must contend with in the workplace as well as an extensive review of the constructs and dynamics of mindfulness practice in its various iterations. It also considered the potential impact of the practice and its interventions on executives who have significant responsibility in an ever-changing workplace, consider their environment both dynamic and stress-filled, have a negative view of that environment, and who stated their ability to navigate their job in a positive and effective manner, is either diminishing or has already been diminished.

# CHAPTER 2: REVIEW OF THE LITERATURE

HLEs are most often individuals who have been given a position of authority and are responsible for leading and managing others. They are formally required to provide a degree of structure and organization appropriate to the organization's situation. These executives act as a liaison, role model, and catalyst for action and problem solving, administering vital group support and supervision not usually provided by other group members. HLEs are often responsible to articulate group objectives and goals succinctly and clearly, just as they are required to adhere to high standards of performance, and promote equity and equality among group members. They are also usually required to facilitate discussions, help the group develop, and provide change strategies and conflict resolution among and between group members (Linger, 2012). A key component of an HLE is establishing an environment of trust by modeling sound ethical principles in problem solving and conflict resolution (both within a team environment and independently), and in decision making. Mindfulness practice can assist HLEs in creating environments of trust and safety by positively impacting several areas that are directly responsible for business performance, among them: safety culture (Hopkins, 2002), conflict resolution (Riskin, 2004), creativity (Langer & Piper, 1987), and decision making (Fiol & O'Connor, 2003).

HLEs are not "born," but rather through assignment they are responsible to oversee teams. There is an implied contextual understanding that they possess at a minimum, the ability to carry out the tasks that are assigned to them in the work environment. They usually have significant responsibility to ensure that the organization, department, or division for which they are in charge are meeting the goals and objectives

set forth by superiors, and are performing in a way that will prove advantageous to the organization as a whole.

By virtue of their positions and ancillary responsibilities, many HLEs face challenges in handling both work-related stressors associated with change, and emotions in themselves as well as in their subordinates. Issues involving the ability to perform and feel productive as well as the need to earn the respect of the team for which they are responsible are paramount measures of success in the mind of HLEs and can create negative stressors within their work environment if they are not able to effectively manage conditions and feel supported. There is evidence that suggests that organizations that operate mindfully foster learning environments where understanding and action are at the forefront, as opposed to organizations that have as these priorities—policies, procedures, control, and order (Browning & Boudes, 2005). Over the past decade there has been increasing acknowledgment of the importance of HLEs' ability to develop capabilities for recognizing and dealing with their own emotions and those of others; and that by doing so, HLEs can become more effective in the many complex interpersonal situations they confront on a daily basis (Hede, 2002; Solomon, 2007).

The main goal of this dissertation research was to study the experience of building a mindfulness practice within a coaching framework, through which the individual practitioner who has been identified as an HLE in a dynamic work environment can explore the nature of the mind–body connection through the practice, while shifting from negative perceptions and unmanageable stressors to a state where the practitioner perceives a more positive work landscape and quality of life. Its fundamental purpose was to consider the literature associated with the dissertation focus area and to support

the view that the techniques and tools such as those taught through traditional mindfulness and HeartMath practice, contribute to the well-being of practitioners in the targeted environments, can aid in creating perceptions of reduced stress, an enhanced quality of life, and improved state of health. For this purpose, this literature review is divided into multiple sections that seek to address the focus of this study.

## The Dynamics of Mindfulness in Creating Infrastructure for Transformative Life Change

The properties of mindfulness practice in helping practitioners to build the infrastructure needed to alter, change, or transform their lives is spoken about in detail by Kabat-Zinn. At the core of those who practice mindfulness is a desire to attain a conscious state. Kabat-Zinn (2012) posits that mindfulness practice can provide the practitioner with a true embracing of a deeper sense of self and others which can permeate life and transform the relationship to how one thinks, feels, and works. This section considers the elements and constructs of mindfulness that buoys practitioners in moving toward a more comfortable sense of self and the world in which they must engage daily.

### The Constructs of Mindfulness

Mindfulness has been described as a process of bringing a certain quality of attention to moment-by-moment experience (Kabat-Zinn, 1990). The practice of mindfulness was developed through the use of a variety of meditation techniques that have their roots in Buddhist spiritual practice. At the core of Buddhist practice is a focus on “the path” that can lead to cessation of personal suffering (Nyanaponika, 1962; Silananda, 1990).

In modern psychology, mindfulness has been contextualized as an approach for increasing awareness and responding skillfully to mental processes that contribute to emotional distress and maladaptive behavior. D. Brown (1977) suggested that "mindfulness expands awareness to as many possible mental events—sensations, thought, memory, emotions, perceptions—exactly as they occur over time—nothing is a distraction" (pp. 243-244). Marlatt and Kristeller (1999) described mindfulness as "bringing one's complete attention to the present experience on a moment to moment basis" (p. 68).

Interest in mindfulness began to flourish when MBSR, a manualized treatment program originally developed for the management of chronic pain, was introduced (Kabat-Zinn, 1982; Kabat-Zinn et al., 1985; Kabat-Zinn, Lipworth, Burney, & Sellers, 1987). Current innovations in psychological treatments have seen an uptake in the use of mindfulness approaches as with mindfulness-based cognitive behavioral therapy. This particular clinical intervention combines training in mindfulness techniques with cognitive therapy. It is proving to be highly effective with participants engaged in therapeutic counseling. A review of 39 previous studies involving 1,140 patients by Professor Stefan Hofmann of Boston University concluded that mindfulness is effective for relieving anxiety and improving mood (Hofmann, Sawyer, Witt, & Oh, 2010).

While general descriptions of mindfulness have not been 100% consistent among investigators, researchers, or disciplines (i.e., some researchers believe that mindfulness requires a process of meditation to be effective, others do not), there is fundamental agreement on some of the principles of mindfulness that unite investigators and researchers, including the description of mindfulness as a kind of non-elaborative,

nonjudgmental, present-centered awareness in which each thought, feeling, or sensation that arises in the attentional field is acknowledged and accepted as it is (Kabat-Zinn, 1990).

In a state of mindfulness, thoughts and feelings are observed as events in the mind, without over-identifying with them and without reacting to them in an automatic, habitual pattern of reactivity. This dispassionate state of self-observation is thought to introduce a "space" between one's perception and response (Bishop et al., 2004). Being able to respond to situations more reflectively rather than reflexively is critical to achieving the goals of mindfulness and is an obvious asset in the workplace.

An operational definition of mindfulness was proposed by a group of scholars (Bishop et al., 2004) and over the past few years seems to be gathering consensus among and between researchers and investigators. These scholars posit a two-component model of mindfulness. The first component is self-regulation of attention so that it is focused on immediate experience, thereby allowing for increased recognition of mental events in the present moment. The second component is an orientation to experience that begins with making a commitment to maintain an attitude of curiosity about where the mind wanders whenever it drifts away from the breath, as well as curiosity about the different objects within one's experience at any moment (Bishop et al., 2004). Both of these aspects of mindfulness are designed to create, maintain, and sustain a mindful state. The developers of the two-component operational definition believe that it is consistent with general descriptions of mindfulness in the literature.

**The benefits of being present: Mindfulness and its role in psychological well-being**. In our professional as well as our personal lives, the quality of consciousness is

vitally important for the enhancement and the maintenance of our well-being (Wilber, 2000). Because most human beings have the capacity to exercise attention and awareness (both part of consciousness), it is extremely easy to overlook the importance of consciousness in human beings. Even to date, there is very little empirical evidence that speaks to the quality of consciousness and its relationship to well-being.

What mindfulness research seems to suggest is that a highly significant attribute of consciousness is involved. In a study conducted within a dynamic healthcare organization delivering a MBSR program using primarily telephone sessions over an 8-week period, 36 nurses who were responsible for fast-paced decision making had to contend with consistently changing environments; the study participants reported improved states of awareness and attention toward self and others, improved states of general health, reduced stress, reduced burnout, increase in self-compassion, serenity, and empathy, and improvement in several other areas. Improvements were sustained 4 months later and individuals who continued their MBSR practice after the program demonstrated better outcomes than those who did not. Findings suggested that a mindfulness intervention can be a low-cost, feasible, and scalable intervention that shows positive impact on health and well-being, and an increase in awareness (Bazarko, Cate, Azocar, & Kreitzer, 2013).

Nyanaponika (1972) referred to mindfulness as “the clear and single-minded awareness of what actually happens to us and in us at the successive moments of perception” (p. 5). Research continues to grow which demonstrates that mindfulness programs via facilities specifically developed for these trainings have a variety of well-being outcomes (Kabat-Zinn, 1990).

As stated previously, mindfulness has both components of awareness and attention. Westen (1999) referred to awareness as the background "radar" of consciousness, which continually monitors both the inner and outer environments. A person may in fact be aware of stimuli without that stimuli being at the center of attention. Most of Western research focuses on the properties of mindfulness in heightening conscious awareness and how it provides heightened sensitivity to a limited range of experience (Westen, 1999). Both the components of attention and awareness are interconnected; attention pulls figures out of the ground of awareness, holding them in focus for varying lengths of time (Kabat-Zinn, 2005; Westen, 1999).

While most humans exhibit some features of awareness and attention, the practice of mindfulness is considered an "enhanced attention to and awareness of current experience or present reality" (K. W. Brown & Ryan, 2003, p. 822). One of the most significant core characteristics of mindfulness is described as "open or receptive awareness and attention" (Deikman, 1982; Martin, 1997).

The practice of mindfulness can be stymied or even compromised when an individual behaves too automatically or without awareness, too compulsively and not in tune to one's behavior (Deci & Ryan, 1980). If a designated leader is not able to self-regulate behavior, is outside of awareness, or acts too compulsively at work, the potential exists to impede the building blocks of trust between team members, and create a culture of instability, fear, and stress.

While mindfulness bears some resemblance to other constructs and forms of self-awareness, it differs significantly from those constructs in the major principles at its core. For instance, Duval and Wicklund's (1972) theory of objective self-awareness, Buss's

(1980) self-conscious theory, and Carver and Scheier's (1981) control theory defined self-awareness in terms of knowledge about the self. For instance, when Buss discussed private self-consciousness, he described it as a disposition to be highly aware of internal states (Fenigstein, Scheier, & Buss, 1975). The focal point of this theory is that it is concerned with the focus of the awareness rather than the quality of awareness. This type of focus on awareness can lead to preoccupation with internal states, which can cause judgment of self and others, and rumination. Another construct is public self-consciousness, which is the tendency to be concerned about the self as perceived by others. This tendency to be concerned may in fact detract from present awareness. These forms of self-awareness reflect cognitive operations on aspects of the self through self-examination, and are processes collectively referred to as *reflexive consciousness* (Baumeister, 1999; Bermudez, 1998).

On the other hand, mindfulness directed inward differs from these approaches in that at its core it focuses on perceptual or pre-reflexive experiences. In this mode of functioning, the focus is operating on, rather than within thought, feeling, and other contents of consciousness. There is no judgment in this process; it is perceptual and reflective. This way of managing others can be effective, as it is nonreactive, since it has qualities of nonjudgment and curiosity (K. W. Brown & Ryan, 2004).

William James (1911/1924) stated that "compared to what we ought to be, we are only half awake" (p. 237). The main focal point of mindfulness is on the quality of consciousness, demonstrated by clarity and vividness of current experience and functioning. In the workplace, having the ability to be clear and succinct as it relates to

one's emotions and decision making are attributes that may lead to success in work environments.

**Mindfulness and task performance**. As stated previously, research on workplace applications of mindfulness has been sparse, particularly as it relates to the impact of mindfulness on perceived productivity within organizational settings. Dane (2011) posited that mindfulness is a state of consciousness in which attention is focused on present-moment phenomena occurring both externally and internally. However, mindfulness has historically been viewed as a state of consciousness cultivated through meditative practice (Conze, 1956). To date, the terms *mindfulness* and *meditation* are sometimes used interchangeably. Yet, at the core of mindfulness is a psychological state, the emergence of which does not require meditation (K. W. Brown & Ryan, 2003).

Paying attention is key in the workplace, particularly as it relates to HLEs and their responsibilities in managing change both in themselves, others, and their environment. There is growing evidence that HLEs' role in managing change impacts significantly the success of the change (Conner, 1996; Higgs, 2005; Kotter, 1995). The essence of mindfulness is the ability to maintain attention without judging or ruminating.

In a 2010 Wake Forest University study published in *Consciousness and Cognition*, researchers demonstrated that only 4 days of mindfulness practice can enhance the ability to sustain focused attention and showed significant improvements in mood, working memory, spatial processing, and cognition (Zeidan, Johnson, Diamond, David, & Goolkasian, 2010). Research also suggests that the manner in which organizational members focus attention affects how they make strategic decisions

(Nadkarni & Barr, 2008), whether they heed risks (Bazerman & Watkins, 2004), and if they notice key resources at their disposal (Weick, 1993).

Kabat-Zinn (2005) indicated that attaining a mindful state of consciousness is an inherent human capacity. This statement carries an inherent belief that most people—including designated leaders—have been, or at a minimum, can be mindful at some point in their life.

Research has found that, depending on an individual's dispositional tendencies, some people may be in a mindful state of consciousness more often than others (Baer, Smith, & Allen, 2004; Giluk, 2009; Walach, Buchheld, Buttenmuller, Kleinknecht, & Schmidt, 2006). These theories suggest that mindfulness is a "state" construct and that it evolves around the concept of moment-to-moment awareness. It also involves attending to external and internal environments. Nyanaponika (1972) suggested that "mindfulness is the clear and single-minded awareness of what actually happens to us and in us at the successive moments of perception" (p. 76).

In a study conducted at the Virginia Tech Carilion Research Institute by Dr. Ulrich Kirk, the findings demonstrated that people who practice mindfulness use different parts of their brains in the decision-making process. This is most visible in their ability to react more rationally rather than emotionally when faced with unfair situations (Kirk, Downer, & Montague, 2011). The ability to make rational decisions by HLEs in dynamic environments can assist in bringing a sense of cohesiveness, trust, and calm among the team as well as a sense of self-esteem and a state of mind that brings greater awareness to the HLE.

The state of mindfulness is very similar to the state of absorption. Being absorbed is a state considered by some researchers to be a critical component in job engagement. In a state of absorption, one is deeply attentive to and engaged with a particular role, activity, or task (Agarwal & Karahanna, 2000; Rothbard, 2001; Wild, Kuiken, & Schopflocher, 1995).

Absorption, as does mindfulness, involves directing attention to present-moment phenomena. The major difference between mindfulness and absorption is that absorption involves a narrower attentional breadth. Many leaders in the workplace can achieve a level of absorption without practicing mindfulness; however, the end result is the inability to consider additional external stimuli that need to be acknowledged in order make appropriate decisions.

Research indicates that in a state of absorption, individuals tend to ignore stimuli not directly related to the task at hand (Rothbard, 2001). Bazerman (2006) provided an example of this by explaining how, when playing a game of bridge, he focused solely on the bridge game itself and was completely oblivious and unaware of the large crowd of bystanders who had gathered to watch him play until he had concluded the game.

Mindfulness, on the other hand, involves a wide attentional breadth that allows attention to a variety of stimuli. It is interesting to note that much of the research on mindfulness points to a variety of non-task performance outcomes, and does not focus on work-related perception shifts. Much of the research posits that mindfulness enables its facilitators to effectively cope with a range of experiences including those associated with strong emotions or physical pain, depression, and anxiety (Baer, 2003; Broderick, 2005; K. W. Brown & Ryan, 2003; Shapiro, Carlson, Astin, & Freeman, 2006; Shepherd &

Cardon, 2009). As stated previously, there is not enough breadth of research that focuses on nonclinical outcomes of mindfulness in the workplace.

Success outcomes are of utmost importance in workplace environments where change, managing others and self, and productivity goals are imbedded in the culture of the organization. A critical dimension of job performance involves perceptions and behaviors that support and contribute to an organization's ability to carry out its purpose and its technical core (Motowidlo, Borman, & Schmit, 1997).

Given its wide attentional external breadth, mindfulness may impact task performance and the perception of an employee's perception of how well he or she is doing on the job and their sense of stress. Research suggests (Dane, 2011) that when individuals are in a mindful state, their external attention to phenomena is quite wide and as such they are attuned to a relatively large number of stimuli.

In addition to wide external attentional breadth characterizing mindfulness, there is also the phenomenon of wide internal attentional breadth which research suggests may play a key role in a sense of ease and effective performance on the job. Evidence indicates that individuals are often not attuned to certain feelings that might seem difficult to overlook (Dane, 2011). An example of this might be that a person could be happy or sad, though not overtly aware of the presence of this emotion (Lambie & Marcel, 2002).

Additionally, there is evidence that mindfulness promotes an approach to the present that is more inclusive and authentic, and provides the opportunity to "slow down" and observe the full range of our experiences as they truly are (Passmore, 2010). Mindfulness researchers suggest that by slowing down, one can be more effective and

more satisfied (Passmore, 2010). It appears that in participating in moments of inner stillness, one is able to step out of the whirlwind of flow and movement—just for a while, in order to recalibrate, step into clear thinking, and reenter the movement and flow in a way that will serve the HLE and team more efficiently and harmoniously.

Additional research has shown that performance-related behavior is often triggered through automatic goal activation such that upon encountering certain cues, one takes action with little to no conscious preplanning or awareness of the thought sequence that came before the behavior or action (e.g., Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001; Fitzsimons & Bargh, 2004; George, 2009).

Whether the workplace environment is dynamic or static also has some influence on the success of mindfulness practices in the workplace (Edwards, 1962; Gonzalez, 2005). Dynamic environments are those that are rapid and fast-paced, wherein leaders have to make interdependent decisions in real time. Dynamic environments involve rapid change and competition, and are usually contained within high-velocity industries (Bourgeois & Eisenhardt, 1988; Nadkarni & Barr, 2008). These types of environments are usually entrenched in negotiations (Polzer, Mannix, & Neale, 1998), emergency response operations (Klein, 1998), or crisis management situations (Drabek, 1985).

Maintaining a wide breadth of attention may be most useful in dynamic task environments. Static task environments are those that are relatively stable and have fixed or predictable relationships (Edwards, 1962; Nadkarni & Barr, 2008). There is some evidence that a wide external attentional breadth associated with mindfulness may be limited in a nondynamic (static) environment. An example of a static workplace environment might be a department head who writes research papers and/or oversees

staff that conducts the research. Successful performance in managing others, carrying out tasks, and enhancing the quality of work in static environments may require filtering out a number of present-moment stimuli and focusing more narrowly on the task at hand (Chatjut & Algom, 2003; Easterbrook, 1959).

What this literature proposes is that the relationship between mindfulness, quality of worklife, and perceived high performance is positive when one operates in a dynamic task environment and has a high level of task expertise. Conversely, the relationship between mindfulness and task performance is negative when one operates in a static task environment and is a task novice (Dane, 2011). The literature also proposes that wide external attentional breadth supports task performance in a dynamic task environment and inhibits task performance in a static task environment (Dane, 2011).

Finally, if HLEs can look at current demands not as stressful distractions that they must hurriedly deal with, but rather as a natural and significant component of their daily job lives, they may in fact be more effective at focusing on the details of the events that surround them as well as their internal reactions to those events. Thus, in focusing attention as directly as possible on the present moment, HLEs may achieve a higher sense of ease, an enhanced quality of life, and a perceived quality of positive performance on a range of tasks and within daily relationships in the workplace.

## Perception and Awareness

**Perception.** When perception is understood as a critical aspect resulting in an event or situation producing stressful conditions, that understanding can be essential in the process of modifying behavior with the result of alleviating deleterious consequences (Sher, 2005).

According to Rothbart and Sheese (2004), "Adults use substantial physiological energy to intentionally self-regulate emotions during stressful situations because they are activating attentional, inhibitory and activational control centers in the nervous system" (p. 337). However, it is known that with practice on a regular basis, the energy used to self-regulate perception and manage emotions become less substantial (Childre & Rozman, 2002).

Dr. Graham Burrows, former President of the International Society for Investigation of Stress, has posited that it is how an individual perceives and reacts to an event that determines whether or not the stress response will be activated (Burrows, 1995). In other words, perceptions determine whether or not one will have the experience of negative stress. According to Burrows (1995), "People's experience with stress results primarily from problems in perception" (p. 2).

What we know about perception is that it can be thought of as an "attitude" and its understanding is based on what is thought and observed. It is usually based on the senses and similar in concept with awareness, sensitivity, opinion, insight, and acuity (Eriksen & Eriksen, 1972). Thus, it appears that perceptions are somewhat filtered through the emotional history and experiences of the individual. The word *emotion* can be defined as energy in motion (McCraty, 2004, p. 134). An emotion is a strong feeling such as joy, sorrow, or anger. People are not always aware of their deeper feelings and how they affect the body. However, researchers have observed how feelings *influence* the body through the effects they have on the heart rhythm (Childre & Martin, 1999). Emotional patterns are established through emotional history and experiences, and become habit forming. Changing the emotional pattern may be possible through building and

increasing momentary awareness of emotions and perceptions, and by feedback through the autonomic nervous system (IHM, 2005; Northrup, 2002).

**Emotional regulation**. Emotional regulation is the ability to manage emotions and perceptions as they arise. It is considered by experts to be one type of self-regulation (Baumeister, Zell, & Tice, 2007). It is about the willingness to be open "to experiencing your own experience when you experience it" (Hayes et al., 1999, p. 33). The ability to self-regulate emotions is essential to functioning effectively in human environments (Baumeister et al., 2007, p. 408). It involves the ability to intentionally and appropriately respond to interpersonal stimuli (Fitzsimons & Bargh, 2004, p. 151). Research conducted by Langer (1997), a leader in mindfulness research, demonstrated that mindfulness, when practiced regularly, improved memory, motivation, creativity, and job satisfaction among other psychological and physiological factors.

Hayes et al. (1999) posited that when one has a willingness to be open to emotions as they arise, this willingness promotes acceptance of uninvited experiences, including any unwanted internal events. Managing emotions is less about controlling emotions and has more to do with replacing control with willingness so that one can "*feel* better, as opposed to feel *better*" (Eifert & Forsyth, 2005; Hayes et al., 1999; Orsillo, Roemer, & Holowka, 2005).

Mindfulness practice has been shown to also assist with the shift from the desire to control emotions to a willingness to experience them. If an individual can learn to be mindful, which concerns itself with paying attention, on purpose, in the present moment, he or she can reclaim another domain of the mind that will help that person become more aware and thus willing (Kabat-Zinn, 2012). This ability of shifting from control to

willingness and acceptance is of particular importance when we consider that HLEs often engage in what Grandey (2000) calls emotional labor and can find themselves depleted and closed off "if they allow the control aspect of the self to transcend the willingness to experience" (p. 95). When executives attempt to demonstrate emotions they believe would be acceptable within the value system of the organization for which they work, their true emotions may not surface because of the energy utilized to suppress them. When there is a suppression of authentic emotion, the result can be emotional distress, physical and psychological illness, and a negative perception of the workplace leading to job burnout (Pennebaker, 1990; Pugliesei, 1999).

When emotions are not regulated successfully, heart rate, blood pressure, and other physiological indicators are affected (Grandey, 2000). Physiological energy can be depleted and the individual can find him- or herself with physical, psychological, and emotional maladies that impact the nervous and cardiovascular systems (Rothbart & Sheese, 2004). Having the wherewithal to shift from a negative orientation to a positive one in the workplace can result in an experience of positive emotions over the long term.

**Positive emotions.** Frederickson (2001) defined emotions as "typically about some personally meaningful circumstances" (p. 218). They are typically brief and are often conceptualized as being associated with "emotion families such as fear, anger, joy and interest "(p. 218). Frederickson formulated a theoretical model called the "broaden and build" theory of positive emotions, which in essence proposed that emotions such as pride, joy, contentment, and love all "share the ability to broaden people's momentary thought–action repertories and build their enduring personal resources…intellectual resources to social and psychological resources" (p. 219). According to Frederickson

(2001), positive emotions broaden thought–action repertoires and have long-term adaptive benefits because they build enduring personal resources and these resources can function as reserves to be drawn upon in the future to manage difficulties or future threats (p. 219).

The role of positive emotions in the "broaden and build" theory has empirical support. Evidence suggests that positive emotions broaden the scope of cognition, attention, and action, which are also known to build intellectual and social resources (Frederickson, 2001). Research on how positive emotions contribute to a sense of well-being and quality of life is clear: Negative emotions narrow the momentary thought-action repertoire and positive emotions broaden this same repertoire. Consequently, positive emotions function as antidotes for the lingering effects of negative emotions. They correct or undo the effects of negative emotions (Frederickson, 1998).

As noted in Frederickson's research, people who are able to experience positive emotions have a better sense of clarity and focus (Taylor, Kemeny, Reed, Bower, & Gruenewald, 2000). Folkman and colleagues posited that positive experiences during chronic stress help people cope (Folkman, 1997; Folkman & Moskowitz, 2000; Lazarus, Kanner, & Folkman, 1980). Positive emotions are also known to assist in building psychological resilience; that is, when one can sustain positive emotions they are better able to bounce back from stressful experiences quickly and efficiently, just as resilient metals bend but do not break (Carver, 1998; Lazarus, 1993). Individuals who experience more positive emotions over time become more resilient and improve their ability to cope. The ability to cope and experience positive emotions builds on one another (Frederickson & Joiner, 2002). Research suggests that positive emotions make people

feel better in the present, but also because they create resiliency and broadened thinking; positive emotions increase the likelihood that people will feel good in the future (Tugade & Frederickson, 2000). Within this context, mindfulness can help resist the natural tendency to be pessimistic. Passmore (2010), a psychologist and researcher, suggested that "our natural tendency to be pessimists can be altered through the practice of activities designed to help us identify the negative ruminative type of thinking that is typically associated to a self-defeating approach to adversity" (p. 193). Consequently, altering the pessimistic state through mindfulness to a more positive state can bring a sense of calmness, satisfaction, confidence, and serenity.

**The heart-brain connection to emotion and perception.** When one is feeling confident and secure, feeling cared for, or appreciating someone or something, the heart rhythm is smooth and even. The smoother the heart rhythms, the easier it is to think clearly and make better decisions, as Western researchers have discovered that the heart and brain are connected (Childre & Martin, 1999). The heart has its own independent nervous system—a complex system referred to as "the brain in the heart" (Thayer & Lane, 2009). "There are at least forty thousand neurons (nerve cells) in the heart—as many as are found in various subcortical centers in the brain" (Armour & Ardell, 1984, p. 64). Once individuals learn to become aware of perceptions and emotions, they can then restructure and reformulate emotional responses, creating a new habitual schema (Culbert, McCraty, & Martin, 2004; Weins, 2005).

To further describe the heart–brain connection and its usefulness in creating moments of awareness as it relates to perceptions and awareness, it is necessary to explore parts of the brain that have a role in assisting with emotional and perceptual

shifts. The amygdala is an almond-shaped structure deep inside the brain's emotional processing system and its specialty is to store strong emotional memories (Ackerman, 1992). The cortex is where reasoning and learning are centered, and it helps solve problems and determine right from wrong (Yang & Damasio, 2007, p. 4). The thalamus is believed to process sensory information as well as relaying it. These three areas in the brain—amygdala, cortex, and thalamus—work closely together. Each of the primary sensory relay areas receives strong "back projections" from the cerebral cortex (Armour & Ardell, 1984). When new data and information come into the brain, the brain looks for associations and compares what is familiar in emotional memory with this new information. It then communicates with the cortex to determine what actions would be appropriate to take and which ones would not (LeDoux, 1996).

**Emotional energy flow.** In thinking about how the brain works with the heart to help self-regulate perceptions, emotions, and feelings, it is important to understand Travis and Ryan's (2004) idea of the interconnectedness of thinking, perceiving, and wellness: Thinking depends on the production of electrochemical energy in the brain, and thus, is a type of energy output in the "Wellness Energy System." While thinking draws energy from all three of the Wellness Energy System input sources, it is particularly dependent upon sensory data: "Thinking energy is intimately connected with the energy of feelings/emotions in mapping our internal version or interpretation of external reality" (Travis & Ryan, 2004, p. 57).

The Wellness Energy System referred to in this context points to a theory of dissipative structures designed by IIya Prigogene for which he was awarded a Noble Peace Prize in 1977. Dissipative structures are open systems in which energy is taken into

the body and transformed, and then returned (dissipated) to the environment (Travis & Ryan, 2004). Closed systems are not dissipative structures; they keep energy blocked, do not circulate or change energy in the way dissipative structures do: "A rock or cold cup of coffee are closed systems because they do not channel and transform energy in this way" (Travis & Ryan, 2004, p. xxiv). The underlying theory of Travis and Ryan (2004) is that clear and efficient flow of energy is essential to emotion regulation and wellness and that disease as well as states of disturbance will most certainly come about when there is "interference with this efficient flow of transformed energy" (p. xxv). This efficient flow of energy is intrinsic to regulating wellness and emotional health.

For HLEs and any individual, physiological, emotional, mental, and spiritual conditions determine how much energy is taken in, what that energy feels like, and how it moves out into the environment, the workplace, at home, or within society. When the energy flow is balanced, humans feel good; when there is interference at any point—the input, output, or in between—people can feel empty, confused, and blocked. Illness is often the result (Travis & Callander, 1994).

Kabat-Zinn (1990) posited, "This moment, when held in awareness with gentleness and self-compassion, has the potential for catalyzing, healing, and transforming your life" (p. 35). In the pursuit of assisting HLEs and others to self-regulate perceptions, emotions, and feelings—in order to bring about momentary awareness, keep transformative energy flowing in a healthy and productive manner so as to reduce stress and enhance the quality of life—an intervention that focuses on achieving the aforementioned states can be beneficial.

**Summary**

It is clear from the research on mindfulness that there are benefits inherent in the process of its practice that would be of great support to those executives who are ranked "high level," have significant responsibilities for others, experience negative stress responses on a regular basis within their dynamic work environments, and who perceive a low quality of life both in their relationships at work, an inability to manage emotions of self, and to assist others in doing so.

Mindfulness practice has the capacity of assisting those in demanding job positions with slowing down, building nonjudgmental awareness, and taking the time to observe what is actually occurring, as opposed to engaging in perceptions that are not based in reality. The practice of mindfulness can assist in this way, since at its core it is a process of bringing a certain quality of attention to moment-to-moment experience (Kabat-Zinn, 1990). Because thoughts and feelings are observed as events in the mind, it can help an individual introduce a space between one's perceptions and responses (Bishop et al., 2004). It can also assist in refining the quality of consciousness we bring to work and to our lives on a daily basis.

Although research on the impact of mindfulness practice in the workplace is beginning to grow (Dane, 2011), the research that focuses on transpersonal aspects of change, such as perception shifts and emotional regulation control, is at present very sparse. However, studies such as Zeidan et al. (2010) at Wake Forest University, seem to suggest that the practice of mindfulness can sustain the ability to focus attention, demonstrating improvements in mood and cognition. Another study by Kirk et al. (2011) at the Virginia Tech Carilion Research Institute described the positive impact on the brain

regarding decision-making processes as a result of mindfulness practice. This seems to be clear evidence that rational decision making is increased when one participates in a mindfulness practice (Kirk et al., 2011).

The research covered in this review also suggests that perception and emotional shifts from positive to negative as a result of an engagement in the process of mindfulness (Rothbart & Sheese, 2004). This is a significant finding given the research conducted by a group of clinicians from Australia who studied how the stress response could be altered by using coping strategies. These clinicians further described how an individual perceives and reacts to events can be the determinant factor as to whether or not a person experiences a negative stress response (Burrows, Norman, & Stanley, 1999). The ability for HLEs to manage perceptions and regulate emotions can mean the difference in creating a harmonious workplace, where trust, positive attitudes, and enhanced quality of life are grounded and strong. The physiological responses are steady and smooth.

It appears that when mindfulness is practiced, one feels positive, confident, and secure. Even heart rhythms are smoother and even. When heart rhythms are steady, it becomes easier to think clearly and make better decisions (Childre & Martin, 1999). There is a heart–brain connection when mindfulness is practiced that is useful in creating moments of awareness. Once individuals learn to build their awareness around emotional regulation and perceptions, they are then able to restructure their emotional responses and create a new way of forming patterns and habits which are in their best interests (Culbert et al., 2004; Weins, 2005).

This mind–body connection brought on by mindfulness practice can help HLEs to experience and be aware of the interconnectedness of thinking and perceiving, which can lead to a state of balanced wellness and energy. The lack of interconnectedness can create states of confusion, emptiness, and overwhelming feelings (Travis & Callander, 1994). When an HLE is able to nonjudgmentally hold each moment in awareness with self-compassion, compassion for others, and gentleness, therein lays the opportunity for transforming life (Kabat-Zinn, 1990).

Understanding the relevancy, practicality, and benefit of mindfulness practice in dynamic environments by HLEs was the focus of this researcher's study. It appears that the opportunity to inform this body of research has the potential to provide groundbreaking insight in the subject area.

## Workplace Stress

Negative stressors may come about when our perception of situations and events do not meet our expectations. In a dynamic work environment where change is the premiere constant, the opportunities for negative stress and diminished health loom large. Understanding how negative stress impacts our ability to think and work optimally is vital in order to make the changes necessary to transition from negative perceptions and management of stressful situations to a more positive orientation.

### Stress and Health

"When health is absent, wisdom cannot reveal itself, art cannot become manifest, strength cannot be exerted; wealth is useless and reason powerless" (Weisstein, 2003, p. 33). This quote was credited to the Greek anatomist, Herophilus of Chalcedon (ca. 320

B.C.E.). It implies that unless we live in a state of optimal health and wellness, we will never live to our full potential or function from a holistic and healthy place.

The inability to respond to stressors in one's life in a way that supports conscious awareness and positive emotions as tools to change emotions, behaviors, and the biological systems of the body, can contribute to conditions that cause a diminished health status or a loss of homeostasis (internal balance) and produce a general sense of "dis-ease." There is increasing evidence that links work stress to negative individual and organizational outcomes (Baer, 2003; Centers for Disease Control and Prevention [CDC], 2010; Childre & Rozman, 2005; Cooper & Cartwright, 1994; Goldstein & Stahl, 2010). There is a growing body of evidence that suggests that the basis of psychological well-being is not just psychological in nature but also physiological (Davidson et al., 2003; Staw, 2004; Wright & Cropanzano, 2007). Consequently, it appears that stress can impact not only the psychological aspects of who we are and our states of being, but also our physiological well-being.

**Operational and descriptive definition of stress.** Stress is a broadly-used term to describe situations from feelings of nervousness, discomfort, and anxiety brought on by a variety of conditions resulting in physical and biological maladies. The following research seeks to define the term *stress* in a clinical, operational, and descriptive manner, and moves away from a broad, generic explanation. Stress has been defined—among other definitions—as the inadequate physiological response to any demand: "Physiologists define stress as how the body reacts to a stressor, real or imagined" (Lovallo, 2005, p. 24). Acute stressors affect an organism in the short term, whereas chronic stressors show impact over the longer term as in changing and dynamic work

environments. Stress refers to a condition and stressor to the stimulus causing it. Stress covers a wide range of phenomena, from mild irritation to drastic dysfunction that may cause severe health breakdown (Shilpashree & Sathish Kumar, 2011).

*Merriam-Webster's Collegiate Dictionary* defines stress as "bodily or mental tension resulting from factors that tend to alter an existent equilibrium" ("Stress," n.d.). This definition contains two elements: It speaks first to a tension, more than likely caused by some force pulling on the system, and secondly, the tension implies a threat to the normative equilibrium of the system. Both elements indicate that stress is an active process that "involves an action on the system that threatens its equilibrium" (Lovallo, 2005, p. 38).

There is an implied assumption that the tension may cause harm unless there is a process of compensation that can reduce the disequilibrium, or the cause of the stress is removed. Signs of stress may be cognitive, emotional, physical, or behavioral (Karasek, 2006). The description in the Merriam-Webster's dictionary further mentions mental or bodily tensions, which implies an ability to distinguish between psychological and physical stresses. Mild stresses are those that cause small demands, consequently, there is very little compensation required to manage this stress. When there is moderate demand, the demand for compensation rises. Finally, when severe demand is placed upon us, the stress is considered extreme and much compensation (or action to reduce the cause of the stress) is required (Lovallo, 2005).

**Challenges versus stressors.** Because there are so many definitions and variations that attempt to clarify the meaning of stress, it is also critical to have the dialect around stress identified so that words such as c*hallenge* are not automatically considered

as “stressful” or “stress producing.” To understand the association between high stress and lack of well-being, one must be able to define job stress and differentiate between that kind of stress and on-the-job challenges.

Karasek (1990) suggested that there is a distinct difference between job stress and job challenges. Job challenges have the ability to energize one psychologically and physically. Challenges can motivate and excite one to learn new skills and become better at managing others. When challenges are met, there is a sense of satisfaction. Consequently, challenges are a significant factor for managers to experience a healthy and productive work environment (Karasek, 1990). Wright (2007), author of “Stress in the Workplace,” wrote, “The importance of challenge in our work lives is probably what people refer to when they say ‘a little bit of stress is good for you’” (p. 279).

**Biological responses to stress**. Stress is also defined in a medical or biological context as

> a physical, mental, or emotional factor that causes bodily or mental tension. Stresses can be external (from the environment, psychological, or social situations) or internal (illness, or from a medical procedure). Stress can initiate the “fight or flight” response, a complex reaction of neurologic and endocrinologic systems. (“Stress,” 2012, para. 1)

Significant research is emerging which describes how individuals can transform stress into optimal performance at work. Improving stress-to-performance ratios is possible (Childre & Rozman, 2005). However, before one can transform stress into optimal performance, one must first understand how stress works on our body’s chemistry.

Approximately 1,400 different biochemicals are released by the body as soon as it senses stress. Stress hormones and neurotransmitters affect how one feels and how one

perceives experiences. When one is in a state of high stress, the physiological and biological systems are immersed in stress hormones and this speeds up an individual's aging biochemical clock. It drains emotional stamina, the ability to be resilient, and it depletes physical vitality (Selye, 1973).

The adrenal glands, which lay on top of the kidneys, manufacture the two major stress hormones, adrenaline and cortisol. Strong emotions, such as fear or anger, produce a large amount of adrenaline, which in turn might make an individual feel a surge or boost of energy. However, the adrenaline hormone does not stay in the body long. When there are large quantities of adrenaline released into the body and the frequency of the release is high, there is a high probability that this constant adrenaline release can lead to high blood pressure and burnout (McCraty, 2001).

The other hormone related to stress is cortisol, frequently called the "stress hormone." It is a necessary and vital hormone; for example, if cortisol were not manufactured in the body, one might not wake up on time for work. However, when humans produce more cortisol than they need on a regular basis, over time that chronic condition can cause sleeplessness, loss of bone mass, osteoporosis, allergies, asthma, acid reflux, ulcers, low sperm count, redistribution of fat to the waist and hips, and fat buildup in the arteries, which can lead to heart disease and numerous other diseases (McCraty, Barrios-Choplin, Rozman, Atkinson, & Watkins, 1998).

Physical stressors are those that are considered to cause a direct threat to our physical homeostasis or well-being (Lovallo, 2005). An example of a physical stressor might be the body's response to weather that is too cold or too hot. Psychological stressors are events that can challenge our psychological safety (i.e., thoughts,

perceptions, and/or interpretations). A major disappointment on the job, or in one's personal life, might also cause psychological distress.

Lovallo (2005) provided an example of emotional distress wherein the sound of footsteps on a dark street may provoke a feeling of terror and a racing heartbeat. This is a case where the physiological responses start out as thoughts and interpretations, mental events that are not in fact physically threatening and are not things at all (Lovallo, 2005). The same is true of the aforementioned example of the feeling of disappointment on the job, which may bring a physiological change of sadness, depression, and isolation, all driven by thoughts and interpretation of those thoughts.

For example, an HLE may perceive a lack of support from superiors or insubordination from staff. These perceptions are actually events that occur in the mind and may have physiological effects that are driven only by thoughts and interpretations and may, in fact, not be based in reality at all. It is important to understand that whether the thoughts and interpretations are real or not, they are causing physiological changes in the person experiencing them—in essence, high levels of stress (Childre & Rozman, 2005).

**Self-regulation and stress.** Reducing negative stress responses, automatic thoughts and behaviors (when they are unproductive), and freeing cognitive resources to engage in the world in new ways takes some training. Over the past decade, there has been increasing acknowledgment of the importance of those in management to develop capabilities for recognizing and dealing with their own emotions and those of others. By doing so, HLEs can become more effective in the many complex interpersonal situations they confront on a daily basis (Hede, 2002; Solomon, 2007). When an HLE is faced with

increasing demands and decreasing resources (which is a usual circumstance in today's dynamic workplace), the end result is usually an imbalance in the workplace environment that can produce an increase in stress (Johnson et al., 2005; Schabracq & Cooper, 2000). These conditions undoubtedly contribute to a negative stress response.

Ryan and Jethá (2005) suggested that human beings have not evolved to cope with the levels of work in modern society and, therefore, have poor stress responses that negatively impact the body and increasing cortisol levels throughout the body, and making one sick: "Cortisol, the hormone that the body releases under stress, is the strongest immunosuppressant known" (Ryan & Jethá, 2005, p. 292).

In dealing with work environments that foster stress which tends to be negative, it is important to understand that the mind can act as an asset. *The Merriam-Webster Online Dictionary* defines *asset* as any item of economic value owned by an individual or corporation ("Asset," n.d.). The mind is the primary asset we offer to the world and to the organization we work for, and like all assets, it has to be managed well to increase its value.

As one seeks to gain self-awareness and control over emotions in order to reduce stress, the ability to develop a sense of self-regulation is a fundamental process to healthy internalization (Deci & Ryan, 1980). As Everly and Lating (2002) pointed out, "It is the human stress response system that is the mechanism that intricately monitors how people self-regulate in response to psychological, emotional, environmental, or biological stimuli (e.g., fear response and or other stressors)" (p. 40).

Self-regulation involves the ability to intentionally control and appropriately respond to interpersonal stimuli (Fitzsimons & Bargh, 2004). Self-regulation integrates a

complex range of "cognitive, emotional and motivational processes which affects physiological functions and can determine how one actualizes his or her intentions" (p. 151).

When there is a lack of self-regulation, the experience of emotions and stress can disrupt homeostasis (internal balance) in a variety of physiological systems, including the endocrine system (hormonal system) and the autonomic nervous system, which controls blood pressure, breathing, skin conductance, and heart rate (Grandey, 2000). As a result, a person's sense of well-being is disrupted. This is particularly true for HLEs whose jobs are often overwhelming. Their stress response is usually negative in times of chaos, resulting in damaging effects to the physiological, biological, and psychological systems. When it comes to stress and well-being in the workplace, the role of well-being in the determination of workplace harmony and efficiency has been recognized for many years in the applied sciences (Wright & Cropazano, 2007). In fact, research suggests that as much as 90% of employee turnover is associated with issues surrounding the well-being and stress levels of executives (Wright, 2007).

Another feature of the stress response is initiated when individuals experience a loss of feeling in control of a situation (Izard, 2002). The link between sense of control or autonomy and emotions is high confidence, and an increased sense of autonomy promotes positive behavior and openness. However, low confidence and a decreased sense of autonomy leads to cessation of desired behavior and possibly illness, according to Chu-Hsiang, Johnson, and Lord (2009). Rothbart and Sheese (2004) explained that when the physiological systems are triggered, they cause the release of hormones such as

cortisol, which can have a "deleterious effect on the cardiovascular and central nervous systems" (p. 340).

To that end, there are numerous studies which examine the triggers and mechanisms by which unregulated and unmanaged stress responses result in behavioral, mental/psychological, and physically altered states (Cohen & Pressman, 2006; Demaree, Robinson, Everhart, & Schmeichel, 2004; Nelson et al., 2007; Suls & Bunde, 2005; Warr & Downing, 2000). Within these studies, the researchers looked at perception as a vehicle that creates negative emotions and stressful conditions, and can create triggers that foster unhealthy behaviors, keeping us from living in harmony with our internal and external environments, including the workplace, at home, and other social environments.

**Impact of common emotions on stress response.** Childre and Rozman (2005) considered stress a term used to describe the wear and tear the body experiences in reaction to everyday tensions and pressures. They posited that career and change are common causes of stress and that the emotional pressure and tension felt in response to the little everyday hassles do the most damage (Childre & Rozman, 2005).

In a 1997 study conducted at Duke University and published in the *Journal of the American Medical Association* by Gullette, Blumenthal, Babyak, and Jiang, results showed that common negative emotions and anxiety-based problems such as tensions, frustration, disappointment, and sadness can trigger a drop in the blood supply to the heart (p. 1521). Mittleman, Maclure, Nachnani, Sherwood, and Muller (1997) observed that "in daily life these emotions more than double the risk of myocardial ischemia, an insufficient blood supply to heart tissues that can be a precursor to a heart attack" (p. 771).

For HLEs who manage executives in the workplace, it is critical that the delicate machinery of the body has a relatively constant internal environment in order to protect itself from the tensions and pressures of everyday worklife. Understanding that distorted perceptions drive negative thoughts and emotions cause negative physiological effects can prove helpful for HLEs who have identified a need for a stress reduction intervention (Beckham & Beckham, 2004; Dane, 2011). When a threat is severe enough, managers need to be able to mount an adequate stress response, strong enough to be able to meet and overcome the threat.

**Role of the autonomic nervous system in workplace stress response.** In order for HLEs to consciously respond appropriately to stress, it is important that they gain a basic awareness of what is going on inside of their bodies during times of stress and a general understanding of the workings of the autonomic nervous system, which is a part of the central nervous system. John Adams, an expert in workplace stress response and intervention, explained that the autonomic nervous system and endocrine system take up arms to prepare the recipient for the stress to fight the stressor or get out of its way (known as fight or flight response) and that the entire body which relies on the autonomic nervous system is affected by stress (J. D. Adams, 1990).

Biological and physiological researcher Lovallo (2005) suggested that the autonomic nervous system operates automatically at a subconscious level and controls many of the functions of the internal organs and glands. It is highly involved in the ability to feel and experience emotions and stress. The autonomic nervous system has two branches. One branch is called the sympathetic nervous system, which prepares the body for action by speeding up the heart rate, often compared to the gas pedal in a car. The

other branch, which is the parasympathetic nervous system, is often compared to the brake in a car because it slows the heart rate down (CMBM, 2011; Lovallo, 2005).

During aerobic exercise, the sympathetic nervous system is activated. Similarly, when a manager feels overwhelmed at work or is disappointed, feels threatened or angry, feels his or her heart rate rising, and anxiety is setting in, the sympathetic nervous system is reacting to the thoughts and interpretations of the individual. On the other hand, when managers are at peace, at rest, feeling calm, breathing is deep and even, the parasympathetic nervous system is at play (Lovallo, 2005, p. 50). It is the lack of attention to workplace stress, its triggers, and the potential impact on managers on the job that can lead to extreme consequences to the health and well-being of the individual manager and the costs to the organization.

**Stressors in the Workplace**

Every human being experiences stress at one point in time throughout his or her life. What individuals do about stress and how it is managed makes all the difference between whether human beings perform well at work or home, or whether they are consumed by stress and begin to shut down biologically, emotionally, psychologically, and physically. Work stress researchers and MBSR interventionists including J. D. Adams (2007), Billikopf (1994), and Hede (2002) agree that job stress is a serious problem in many organizations. There is increasing evidence that links work stress to negative individual and organizational outcomes (Baer, 2003; CDC, 2010; Childre & Rozman, 2005; Cooper & Cartwright, 1994; Goldstein & Stahl, 2010). Furthermore, Hamel (2000) described how today's work environment has changed and workplace change "no longer moves in a straight line, it is distinctly, non-linear" (p. 13). The

dynamic nature of the workplace today with its many changes can pose threats to an HLE's health and sense of well-being.

In a review of literature of work stress and hypertension, investigators found that those individuals with high-status jobs showed significantly higher blood pressure than those with low-status jobs during daily life and during laboratory testing (Mills, Davidson, & Farag, 2004). Caulfield and fellow researchers also found that work stress created feelings of strain and overload, which reached beyond the workplace and included an increase in family conflict and withdrawal from family involvement (Caulfield, Chang, Dollard, & Eishaug, 2004).

Research has described the less than stellar impact many organizations have made in attempting to create interventions to reduce stress in the workplace. To that end, Briner and Reynolds (1993) posited that many workplace stress reduction interventions fall short because little attempt has been made to find out what managers understand by "stress" and the extent to which they think that their organization has a responsibility to address stress-related problems (Briner & Reynolds, 1993).

Because HLEs find themselves in environments where expectations for optimal levels of productivity and highly functioning teams are thrust upon them by their superiors, consideration should be given to defining stressful situations suffered by HLEs and how those situations are impacting the individual manager and the environment he or she manages. Karasek (2006), a leader in occupational stress, referred to this type of condition as demands of the job exceeding the control of the HLE, thus creating levels of stress that can impact of the manager's ability to effectively function.

**Consequences of workplace stress.** Cooper and Cartwright (1994) stated that "direct and indirect cost of workplace stress can be measured in both human and financial terms" (p. 462). Data from the U.S. Bureau of Labor Statistics presented by the CDC (2010) indicated that workers who must take time off work because of stress, anxiety, or a related disorder will be off the job for about twenty days. Heads of organizations are often under the misconception that they must "turn up the heat" on managers and executives in order to have good productivity and remain profitable in the current marketplace (CDC, 2010). What is known through recent research is that humanistic and financially healthy organizations will be likely to be successful in retaining and maintaining a workforce that is highlighted by good physical, psychological, and mental health (Cooper & Cartwright, 1994).

Chronically stressful situations in the workplace, particularly those in which surprise stressors are frequent, tend to create wear and tear on the body, mind, and spirit of those who are affected by them. Maladies such as hypertension, stomach ailments, depression, feelings of apathy, alienation, are all known to have a causal relationship with stress (J. D. Adams, 1980).

**Organizational demands and stress.** Based on the research discussed, it has become apparent that HLEs can identify with the belief that high levels of stress inherent in the ways organizations choose to operate exist within the work environment. The ability to understand the organizational sources of stress is integral to creating and designing protocols and processes for removing unnecessary stressors in the workplace (Williams, 2006).

Many organizations have a well-developed work culture and exhibit strong norms about how hard people work. Executives talk about working in an environment where they have "too much to do and too little time to do it in" (J. D. Adams, 1990, p. 94).

**Habituation of stress in the workplace.** Leaders in the field of occupational stress research are seeing a rise in illness due to negative stressors to which executives have become habituated (Michie, 2002). Surveys and questionnaire responses from employees at all levels have identified increases in irritability, worrying, forgetfulness, nervousness, fatigue, and in chronic illness; loss of sense of humor; and excessiveness, including eating more, drinking, or using mood-altering stimulants—even relying on stress to keep going (Childre & Rozman, 2005; Leather, Beale, & Sullivan, 2003). Based on this research, it appears that when HLEs are less likely to think clearly or less efficiently in their decision-making ability or their ability to communicate clearly, they are more likely to become less healthy and less effective in the workplace.

Childre and Rozman (2005) described that habituation of stress can be defined as a stress habit and is often seen in individuals who manage organizations and have substantial responsibilities. For many HLEs, changing behaviors to reduce stress is difficult. Stress, in people who have critical decision-making responsibilities, can inhibit what is called cortical function, which is part of our neural circuitry. Cortical function is brain activity that allows change. In essence, when stress becomes a habit, it forms a mental block that prevents these individuals from thinking of or facilitating action on real solutions (Childre & Rozman, 2005).

**High cost of workplace stress.** In today's "hurry up and get it done" culture in the workplace, managers must contend with high levels of stress. What many

organizations do not immediately comprehend is the high and unmeasured cost related to workplace stress, which is largely hidden (J. D. Adams, 1980).

In a 1999 study conducted by the International Labor Organization, researchers found that three of every four participants found their work stressful—both in the United States and abroad (Service Employees International Union [SEIU], 2010). This situation of stressful work environments is considered a global epidemic. In a study by the American Psychological Association (n.d.) on Workplace Stress, the significant issues for executives were found to be work/life balance, workplace stress in general, and job demands. Workplace stress causes U.S. employers an estimated 200 billion dollars a year in healthcare-related expenses for executives (American Institute of Stress, 2001). What organizations fail to understand is that stress has a generalized effect on the body; whether it is reacting to negative comments directed at performance or one's own feelings of inadequacies on the job, the reaction to stress is predictable. However, for organizations, understanding the direct connection between health, wellness, illness, and cost to organizations from employee stress shows significant gaps.

J. D. Adams reported in 1990 that between 75%–80% of total health care risks are related to stress levels and lifestyle habits. What is most startling is that most of the leading causes of premature death include considerable numbers of lifestyle factors, many of which are further exacerbated by excessive stress and strain (J. D. Adams, 1990). Today, the same problems exist around stress and lifestyle habits. In a article entitled "Workplace Stress," published by the American Institute of Stress (n.d.), it is estimated that the cost of stress to U.S. industry results in more than $300 billion a year

in absenteeism, turnover, diminished productivity, medical, legal and insurance cost ("Job Stress is Costly," para. 1).

In 2000, a group of researchers on workplace health risks and associated costs (Anderson, Serxner, & Gold, 2001) conducted a study to assess the relationship between modifiable workplace health risks and total health care expenditures for a large employee group. This group included both management and non-management participants. Risk data were collected through voluntary participation in health risk assessments (HRA) and worksite biometric screenings, and were linked at the individual level health care plan enrollment and expenditure data from employers' fee-for-service plans over the 6-year study period. The settings were worksite health promotion programs sponsored by six large private-sector and public-sector employers. Of the 50% of executives who completed the HRA, 46,026 (74.7%) met all inclusion criteria for the analysis. Eleven risk factors—exercise, alcohol use, eating, current and former tobacco use, depression, stress, blood pressure, cholesterol, weight, and blood glucose—were dichotomized into high-risk and low-risk levels (Childre & Rozman, 2005).

The association between risks and expenditures was estimated using a two-part regression model, controlling for demographics and other confounders. Risk prevalence data were used to estimate group-level impact of risks on expenditures. Risk factors were associated with 25% of total expenditures. Stress was the most costly factor, with tobacco use, overeating, and lack of exercise also being linked to substantial expenditures (Childre & Rozman, 2005).

While HLEs's stress may be elevated due to various stressors not experienced by non-management executives, workplace stress extends to a significant amount of

executives within organizations across the United States, as noted previously. When individuals in the workplace are stressed, they often take on unhealthy behaviors. For example, stressed people tend to drink more alcoholic beverages or eat more unhealthy food than they normally would (Canadian Centre for Occupational Health and Safety, 2012).

There are a number of different stress-related illnesses and health care costs that arise from unmanaged workplace stress. Many of the stress-related illnesses represent unmeasured costs that organizations must pay for through absenteeism, poor decisions, bad judgments, presenteeism (attending work while sick), and so forth. In aggregate, these illnesses add up to a huge annual unmeasured expense as overhead for an organization. The invisible overhead workplace events associated with excessive stress are estimated to cost 200–300 billion dollars per year (J. D. Adams, 2007). Workplace stress results in poor decisions and bad judgment, loss of motivation, innovation, and intellectual capital, diminished teamwork, diminished customer service, and many other managerial and organizational deficits (Wright, 2007).

> Econometric analyses show that health care expenditures all over the world, due to stress has increased nearly 50% since 1983 for workers reporting high levels of stress, and nearly 200% for workers reporting both high levels of stress and depression. It has been estimated that 75–90% of all international visits to primary care physicians are for stress-related problems. (J. D. Adams, 2007, p. 7)

In what is still considered to be one of the most comprehensive American studies examining the relationship between hypertension and job strain, Schnall, Schwartz, Landsbergis, Warren, and Pickering (1998) followed nearly two hundred men for 3 years and found that those with the most job strain had significantly higher blood pressure than those with the least. Executives with very demanding tasks that did not allow for the

latitude necessary to make decisions they felt necessary were at a greater risk of heart disease than those who did not experience such job strain (Schnall et al., 1998).

According to a major longitudinal study conducted in 2006, researchers Chandola et al. (2006) found that if a manager and/or an employee feels he or she does not have the ability to control the work processes of the team in the way necessary, he or she may be a candidate for developing a metabolic syndrome wherein a cluster of factors increases the risk of heart disease and type-2 diabetes. Participants in the study were 10,308 men and women between the ages of 35 and 55 who were followed over a period of 14 years (Chandola et al., 2006).

**Workplace injury and emotional trauma caused by stress.** Other research supports the link between stress and workplace injury (Williams, 2006). If HLEs are so preoccupied with the daily stressors on the job, then they will be inclined toward not paying attention to their physical environment and opportunities for falling or hurting oneself becomes more of a risk. Although additional research is needed in this area, there is growing concern that stressful working conditions impede safe work practices and set the stage for injuries at work (CDC, 2010).

Based on the literature from Bromet, Dew, Parkinson, Cohen, and Schwartz (1992), the stressors in the technologically advanced workplace are considered worse than in past eras on an external level and as a result, stress is worst on an individual and internal level. Additionally, it is obvious to many individuals that when stress is experienced in the workplace, it is often played out in other settings including at home, as human beings usually cannot turn stress off as if it were a water faucet. External pressures such as interactions with family and associates or driving in rush hour traffic

create environments that are unhealthy (Bromet et al., 1992; Morris & Long, 2002). Goldstein and Stahl (2010) suggested that the condition of stress has increased to a point where people on a personal and professional level are beginning to worry about how much they worry and why they worry. These researchers posited if stress is not handled appropriately, a sense of alienation and disconnection arises, low job satisfaction, a perception of poor work performance or actual poor work performance and negative health effects may occur (Goldstein & Stahl, 2010).

Herbert Benson, MD, an expert in the field of mind–body medicine, suggested that a large number of our population are not adequately prepared or equipped with coping strategies for dealing with stress (Benson & Klippner, 1976). Those who experience high levels of stress in the workplace do not feel comfortable with themselves, with those they supervise, or with their peers, and as a result begin to feel isolated and distant from the natural world and within their social and work environment. Human brains get inundated with information along with the pace of life, and as a result individuals become susceptible to self-judgment, frustration, panic, and worry (Goldstein & Stahl, 2010).

The condition of stress has increased to a point where people on a personal and professional level are beginning to notice that stress is impeding their quality of life. The National Institute of Mental Health (NIMH) reported in 2008 that about 40 million American adults suffer from stress-related disorders. Organizations often expect increased productivity and pay little to no attention to these issues (Karasek, 1990). What appears to be more important are matters such as the quarterly report results, the day's

productivity levels, and how much profits were impacted by the actions of its executives (Billikopf, 2003).

Numerous studies have shown that job stress is the major source of life stress. In an article published by The American Institute of Stress (n.d.), the findings demonstrated that 46% of people surveyed indicated that workload was a significant issue for them, 20% of people shared that juggling their work load and personal lives was stressful, and 28% noted that dealing with others in the workplace created substantial stress for them. The authors noted that many researchers believe that employers can sustain and enhance productivity and cost savings in addition to achieving healthier behaviors and enhanced participation from executives by paying attention to the workplace stress and worklife balance of their executives (American Institute of Stress, n.d.). In a review of the U.S. Workplace Wellness Market published by Rand Health, findings suggested that workplaces can be healthy and positive if leadership in the workplace is committed to worker engagement and worker health via promotion of a stress reduction and self-care intervention for executives (Mattke, Schnyer, & Busum, 2012).

**Managing the stress of working with others.** Interpersonal relationships at work serve a critical role in the development and maintenance of trust and positive feelings in an organization. Although the quality of interpersonal relationships is not solely responsible for generating worker productivity, it has been proven to be a significant contributor (Billikopf, 2003). An effective manager in the workplace is responsible for making difficult and at times unpopular decisions, showing concern for subordinates, abstaining from showing favoritism, and avoiding misusing supervisorial powers. These managerial duties can cause feelings of being overwhelmed and stressed (Lazarus, 1991).

When being overwhelmed becomes the "norm," anxiety, low energy, and fatigue can take over: "A sense of overwhelm is often the first health alert" (Childre & Rozman, 2005, p. 54). It is important to remember that stress occurs when perceptions of events do not meet expectations and one is not able to manage reactions to the stressor (Karren, Smith, Gordon, & Frandsen, 2013).

In a coaching session in which HLEs were asked how they would describe an HLE whose job is under control and who is not bothered continually by work overload, interruption, surprise changes, and so on, most of the HLEs thought this state of being was impossible; even if managers were fully doing their job they believed they would never experience a sense of control. This perception speaks again to the inherent role that high levels of stress play in a manager's daily work environment (J. D. Adams, 1980).

It is clear that HLEs contend with high stress levels on the job that can impact their health and sense of well-being. Stressed managers feel tired and/or fatigued. They are often nervous, anxious, and depressed. Many have problems with sleeping, repeated headaches, and minor aches and pains. They worry about job security, financial obligations, relationships, and suffer from feelings of inadequacy and perceive their performance as sub-par (Childre & Rozman, 2005).

Karasek (1990) and Leka, Griffith, and Cox (2013) suggested that job and manager stress occur because the demands of employment exceed the controls of the individual needed to interact with those demands. Areas that are out of control might include the resources, needs, or capabilities of both the HLE and the executives they manage.

Childre and Cryer (2000) expressed that in order to mediate the tension that exists when managers are expected to produce stellar results, while feeling disempowered, with what they perceive as limited control and resources, a critical element in gaining "control" of their environment is becoming aware of their inner selves with curiosity and without judgment. They describe the four dynamics of IQM (Inner Quality Management): internal self-management, coherent communication, boosting organizational climate, and strategic processes of renewal. Internal self-management is about helping people manage their thoughts and emotions effectively in order to build a high performance department/organization in this age of accelerating change (Childre & Cryer, 2000). Based on research discussed, it has become apparent that managers can identify with the belief that within the work environment high levels of stress are inherent in the ways organizations choose to operate. The ability to understand the organizational sources of stress is integral to creating and designing protocols and processes for removing unnecessary stressors in the workplace (Williams, 2006).

Many organizations have a well-developed work culture and exhibit strong norms about how hard people should work. Executives talk about working in an environment where they have "too much to do and too little time to do it in" (J. D. Adams, 1990, p. 94). In the "Attitudes in the American Workplace VII," 42% of the participants studied indicated that they at least sometimes do not have adequate control or input over their work duties and that this creates negative stressors (American Institute of Stress, 2001).

Work stress researchers and MBSR interventionists including J. D. Adams (2007), Billikopf (1994), and Hede (2002) appear to agree that job stress is a serious problem in many organizations. There is increasing evidence that links work stress to

negative individual and organizational outcomes (Baer, 2003; CDC, 2010; Childre & Rozman, 2005; Cooper & Cartwright, 1994; Goldstein & Stahl, 2010).

In a review of literature of work stress and hypertension, investigators found that those individuals with high-status jobs showed significantly higher blood pressures than those with low-status jobs during daily life and during laboratory testing (Mills et al., 2004). Caulfield and fellow researchers (2004) also found that work stress created feelings of strain and overload, which reached beyond the workplace and included an increase in family conflict and withdrawal from family involvement. Organizations' failure to keep the focus on humanistic needs of their executives in an effort to function optimally had its beginnings during the burgeoning of industry development in the United States.

**Company Growth, Profits, and the Impact of This Change on Executives**

During the Industrial Revolution, when growth of factories in the United States was made possible through the invention of new technologies that enabled mass production of goods by using machines and producing goods that had interchangeable parts, there was a burgeoning push toward increased production. While production increased, the industrial revolution also changed how work was performed (Briskin, 1998; Capra, 1988). It was during this period that human contributions were increasingly divided into specific tasks (Briskin, 1998).

The focus became productivity, efficiency, and the division of labor. As the growth of industries continued, control and profit became important factors in the work environment. The function of management became scientific in nature and focused specifically on increased proficiency, production, and the maximization of profits

(Taylor, 1947). The introduction of scientific management enabled a 10-fold increase in the production of foods and services. However, in order to achieve these significant profits, workers were dehumanized and driven, coerced, and manipulated to work at the optimal efficiency (Trahan, 2010). Thus, began the hierarchical structure of profit-driven and dynamic organizations and corporations (Weber, 1947).

The corporate drive and desire for ongoing profit does not adequately reflect the responsibility organizations have toward their executives. Corporate interests by their very nature often outweigh the needs of the company's executives, thus creating opportunities for environments where managers in particular have to navigate often impenetrable hurdles that relate to issues of fragmented thinking, lack of control, shortage of resources, unreasonable demands being placed upon them, and experiences of high levels of stress due to the ever changing environments of the workplace (Bohm, 2002; Troup & Dewe, 2002; Ucok, 2006).

According to Hamel (2000), the world of work is changing and remains as dynamic as ever. In the 21st century, the nature of work and of change at work is abrupt, nonlinear, and discontinuous (Hamel, 2000). In large part, this is due to the Internet, in that it has literally rendered geographical boundaries unimportant. In this age of business, a company that is evolving slowly is already on its way to becoming extinct (Hamel, 2000). There is an inherent requirement to keep up with the times within the diversity of changes.

In the United States, the number as well as the mix of people available to work has changed and continues to change. The U.S. Census Bureau indicates that between

2000 and 2020, there will be a significant drop in the growth of the labor force among executives considered prime-age (Dychtwald, Erickson, & Morison, 2006).

According to the Society for Human Resource Management (SHRM) Foundation's 2007 survey of senior executives, significant challenges for companies doing competitive business in the United States consisted of succession planning, recruiting and selecting talented executives, engaging and retaining talented executives, and providing leaders with the skills to be successful. Senior executives (HLEs) did not feel confident that their companies had a plan to address these human capital challenges, particularly those of senior executives (SHRM Foundation, 2007).

Despite all of the challenges high-level executives face, a 7-year study of more than 3,000 corporate leaders by the Center for Creative Leadership found that executives of all ages share common values about what matters most in and out of the workplace, including respect, trust, and family (Deal, 2007). In another study conducted by Rainmaker Thinking, a leading research and development company focused on management and the workplace, involving more than 500 managers in 40 different organizations, results of the study indicated that few managers consistently provided their direct reports with five management basics: (a) clear statements of what is expected of each employee, (b) explicit and measurable goals and deadlines, (c) detailed evaluation of each person's work, (d) clear feedback, and (e) rewards distributed fairly (Tulgan, 2004).

The speed of change and the lack of support to manage the change, both of which activate negative stress responses, make it difficult for executives who are high level to "keep up" and pay attention to the core needs and values important to executives, described by Deal (2007). This environment opens a window to further immerse oneself

in a stream of perceptions and emotions that do not serve the HLE, but rather works against a sense of harmony and wellness at work. When negative stressors rear their ugly heads, the ability to focus and pay attention becomes greatly diminished.

When an individual experiences negative stress, it is usually accompanied by fragmented thinking. Elder and Paul (2011) described fragmented thinking as "thinking that leaps about with no logical connections" (p. 10). Bohm (2002) suggested that fragmented thinking interferes with clarity of perception by creating an illusion of reality and interferes with problem solving when issues arise, thus creating difficulties and additional problems. According to Bohm, this type of thinking creates difficulties because it leads to a perception of the world based on an individual's rational cognition, which may not reflect the direct experience of reality.

When a high-level employee is experiencing negative stress responses, he or she may not be available or "present" for their executives in the way they need to due to that fragmented thinking, but rather will be preoccupied with their experiences of negative emotions and their need to control or manage them.

Research by Troup and Dewe (2002) on management and negative stressors described that when managers feel they must perform optimally in service to their organization but are not given the level of control they need to accomplish their management goals, issues of stress become significant (Troup & Dewe, 2002).

The challenges managers face as they attempt to manage people, mediate situational differences with upper leadership and conditions in their department sometimes without the level of support they need, can be felt and experienced as isolative and overwhelming (Hede, 2002).

**Interacting with executives.** Interpersonal relationships at work very often serve a critical role in the development and maintenance of trust and positive feelings in an organization. While the quality of interpersonal relationships is not solely responsible in producing worker productivity, it has been proven to be a significant contributor (Billikopf, 2003). An effective HLE in the workplace is usually responsible to make difficult, unpopular decisions, show concern for subordinates, abstain from showing favoritism, and avoid misusing supervisorial powers.

Basic human interaction in the workplace is clearly responsible for organizational growth and productivity. Ineffective human interaction or relationships can also be responsible for the organization's ultimate demise. Wholesome and effective human interaction requires a verbal or physical way to acknowledge another person's value (sometimes called "stroking"). In the work environment, stroking takes place in the way of verbal communication and body language. Some examples of that might include smiling, waving, nodding, a glance of understanding, shaking hands and saying hello, or even a gesture such as sending a gift of flowers or a card, and so forth (Berne, 1964). Recognizing and identifying appropriate times to demonstrate authenticity, via stroking, is important and speaks to awareness and attention of moment-to-moment experience.

Human interaction of stroking is generally expected to be metered out by supervisors to executives. While there are differences in mores, values, languages, and customs between different ethnic groups and groups of different national origin, what is most interesting is that research indicates that differences between individuals within any given nation or culture are much greater than differences between groups (Cortes, 1991).

Thus it is important to be observant and build on observation with the ability to communicate effectively with team members who have diverse orientations. In the United States, as in many other countries, education, social standing, religion, personality, belief structure, past experience, affection shown in the home, and a variety of other elements and factors will impact human behavior and culture. It is of importance that HLEs are able to pay attention to cultural differences that exist on an individual basis and not only those that exist among and between groups. Being aware, nonjudgmental, and mindful in these situations can contribute to trust building, cohesiveness, and an enhanced quality of life (Linger, 2012).

Unbiased observation and conversation is critical in accomplishing this goal. In the United States, observations can be made in the workplace where culture will transcend race or ethnicity. A person from one ethnic group can share cultural norms with someone from another ethnic group. Culture is not necessarily about ethnicity or race; rather it is more about common values, shared philosophies, and belief systems (Cortes, 1991).

Awareness and attention to these differences are critical in order to create an environment of trust in the workplace. When we act on generalizations about a culture, ethnic group, or custom, we are potentially creating a dangerous environment wrought with misunderstanding. Cultural and ethnic misunderstanding can create workplace disharmony and does nothing to foster equality and equity in the workplace. In order to be an effective manager of people, an HLE's role is to ensure that there is homeostasis related to effective communication, equity, and receptiveness of interpersonal feedback. Good observation skills, effective questions, and good conversational skills are also

required (Nichols, 1995). Research suggests that mindfulness practice can assist in meeting the level of homeostasis to reach the aforementioned desired goals. According to researcher Holly Rau, results on shifts in moods and emotions indicated that executives who practice mindfulness described better level self-control over their emotions and behaviors during the day (Rau, 2013). In addition to managing one's own emotions and behaviors, self-regulation is a skill that is critical to possess in relationship with others (Linger, 2012).

People everywhere have much in common, such as a need for affiliation and love, participation, acceptance, and contribution. When the exterior is peeled away, there are not so many differences in the essence of human interaction. An effective leader is able to observe experiences both internally and externally as they occur, remain nonjudgmental and act in a way that will foster positive relationships among and between executives, rather than diffuse them (Linger, 2012).

**High-level executives and their role.** HLEs are those executives who are responsible for making decisions in a changing and evolving workplace with ever-burgeoning responsibilities, including decisions regarding the oversight of others and their duties. They are also responsible for ensuring that business is handled in a timely manner, with outcomes that support the goals of their organization.

Thus, HLEs are often overwhelmed by their responsibilities, in the ever-changing and increasingly dynamic workplace, creating conditions for increased levels of stress, anxiety, burnout, job dissatisfaction, and diminished or less than quality interactions with coworkers and those they manage. These conditions also demonstrate their influence in HLEs' quality of life, both within and outside of the workplace, and can contribute to

feelings of ineffectiveness, as well as a sense of being overwhelmed, isolated, and disconnected.

HLEs within all types of organizations are by definition most often individuals who have been given a position of authority and are responsible to oversee the work of others. It is generally known that inherent in a manager's position, he or she is formally required to provide a degree of structure and organization appropriate to the organization's situation.

These HLEs act as liaisons, role models, and catalysts for action and problem solving, providing vital group support and supervision not provided by another group member. They are often responsible to articulate group objectives and goals succinctly and clearly. According to Joseph DeMent (1996), who served as Hewlett Packard's head of information technology, "Managers are responsible as leaders in defining the 'what' and the 'why' of enterprise objectives" (p. 7). They are required to adhere to high standards of performance, and promote equity and equality among group members. They are also usually required to facilitate discussions, help the group develop both as a team and individually, and provide change strategies and conflict resolution services among and between group members (Hede, 2002; Solomon, 2007).

A key component of a HLE's position is establishing environments of trust by modeling sound ethical principles. By definition, these components can create an environment for stress. If an HLE does not model honesty, integrity, and a positive work ethic (all sound ethical principles) on the job for executives, then he or she will have difficulty effectively managing a team due to lack of trust issues that will undoubtedly

arise (Billikopf, 2003). However, some of what HLEs see as stressors might in fact be challenges, and the difference between the two should be clearly established.

**Management corollaries between challenges and stress.** HLEs face challenges in handling work-related stressors and emotions in themselves as well as in their subordinates. Issues involving the ability to perform, be productive, have an optimistic and positive attitude, as well as the need to earn the respect of the team for which they are responsible are paramount measures of success in the mind of managers. Ucok (2006) posited a significant challenge in the workplace for an HLE's worklife. However, there is an even stronger business demand in all industries to be multi-culturally sensitive, agile, and collaborative to manage the global–local divide (Kokemuller, 2013). These increasing demands can contribute to stress for those in charge of implementing departmental change.

Lazarus (1991) described the "transactional view of stress" as well as the concept of "appraisal". These concepts should be considered when thinking about how HLEs function in their work environments, particularly around implementing change. The transactional view of stress, according to Lazarus, is a product of the transaction between the person and environment. The concept of appraisal is intrinsic to the transaction model, as it is used to examine relationships between persons and their work environment as it relates to the meaning individuals give to their work and to their work environment (Lazarus, 2012).

The contextual linkage between the person and the environment is called *cognitive appraisal* and it is made up of a primary and secondary appraisal process. The primary appraisal process considers "what is at stake," and is concerned with the personal

meanings that the individual attaches to an event and the significance that it may have for their feelings of tranquility and well-being at work (Folkman & Lazarus, 1984). The secondary appraisal, "what can I do about it," is concerned with the appraisal of the individual regarding the availability of resources and coping options (Folkman & Lazarus, 1984).

Daniel Goleman, an internationally renowned psychologist and author of *Emotional Intelligence*, suggested that within "181 different positions from 121 organizations worldwide…67% of the abilities deemed essential for effective performance were emotional competencies" (Goleman, 1998, p. 47). It is relatively simple to understand why feelings of loss of control, the inability to self-regulate those emotions as a result of the primary and secondary appraisal process, can cause stressors to activate a negative stress response.

Ken Wilber, an expert in scientific research and evaluation in MBSR, suggested that in our professional as well as our personal lives, the quality of consciousness (being aware) is vitally important for the enhancement and the maintenance of our well-being (Wilber, 2000). Wilber (2000) also asserted that there has been an increasing acknowledgment of the importance of an HLE's ability to develop capabilities for recognizing and dealing with their emotions as well as the emotions of others within a stressful workplace environment. Hede (2002) and Solomon (2007) posited that by bringing awareness to their interactions with others and self on a daily basis, managers can become more effective in the many complex interpersonal situations they confront on a daily basis.

HLEs are expected to handle unexpected situations that arise on the job, in addition to meeting monthly performance objectives that may have been thrust upon them at the last moment. They need to maintain a positive interface between the public and the organization, perhaps dealing with unhappy customers and clients, working through internal crises with executives, coworkers, superiors, and meeting monthly and yearly sales goals. All of these demands can create extreme levels of anxiety and stress (Bromet et al., 1992; Morris & Long, 2002).

HLEs are also increasingly required by their organization's leadership to incorporate growth into their departmental strategic plans. Additionally, many companies are now requiring their managers to drive integrity, high levels of openness and sincerity to ensure productivity and high performance with a growing number of executives taking on virtual roles. Challenges for HLEs include recruiting and selecting talented executives, succession planning, and engaging and retaining leaders with skills to succeed. HLEs often do not feel confident that their companies have a plan to address diversity and human capital challenges (SHRM Foundation, 2007). These conditions can add to negative perceptions and additional stressors at work.

Kalvita Singh (2005), an organizational effectiveness leader in India, suggested that one of the greatest challenges facing managers today is the ability to accelerate the pace of change within departments and units for which managers have responsibility. This is no easy task, particularly when it requires that managers must understand their duties, and manage the changing agenda and structure in an expeditious manner. HLEs in the 21st century have to contend with the fact that technology continues to blur the lines

between professional and private lives, as people expect each other to respond instantly ("Leadership Challenges," 2012).

**Consuming human resources: Perspectives on the management of stress.** Chronically stressful situations in the workplace, particularly those in which surprise stressors are frequent, tend to create a wear and tear influence on the body, mind, and spirit of those who are affected by them (J. D. Adams, 1980; Krantz, Whittaker, & Sheps, 2011). Maladies such as hypertension, stomach ailments, depression, feelings of apathy, and alienation, are all known to have a causal relationship with stress. It is important to note, however, that these conditions can have a non-stress orientation as well.

While some organizations are beginning to look for ways to reduce the stress levels of executives and increase productivity, many more organizations pay little to no attention to these issues. Most designated leaders can identify with the belief that within most work environments of leaders and managers, there are high levels of stress which are in large part due to factors inherent in normal ways organizations choose to operate. The ability to understand the organizational sources of stress is integral to creating and designing protocols and processes for removing unnecessary stressors in the workplace.

Leaders and managers contend with high stress levels on the job that can impact their health and sense of well-being. As previously stated, stress has a generalized effect on the body; whether it is reacting to negative comments directed at performance or one's own feelings of inadequacies on the job, the reaction to stress is predictable. The cardiovascular and respiratory systems speed up, the gastro-intestinal system slows down; the muscles get stronger, and the immunological process prepares for a possible infection. Over time, depending upon the amount of stressful experiences, an erosive

effect takes place that can lead to physical, spiritual, emotional, and/or mental breakdown (J. D. Adams, 1990). Additional effects of stress include difficulty focusing, loss of sense of humor, irritability, shortened temper, under- or overeating, smoking and drinking to excess, stomach and bowel problems, as well as the top corollary stress effect—heart disease and stroke (Gordon, 2007).

When considering the cost of workplace stress-related illnesses, one should consider that 30% of an average U.S. organization's executives are at significant risk for cardiovascular disorders. A nonfatal heart attack costs over $200,000 to treat in the United States. Organizations within the United States spend $700,000,000 per year to recruit and train replacements for executives aged 45–65 who die of heart attacks. Approximately 55% of cardiovascular risks are attributable to poor health habits and poor stress management (J. D. Adams, 1981). Finally, the latest research on the cost of U.S. job-related stress described a surprising price tag of $300 billion annually due to presenteeism, accidents, absenteeism, employee turnover, diminished productivity, direct medical, legal, and insurance costs, workers' compensation awards as well as tort (punitive damages) and FELA (personal injury judgments; American Institute of Stress, n.d.).

**Summary**

HLEs can feel as if they are caught in a negative whirlwind of dynamic change as the workplace becomes more global and nonlinear. They are responsible for managing in an environment with ever-expanding responsibilities. Ongoing issues around control or lack thereof related to limited resources, support, and buy in—all necessary elements to be success in high-level positions—can diminish an HLE's sense of well-being,

competence, quality of life, and communication with others. Research points clearly to the link between work stress and negative individual and organizational outcomes at work (Baer, 2003; CDC, 2010, Childre & Rozman, 2005; Cooper & Cartwright, 1994; Goldstein & Stahl, 2010). When negative stress is not abated, its impact can be psychological as well as physiological, and indicators point to increased feelings of inadequacy, self-deprecation, loss of ability to see life as positive, and a decrease in communication with others and problem solving.

Paying attention to the impact negative emotions and perceptions can have on one's biological and physiological wellness lies in the ability to be aware and present in the moment, seeing and experiencing moments as they unfold in a nonjudgmental but curious fashion. The ability to engage in this process (called mindfulness) can assist in shifting bodily or mental tensions and relaxing the neurologic and endocrinologic systems of the body ("Stress," 2012). While being able to reduce negative stressors and automatic thoughts and behaviors when they are not serving an individual's best interest may take some time, it is possible through training and practice.

There is a clearly articulated need for support and interventions to relieve negative stress responses and create shifts in emotions and perceptions for HLEs and other executives in the workplace. Data captured by the CDC from the U.S. Bureau of Labor statistics demonstrated the impact of stress on executives. Workers who are experiencing chronic stress, anxiety, or a related disorder will take about twenty days a year off of work to address these ailments (CDC, 2010). Over the long term, executives who are not provided interventions to address their needs around stressors and negative perceptions in the workplace will ultimately experience a wear and tear on the body, mind, and spirit,

making that individual less productive and willing to engage at work (J. D. Adams, 1980). Workers need the skills and abilities to be able to self-manage their emotions and behaviors, and those of others, as well as experience and share coherent communication (Childre & Cryer, 2000).

While research is limited in this area, work stress researchers appear to support the notion that executives who practice mindfulness in the workplace are experiencing high levels of control over their emotions and behaviors, and are consequently able to support themselves nonjudgmentally as well as those who report to them (Rau, 2013).

## Integrative Interventions for Perception Shifts and Emotional Regulation

The following section of this dissertation considers what interventions might be suitable for reducing stress and shifting perceptions and emotions from positive to negative in the workplace. It includes a comprehensive examination of those integrative, holistic tools and approaches that have been scientifically reported to assist in the mitigation of negative stress responses. Additionally, the efficacy of those tools are explored and consideration is given to the ability and weight of those interventions to create opportunities for shifts in perceptions and emotions.

### Mindfulness-Based Stress Reduction

MBSR is a stress reduction resource that engages a process of bringing mindfulness (an intentional nonjudgmental awareness) to present-moment experience (R. L. Adams, 2011). The primary approach that undergirds the concept of mindfulness in modern psychology has its foundation in the ancient Eastern tradition of meditation practice (Hanh, 1976). The Eastern concept of mindfulness has been defined simply as "bringing oneself—a complete attention—to the present experience on a moment to

moment basis" (Marlatt & Kristeller, 1999, p. 68). Kabat-Zinn (2012) described his operational definition of mindful as "paying attention on purpose in the present moment" (p. 17). He also defined it in this way: "Mindfulness can be thought of as moment-to-moment, non-judgmental awareness, cultivated by paying attention in a specific way, that is, in the present moment, and as non-reactively, as non-judgmentally, and as open heartedly as possible" (Kabat-Zinn, 2012, p. 108).

The history of mindfulness practice has its roots in Buddhist practice, which uses meditation techniques to enhance the well-being of mind, body, and spirit. The goal of Buddhism and its practice is to focus on the path to alleviation and cessation of personal suffering (Nyanaponika, 1962; Silananda, 1990). Contemporary psychologists describe mindfulness as an approach for responding efficiently to mental processes, building the skill of awareness—all which assist in diminishing behaviors that create emotional distress and dysfunctional behavior: "Mindfulness is a way of looking freshly, of observation that is essentially nonbiased and explorative" (Martin, 1997, p. 294).

K. W. Brown and Ryan (2003) defined mindfulness as "an enhanced attention to and awareness of current experience or present reality" (p. 822). Mindfulness relates directly to "giving full attention to the present, without worries about the past or future" (Thondup, 1996, p. 48). Nyanaponika (1972) described mindfulness as "the clear and single-minded awareness of what actually happens to us and in us at the successive moments of perception" (p. 5). K. W. Brown and Ryan (2003) further asserted that the practice of mindfulness for all who practice—including those in workplace environments—attends to external and internal phenomena because they are part of the present moment. Based on assertions from MBSR experts, it is clear that "to focus on

external events to the exclusion of internal processes, or vice versa, would constitute a lack of mindfulness" (Dane, 2011, p. 998).

In MBSR training, participants are given a range of exercises and are "instructed to focus attention on a target of observation (e.g., breathing or walking). They are instructed to be aware of it in each moment: "When emotions, sensations, or cognitions arise, they are observed nonjudgmentally" (Baer, 2003, p. 126).

**Mindfulness, the workplace, and staying aware.** As it relates to applying mindfulness in the workplace, specifically with managers, Ucok (2006) posited there have been very few attempts to apply the construct and very little scientific data to support study outcomes. However, he advocated the use of mindfulness while "listening" at work so as to improve transparency in interpersonal communications (Ucok, 2006). Nadkarni and Barr (2008) stated that the manner in which organization members focus attention affects how they make strategic decisions and whether they heed risks. Bazerman and Watkins (2004) noted that paying attention is integral in mindful noticing and may assist executives in noticing key resources at their disposal.

Mindfulness practice in its many forms emphasizes the idea of work as a spiritual practice (Lesser, 2005). It is done by integrating mindfulness practice with cultivating the wisdom of the present moment (Trahan, 2010). Lesser (2005) described that embracing the difficulty of work is the first step in integrating mindfulness practice and workplace/business practice: "When we remove the images we have of a perfect, difficulty-free work life and actually start to appreciate the difficulties, our work lives are transformed" (p. 55).

Transformed worklife has much to do with a change of perception that impacts our neurological and biological states. Lazar et al.'s (2005) research noted how those who practice mindfulness regularly had increased thickness in the prefrontal cortex. Commonly used neuroimaging techniques, such as SPECT and fMRI, also demonstrate that meditation can and does positively affect an individual's brain function.

Richard Davidson, a neuroscience researcher, described the study he engaged in with the Dalai Lama and other colleagues, which focused on illuminating the effects of consistent and regular mindfulness mediation from a neuroscience standpoint. Their findings demonstrated greater emotional regulation in meditators as well as enhanced immune functioning (Davidson et al., 2003). K. W. Brown and Ryan (2003) stated that increased mindfulness is correlated with greater reports of autonomy or self-regulation. Consequently, it stands to reason that HLEs who practice mindfulness would have a greater sense of perception of being autonomous and in control—more at peace and calm even in the midst of change and chaos.

The benefits of mindfulness can be significant, as demonstrated by the aforementioned research. When mindfulness involves fully focusing attention on a physical sensation, activity, or when actively observing an emotional reaction or thought, the busy mind becomes totally calm and becomes a nonjudgmental and nonreactive observer (Baer, Hopkins, Krietemeyer, Smith, & Toney, 2006; Hanh, 1991, Kabat-Zinn, 2005; Mace, 2008). Kabat-Zinn (2005) further explained that there are two constructs of mindfulness, "deliberate" and "effortless." The state of mindfulness often requires one to make a deliberate effort to achieve it; however, with significant and ongoing practice one

can achieve mindfulness without effort. Kabat-Zinn's (2005) metaphor to describe this phenomenon involves the Internet:

> In deliberate mindfulness, you could think of it as dial-up networking, where you have to make an effort to get connected, where often the connection keeps getting disconnected and you have to re-establish it. In effortless mindfulness, the connection is always present. No dial-up is necessary. It just is. We are already connected. (p. 109)

Developing the ability to "keep connected" can serve in the effort to be more compassionate toward self and less self-deprecating. Stone and Stone (1989) stated that human beings, as a part of normal consciousness, have the subjective experience of voices in our heads. Tolle (2013) described this experience as images in our heads, or a mental running commentary. It is one's inner self that engages in this constant inner conversation and experiences it subjectively as mind chatter (Dyak, 1999).

Negative self-thinking can be extremely stressful in the manager's environment. Hede (2010) made the association between the subjective chatter or the running mental commentary and the workplace experience of how one deals with failure when a self-critical inner voice admonishes with thoughts about how weak one is (e.g., "You should have done better!" or "That was a silly thing to do!"). The state of being that comes after this experience and is connected to it, is often accompanied by feelings of guilt or shame and produces inflammatory thought and stress (Hede, 2010).

Hede (2010) further explained that just as with emotions management, the experience of stress can be mediated and monitored by mindfulness practice. He posited that the "meta-self" (the part of the self that manages ego) is able to manage the stress we experience through mindfulness even if one is not fully in control. Through the practice of mindfulness, the meta-self can intervene actively in reducing work–life overload by

managing the demand and support one has in both work and personal life (Bakker & Demerouti, 2007; Lewis, Rapoport, & Gambles, 2003).

Mindfulness assists in self-regulation that can foster non-elaborative awareness and reduce ruminations of thoughts and feelings as they arise. The individual does not get caught up in negative judgments about experiences and their origins, implications, and associations (Dane, 2011). Mindfulness practice helps deepen the understanding that thoughts are an objective of observation, not a distraction, and are to be treated as such. There is a freedom associated with mindfulness. A feeling of being "unstuck," and able to move past difficult thoughts and emotions without making judgments or taking actions that might not be in the best interest of one's own well-being or the well-being of others (Hede, 2010). While Western practitioners commonly engage in MBSR without the substantial focus on faith or traditional Buddhist principles, the core goals are the same as Zen Buddhism from which Western mindfulness practice is derived.

**Foundations of Zen mindfulness.** The foundation of Zen mindfulness practice considers what it takes to feel unstuck and move past difficult thoughts, feelings, and emotions without judging self or others. In Zen practice, as in all Buddhist practice, there is a foundational teaching regarding the path that shows the way to reduce the suffering of human beings inclusive of stress, lack of self-confidence, negative perceptions, fragmentation of thinking, lack of patience and compassion, among other forms of suffering (Lesser, 2005). "The Path" in all Buddhist traditions is called "The Noble Eightfold Path." Lesser (2005) summarized each step of the path as follows:

1. Pay attention to what increases wholesome ideas and behaviors as opposed to past habitual tendencies (considered "right view");

2. Developing a flexible way of thinking based on direct experience rather than assumptions (right thinking);

3. Practicing mindfulness or being in the present moment throughout the workday (right mindfulness);

4. Being honest and telling the truth (right speech);

5. "Doing good and avoiding harm," including compassion, generosity and treating others with fairness (right action);

6. Doing good and not harming others as a result of work (right livelihood);

7. Steady effort using each situation that arises as an opportunity to move toward more wholesome ways of thinking and behaving (right diligence-right effort);

8. Developing the capacity to focus on the process of experience, including the unfolding patterns of impermanence, interrelatedness, and selflessness (pp. 63-105).

In practicing mindfulness, incorporating the tenets of the Noble Eightfold Path can have a positive effect on life satisfaction in general, including on the job. According to Lesser (2005), there are many benefits of integrating practice into the workplace (e.g., Zen / mindfulness). Many of the beneficial effects come with positive changes to our physical, emotional, and psychological states including:

1. The development of a flexible mind that can deal with change;

2. The change to build integrity and deepened relationships;

3. The chance to build leadership and team-building skills through self-knowledge, listening, right speech, alignment of actions with goals, and recognizing the spiritual development of others;

4. Enhanced problem-solving skills and creativity from mediation/mindfulness practice;

5. Increased work satisfaction from seeing work as a "spiritual" practice;

6. Improved listening and communication skills through meditation/mindfulness practice;

7. Improved concentration from meditation practice;

8. Increased appreciation for work and life from living in the present moment;
9. Developing new ways of thinking and acting by eliminating habitual patterns;
10. Contributing to a more connected and sustainable world working for the benefit of others (Lesser, 2005, pp. 26-29).

Through the practice of mindfulness, being able to become more in touch with moment-to-moment experiences both in the workplace and in other environments can help create a shift in our level of peaceful existence on a daily basis. Fontana (1998), author of *The Mediator's Handbook*, noted:

> Whether we have reached the stage of wanting to look more closely into our inner world or are still firmly located in outer concerns, most of us are greatly in need of a serenity which can make us less vulnerable to the many problems that life puts in our path. (p. 6)

Hanh (1991) theorized that mindfulness practice has the potential to help people become "alive" to the present moment. Being able to be attuned to one's own internal processes and states is at the core of mindfulness (Epstein, 1995). The process has to do with particular qualities of attention and awareness that can be cultivated and developed (Kabat-Zinn, 2005).

There is strong and impressive evidence that suggests that being mindful tends to increase physical and mental health, interpersonal relationship quality, and behavioral regulation (K. W. Brown & Ryan, 2003; Creswell & Planko Clark, 2007). Mindfulness practice can also make a significant difference in our everyday existence as it can nurture us mentally, physically, emotionally, and even spiritually. It has been proven to increase compassion and connection with friends, and it can positively affect the way the brain develops as one ages (Ludwig & Kabat-Zinn, 2008).

**MBSR process as intervention**. To help participants experience the benefits of mindfulness practice previously described in this dissertation, an MBSR class, which

usually consists of eight sessions over the duration of an 8-week period, provides participants with a program usually derived from Jon Kabat-Zinn's approach to conducting an 8-week MBSR training. The following is a brief summary of the 8-week course as created by Elisa Goldstein and Bob Stahl. The course is an approved derivative of Kabat-Zinn's MBSR training seminars. Bob Stahl was trained by Kabat-Zinn and is a highly regarded MBSR trainer, a renowned writer of mindfulness manuals and guidebooks, and is the owner of A.R.T., or Awareness and Relaxation Training (Goldstein & Stahl, 2010).

**MBSR course summary.** Stahl and Goldstein's MBSR program focuses on getting participants to be more aware of their thoughts, feelings, emotions, and engages them in a variety of mindfulness practices to help reduce the stress and anxiety they feel in response to life's challenges. It encourages the building of participants' ongoing practice through assisting participants to gain a greater understanding of mindfulness, develop their own formal and informal practice, and formulate a repetitive schedule for practice over the long term.

Participants in the program practice mindful breathing, mindfulness practice in everyday life, body-scan meditation, mindfulness mediation, mindful self-inquiry, mindfulness of emotions, mindful interpersonal communication, the gift of connection, loving-kindness mediation, and mindful yoga (see Appendix A).

**Mindfulness and seeing clearly.** Mindfulness practice allows one to train the mind and grow into seeing more clearly and acting spontaneously with greater awareness, compassion, and wisdom. Kabat-Zinn (as cited in Goldstein & Stahl, 2010) expressed his belief in the mind and heart connection when he stated, "What we call mind is not

separate from what we call heart, we can speak of mindfulness and heartfulness as complementary aspects of MBSR" (p. x). It is the commitment to practice that is most important in order to see a positive change in stress response, perceptions and emotions, levels of awareness, attention, compassion, and moment-to-moment experience.

Possessing commitment to practice and living mindfully in the workplace has the potential to "create opportunities for managers to bring firm attention to the here and now" (Herndon, 2008, p. 39). Kabat-Zinn (as cited in Goldstein & Stahl, 2010) further noted, "It is important to be in touch with life unfolding, however it is in any given moment, yet without being too attached to attaining any outcome" (p. xi). Participating in the practice in this way will bring about opportunities to experience an enhancement of work/life satisfaction. I have provided just a snapshot outline of the 8-week program. Detailed information on Stahl's mindfulness based stress reduction programs and format can be found at http://www.mindfulnessprograms.com/ .

**Foundations of Heartmath as Intervention**

**Heartmath and heart intelligence**. According to the researchers and physicians who work with the HeartMath Institute, heart intelligence is the way in which awareness, intuition, and understanding flows as we experience them. It is when emotions and the mind are brought into synchronization and alignment with the heart. Activation can occur through self-initiated practice. It underlies cellular organization and evolves organisms toward a higher level of order (Childre & Martin, 1999). "There is a personal and a universal unconscious; turning awareness to the unconscious brings understanding and freedom" (Kornfield, 2008, p. 27). Just as a formal MBSR intervention can assist in the reduction or amelioration of a negative stress response, synchronization of the autonomic

nervous system, a general shift in perception and enhanced quality of life in individuals, Heartmath tools, which are also mindfulness tools designed to heightened awareness, are shown to provide similar outcomes (Bedell & Kaszkin-Bettag, 2010).

Heartmath interventions are essential heart-feedback tools and can assist in the awakening of a state of awareness that can bring about a sense of freedom and understanding of life's momentary beauty. The integration of biofeedback techniques (such as Heartmath technologies) into a life, health, and coaching framework is a revolutionary approach for coaches and clients to "pay attention to wellness, behavioral health, and satisfaction with life…along with developing healthy lifestyles" (Hershberger, Edwards, & Rudisill, 2005, p. 137). Heartmath is a series of tools, techniques, and technologies that were created based upon the science and research of the role the physical heart plays in health and well-being, and the integration of the roles our thoughts and daily stressors have on our physical body. The various Heartmath interventions can be used as tools to assist clients in making a higher level of effective decisions and a marked increase in their sense of well-being. Heartmath is an integrative holistic approach "that seeks to integrate and address the full spectrum of body, mind and spirit" (Childre & Martin, 1999, p. x). It helps participants notice in real time how their bodies are reacting to stress and then periods of heightened awareness and calm.

The heart is both a physical object as well as a rhythmic organ. Coaches can use Heartmath tools to work with clients in changing and reducing stressed states. Clients begin to realize that the heart is both a physical object and a rhythmic organ and from it emanates wholeness and love itself. It shows the client how to use the coherent power of

positive feeling to manage their thoughts and emotions (Childre & Martin, 1999, pp. 10–12).

To explain further the phenomenon of coherence, it is the logical connectedness, internal order, or harmony among the components of a system. The originators of Heartmath suggest that the approach is rooted in both scientific research and in the wisdom of love. The founders of Heartmath suggest it is love and a positive feeling (gratitude) in the heart that creates a rhythm that spreads health and well-being throughout the body (Childre & Martin, 1999, pp. 3–15).

Core emotions and feelings affect both branches of the automatic nervous system (Thayer & Lane, 2009, p. 83). They reduce the activity of the sympathetic nervous system (that branch that speeds heart rate, constricts blood vessels, and stimulates the release of stress hormones), and increase the activity of the parasympathetic nervous system (that branch of the nervous system that slows heart rate and relaxes the body's inner systems), thereby increasing its effectiveness. The balance of these two branches of the nervous system is enhanced so that they work together with increased efficiency. This collaboration results in diminished friction and wear and tear on the nerves and internal organs (McCraty et al., 1998). For those clients who are exposed to a Heartmath intervention, they are able to supplement the benefits of their coaching experience and mindfully practice to see physiological change in real time within the areas of distress and need that is their current reality. Using Heartmath as a coaching tool provides the client with multiple ways to experience mindfulness in real time—to find his or herself in a state wherein "a person is intentionally aware of momentary experience" (Yeganeh & Kolb, 2009, p. 13).

**Heartmath applications as a stress reduction and quality of life intervention.** Heartmath coaching techniques and heart feedback tools and techniques lead the clients through a series of thoughtful and reflective exercises while teaching them to improve their physiological state in real time. Through the integrative model of life coaching and Heartmath techniques, clients begin to develop habits of awareness and attention to small but important shifts in thinking and physiology and improve the experience of heart-mind living (IHM, 2007). Research findings indicated that Heartmath heart—mind practice increased levels of coherence/calmness, improved stress management, increased energy, created better focus, and improved performance, in addition to other benefits (Reich, 2010).

At Heartmath's core is the belief that the heart is more than a muscle needed as a mechanism to keep one alive and that heart–mind communication is a scientific reality. Research (Childre & Martin, 1999; Fruehauf, 1997; McArthur & McArthur, 1997; Pearsall, 1998) asserts a clear relationship between the heart, brain, and body.

Although there is no clear demarcation between the mental and physical realms, there is scientifically valid research around the science of neurocardiology, which is the study of the nervous system, combined with the study of the heart. As stated previously, the amygdala and cerebral cortex have their role in autonomic nervous system communication (Swenson, 2006).

However, there is also a link between the amygdala—storehouse of emotional memory; the cerebral cortex—the region of the brain that thinks, strategizes, plans, reflects, inspires, and imagines; the medulla—which contains nerve centers that regulate breathing, heart rate, and other bodily functions; the sympathetic afferent nerves—which

carry information from heart to brain through spinal cord; the frontal lobes—involved in decision making and determine appropriate emotional responses; and the vagus nerve—which contains parasympathetic afferent (flows to the brain) nerve fibers that carry information from the heart to the brain. This neurological communication system is directly connected to the heart–brain, which integrates and processes information from the heart, brain, and body, and intersects with all parts of the system (National Institute of Health, 2005).

*The Neijing*, the ancient book of Chinese medicine definitions, refers to the heart as the ruler of the human body and acts as the seat for human intelligence, which includes the mind. *The Neijing* claims that if we nourish the heart in our daily practice, our lives will be healthy and we will have long life (Fruehauf, 1997). If the heart (or ruler's) vision becomes clouded, then a person's path will become congested and the body will be harmed. For if one's life is centered on distractions and distractive activities and one does not follow the heart's path then harmful consequences may befall one (Fruehauf, 1997). McCraty, Atkinson, Tomasino, and Bradley (2009) described the way in which the heart communicates with the brain and the rest of the body: neurologically (through transmissions of nerve impulses), biochemically (through hormones and neurotransmitters), and biophysically (through pressure waves).

***Coherence.*** When the body's communications systems are in synchronization, a certain level of positive or "good" coherence is achieved. The term *coherence* is used to describe the degree or harmony, stability, and order among and between the body's various rhythmic activities. These include respiration, blood pressure rhythms, and heart rhythm (Bedell & Kaszkin-Bettag, 2010). Hearthmath tools and techniques include the

intentional generation of a heartfelt positive emotional state combined with a shift in attentional focus to the area of the heart—it is this area where many people subjectively experience positive emotions (Childre & Martin, 1999, p. 27). It is important to note, however, that Heartmath tools measure pulse with no direct measurement of respiration.

According to coherence research, when a shift is made into a positive emotional state, heart rhythms change to a more coherent and ordered pattern: "Emotions which are negative such as frustration and anxiety lead to a disordered heart rate variability (HRV) pattern" (McCraty et al., 2009). To explain further the phenomenon of coherence, it is the logical connectedness, internal order, or harmony among the components of a system.

***Heart rate variability (HRV).*** HRV involves changes in the interval or distance between one beat of the heart and the next: "Multiple biological rhythms overlay one another to produce the resultant pattern of variability. Inter-beat interval variations, or heart rate variability, have relevance for physical, emotional, and mental function" (Moss & Schaffer, 2003, p. 2).

HRV is a reliable reflection of the many physiological factors that modulate the normal rhythm of the heart. It is the variation over time of the period between consecutive heartbeats (Rajendra, Joseph, Kannathal, Lim, & Suri, 2006). Changes in heart rate variability have been shown to be indicative of psychological and physiological well-being and of predicting health risks (Beauchaine, 2001; Tsuji et al., 1996). Providing simple biofeedback HRV training for those in need of enhanced physiological health is a simple but very effective process.

HRV researcher Maria Karavidas described the use of HRV biofeedback for the treatment of major depression as producing a significant reduction in depressive

symptoms, with minimal adverse effects. Karavidas (2008), through her work using HRV with various populations, emphasized the evidence for autonomic nervous system dysfunction in depression and the power of HRV biofeedback to enhance autonomic nervous system function. HRV biofeedback training has also been shown to assist in relieving the challenging problems associated with PTSD (Moss, Lehrer, & Gevirtz, 2008). When there is a harmonious order in the body's systems, this signifies a system that is coherent (in sync), and a coherent system is connected to the ease and flow within all aspects of the individual's life once coherence is experienced (McCraty et al., 2009). When the body's systems are coherent, there is a fluidity and synchronicity in the heart rate variability. HRV is thought to reflect the heart's ability to adapt to changing circumstances by detecting and quickly responding to unpredictable stimuli. The normal variability in HRV is due to autonomic neural regulation of the heart and the circulatory system (Rajendra et al., 2006).

***Heart intelligence***. As with an MBSR intervention, the IHM stated primary desired outcome is to assist people in decreasing negative stress responses and increasing states of homeostasis—balance, coherence, and well-being. IHM developed techniques to cultivate this heart intelligence and provides training and licensure in these techniques to practitioners who serve as coaches working with clients to meet their wellness and stress reduction goals. It is these techniques that are the core of Heartmath's "heart–mind" coherence. They can be used as an effective intervention to build mindfulness, an awareness of what needs to change and the ability to see one's inner confidence poised to help create change. As stated previously, this dissertation research used mindful and

heartful exercises published by Heartmath, in addition to MBSR activities. Clarification on the procedures and the way in which they were used follows.

As elucidated previously, "heart intelligence is the flow of awareness and insight that we experience once the mind and emotions are brought into balance and coherence through a self-initiated process" (IHM, 2008, p. 5). The key to this process is "self-initiation." Clients are provided with guidance and they themselves self-initiate the steps toward action. The process of bringing the Heartmath Intelligence model into the coaching equation begins with powerful, potentially transformative questions. Clients are asked about their core values without judgment; they begin to react from their hearts, their leaps of perception and creativity and adaptability grow as they describe their core values (IHM, 2007). For example, questions such as, "Describe a time when you were manifesting a core value, an event, a conversation, a place, or an act" really work to get the client thinking about the qualities and texture of the moment.

Clients also answer questions about what is important to them, and what really matters to them. They are given the opportunity to consider the core values they are actually living by, and describe how to facilitate actions that are important to them and the way in which they perform these actions (IHM, 2008). Clients then are asked to consider the core values they are not living by, and then consider the relationship between their core values and their heart. They are then given an opportunity to understand that core values are at the center of who they are. This is what we mean when we speak of the "heart."

***Heartmath coaching***. In Heartmath coaching, clients have an opportunity to develop gratitude. Gratitude has been scientifically proven to assist in maintaining states

of positive emotions, building stronger immune systems and lowering blood pressure, creating higher levels of joy, optimism, happiness, and reducing feelings of isolation and loneliness (The Greater Good Science Center, n.d.). Clients increase opportunities to experience and practice gratitude by learning to create and recall situations that will evoke gratitude and appreciation.

Clients begin to consider some of the stressors in their lives and how the stressors affect them. They look at the symptoms they experience and then consider through inquiry how they cope, and what they do to reduce stress. They can think about how stress affects their performance and their health, how stress affects their relationships, and how their lives would change if they reduced the stress in their lives (IHM, 2008).

Clients are taken through an exercise designed to understand the power of positive thinking and the emotional shift that takes place. They can begin to understand in which ways not only their thoughts are changing but the ways in which their physiology changes as well. There is significant research which supports the power of positive feelings and the effects of increased longevity, reduced morbidity, increased cognitive flexibility, improved memory, improved decision making, increased creativity, and innovative problem solving (IHM, 2008, p. 27; Nauroz, 2004).

The coach asks questions about how clients recognize stress, and what some of their recurring stressful feelings are. Then clients are guided to shift their focus around their heart. This action is called “heart focus.” Clients are then asked to breathe and feel their breath coming in through their heart and out through their heart—“heart breathing. They are then asked to make a sincere effort to activate a positive feeling—heart feeling (IHM, 2008, p. 44).

Clients are guided by a coach to consider people, things, or events in their life that are important to them and will help them bring forth a positive feeling. The steps taken as they focus on their heart and their breathing, and activating a heart feeling, works in real time to bring about physiological coherence. It is the ability to think clearly and objectively which is enhanced, allowing the client to reduce stress and view issues from a broader, more emotionally balanced perspective (IHM, 2008, pp. 43–48).

Within a coaching context, clients are encouraged to consider the ways in which they might create opportunities to take their thoughts to a place of action. The "thought to action" inquiry brings the client into action once the goal of becoming aware of self, others, and environments on a moment-to-moment basis become a part of the client's daily routine. Socrates said, "The unexamined life is not worth living" (as cited in Maslow, 1998, p. 10). This step asks the client to examine and consider what would be an efficient and effective attitude/action that would balance and de-stress their system. As in MBSR, the goal is to create a new sense of perception and attention to matters that are often overlooked in daily life, at work or home. The focus for the thought to action inquiry is kept on the heart area while inner activity is going on. The client is finally asked to sense any change in perception or feeling and sustain it as long as they can (IHM, 2008). "Heart perceptions are often subtle; they gently suggest effective solutions that would be best for the client and all concerned" (IHM, 2011, p. 43).

**Wellness and Health of Body, Mind, and Spirit**

Research has demonstrated that "the introduction of biofeedback equipment changes the focus of the interaction to include the real-time monitoring of physiological activity…it is introduced as a learning process intended to increase awareness of mind–

body variables and stress reactivity" (McKee & Kiffer, 2000, p. 172). It is about creating an environment of wellness and discovering the various techniques to reduce stress, and to empower oneself to make choices that will support clients in reaching goals that are holistic in nature (mind–body connection) and instrumental in creating a state of wellness.

Although the definitions of wellness are bountiful and diverse, it appears that practitioners in the field of health, life, and wellness coaching have reached considerable consensus around some components of a wellness definition. For example, Arloski (2007) stated, "Wellness is a conscious, self-directed and evolving process of achieving full potential. It is multi-dimensional and holistic—encompassing such factors as lifestyle, mental and spiritual well-being and the environment; it is positive and affirmative" (p. 12).

John Travis, an expert in the field of wellness, posited, "Wellness is a choice, a way of life, a process, an efficient channeling of energy, an integration of mind body, spirit, and a loving acceptance of self" (Travis & Callander, 1994, p. 13). Travis developed a comprehensive inventory that looks at conditions that can lead to wellness. It is called "Wellness Inventory." It involves conducting a whole person assessment in the areas of self-responsibility and love, breathing, sensing, eating, moving, feeling, thinking, working and playing, communicating, intimacy, finding meaning, and transcending (Travis & Callander, 1994, p. 6).

What is most interesting to note with regard to the Wellness Inventory is that both MBSR and Heartmath interventions, by their very nature and design, seek to address all of these areas in assisting the client to live fully in awareness and appreciation. When one

considers wellness as having a variety of facets that speak to overall well-being and the potential of arriving at that goal through holistic measures such as interventions like MBSR and Heartmath coaching, one can begin to understand how these interventions can assist workplace managers and others in coming more fully into themselves through building awareness and changing perceptions without judgment.

**Coaching as a conduit for movement.** Maslow has suggested that each human being possesses an inner nature that is consistently striving in a positive way to become self-actualized (Maslow, 1962). Coaching provides clients with a unique opportunity to partner with a trained professional whose primary role is to serve as a beacon to illuminate areas that the client identifies as needing to be addressed in their lives and/or environment.

***Description of health and life coaching.*** Karen Lawson, author and researcher on coaching constructs, describes health coaching, which works to assist people in finding their way to living life optimally and improving their health, as having four pillars. Pillar one is Mindful Presence: Mindfulness is a process of focused, nonjudgmental awareness in the present moment requiring intentional consciousness at multiple levels. Pillar two is authentic communication. This area builds upon communication frameworks such as motivational interviewing, appreciative inquiry and synthesizes them into cohesive summation with the following four aspects: deep listening, curious inquiry, perceptive reflections, and silence. Pillar three is self-awareness: moment-to-moment mindfulness applied to the self—hysterically, mentally, and emotionally in order to be clear and present with the client. Finally, Pillar four, a safe and scared space, the creation of an

environment of safety as it is perceived by the client, and which is critical for the development of connection and trust in the coaching partnership (Lawson, 2013).

***Qualities of integrative health and life coaching.*** To understand the ways in which coaching assists people, it is important to make clear and highlight the qualities that make coaching distinct from other professional therapeutic interventions. Coaching deals mostly with a person's present and seeks to guide them into a more desirable future (although the process sometimes takes the client back to his or her past for exploratory and reflective purposes); it is a co-creative process, one of equal partnership, as the coach helps the client discover their own answers and does not merely feed them directions (Williams & Menendez, 2007).

It assumes that a range of emotions are natural and normative, and normalizes them. Coaches stand with their clients and help them identify the challenges, then work with them to turn challenges and areas of confusion relative to direction into victories and clarity and hold them accountable to reach their desired goals. Powerful questions are also a distinction of life and wellness coaching, questions that respond to the client's comments (Williams & Menendez, 2007).

Albert Einstein's transcendent comments about asking the right questions demonstrates the essential nature that powerful questions can have in the process of resolving issues and moving someone who is "stuck" forward. He posited,

> If I had an hour to solve a problem and my life depended on the solution, I would spend the first 55 minutes determining the proper question to ask, for once I know the proper question, I could solve the problem in less than five minutes. (Einstein as cited in "Quotations, Authors A-D," 2013, para. 39)

Finding a place of authentic curiosity in order to ask the right questions at the right time can move a client from a place of ambivalence to new horizons of possibilities.

Questions such as “What do you want?” “Where are we?” “What’s next?” “Where do you want to go from here?” “What do you see? “What did you learn?” “What will you do and when will you do it?” “What do you think?” (Whitworth, Kimsey-House, Kimsey-House, Sandahl, 2007, p. 72) demonstrate curiosity on the coach’s side. The coach is in a place of inquiry and thinking outside the paradigm of the usual and the confines of the superficial.

Curiosity arises when the coach learns from and about the client and wants to continue learning. That learning prompts curiosity and a need to learn more; consequently, the coach continues to ask questions that have the ultimate effect of moving the client forward through the process of self-exploration and inquiry. The beauty of this process is that the coach, through the inquiry and curiosity process, becomes the client’s voice, asking the questions the client would ask. The coach is in a far better position to ask these questions because the coach does not deal with the “same personal issues the client deals with such as being distracted by Gremlins, or history, or colleagues, opinions, or loved one’s feelings, or anything else” (Whitworth et al., 2007, p. 75).

Coaching is an intervention that assumes a client is capable of achieving goals with effective support and proper guidance. Coaching differs from therapy in subtle ways in that therapy assumes the client needs healing. Therapy focuses on helping people achieve emotional healing, and explores the roots of problems. Therapy also works for internal resolution of pain and to let go of old patterns and works to bring the unconscious into consciousness, and its roots are in medicine and psychiatry. Coaching, on the other hand, assumes the client is already whole, and works to move people to a

higher level of functioning. It focuses on the future and on the actions the clients can take. It also focuses on solving problems and works specifically with the conscious mind. In addition to working for external solutions to overcome barriers, a coach works with the client to learn new skills and to implement effective choices.

According to Green, Oades, and Grant (2006), life coaching is a systematized, structured approach to assist people's efforts in making changes in their lives and has become a popular means of helping nonclinical populations establish and achieve goals and enhance their well-being (p. 142). It is important to note that health coaching encompasses life coaching in its practice and deals with various aspects of individual's lives that need reflection and action including some aspects of life that have nothing to do with physical ailments or chronic disease. Duke Integrative Medicine, located in Durham, North Carolina, is an internationally renowned training center for professional integrative health coaches. Duke's institute defines an integrative health coach as follows:

> The integrative health coach is a professional with the skills, expertise and time to enhance client activation and engagement and partner with clients for successful, ongoing life, health and wellbeing behavior change. They use both innovative and practical strategies to help clients clarify an optimal vision for their life and all aspects of their health, explore options and steps for realizing that vision, enhance personal accountability, and take action to achieve and sustain their goals. They invite insights and clarity through inquiry and personal discovery. They help clients make changes that support their values and vision to live their lives optimally. The Duke model of integrative health coaching supports the belief that living all aspects of life optimally prepares individuals for a healthy life and enhanced sense of wellbeing. (Duke Integrative Health Manual, 2011, p. 7)

The Duke model focuses on the wheel of integrative health, which includes the following facets: mind–body connection, relationships and communications, physical environment, spirituality, professional and personal development, nutrition, and movement/exercise/rest. At the core of the wheel of health is mindful awareness (Duke

Integrative Medicine, 2011). The client learns how to transform his or her life in order to live optimally by practicing mindfulness and paying attention with curiosity, being aware nonjudgmentally of moment-to-moment experiences on their journey to the life they desire to live. These facets are able to encompass all aspects and conditions of life and provide the client with the opportunity to focus attention on each of the facets with their own mindful awareness at the core of their transformation. Both integrative health coaching (which includes various dimensions of life coaching in its offerings) and life coaching are considered of great value by researchers in the field of applied consulting psychology (Grant, 2003; Olsen & Nesbitt, 2010; Spence & Grant, 2007).

The International Coaching Federation (ICF), is the leading coaching certification organization with a global reach. They support both integrative health coaches and life coaches. ICF has over 15,000 members who are coaching practitioners. ICF defines coaching as a relationship where client and coach partner in a thought-provoking and creative process that can inspire a client to maximized their potential both personal and professional (ICF, 2010, para. 3). The research for this dissertation used an integrative health coaching model in working with study participants who wished to experience a shift in perceptions around negative stressors, quality of life/relationships and emotional regulation, and enhanced sense of well-being within dynamic work environments. Health coaching includes, as previously noted, significant aspects of life coaching in its framework.

***Examining life through the vehicle of coaching.*** "The draw of pursuing life improvement, personal improvement and the exploration of meaning began with early Greek society" (Williams & Menendez, 2007, p. xv). This potential to transform states of

immobility to action, movement, and goal orientation lies within the basic framework of the "designed alliance." This alliance begins with the deliberate and strategic agreement that is in essence the tapestry, the customized arrangement that will guide the way in which coach and client will work with each other during the coaching relationship. To that end, "The design of the coaching relationship begins during the initial discovery session, also called an intake session" (Whitworth et al., 2007, p. 13).

There is an understanding at the outset of the relationship that the client is embarking on a journey of discovery that will require him or her to commit to being a co-participant in this journey in which "both players are intimately involved in making it work" (Whitworth et al., 2007, p. 13). The purpose of humanistic psychology is to establish an autonomous, supportive, structured, collaborative learning environment in order for people to feel confident in discovering their ability to self-actualize and reach their goals (Stober & Grant, 2006, p. 357).

**Self-management/internal self-management and the use of Heartmath in the coaching equation.** One of the fundamental principles in coaching is that of self-management. It has a two-fold purpose. First, as it relates to the coach, "It is about the coach's ability to put aside opinions, judgments, preferences, and beliefs in order to reflect and support the client's agenda" (Whitworth et al., 2007, p. 258). Second, the model of internal self-management concerns itself with understanding that the pressure on an individual will increase in years to come as societal, family, and internal stresses mount and the pace of change accelerates.

At the end of the day, the client will have to make the decision to change, and take the actions necessary to do so. However, as stated previously, it is not a solo journey.

While the power lies in the hands of the client to make the changes, there is significant power in the hands of the coach in the role as shepherd and guide. One might call an effective coach "The Coach Whisperer," as it is the gentle inquiry, the participatory goal setting, the holding accountable, that creates a recipe for success and wellness.

For coaches who have an orientation toward an integrative health or wellness focus in their life coaching practice, it usually means that beyond their life coaching training, they are trained and have the acuities to accept and meet the client where they are today, ask the client to take charge, and guide the client in mindful thinking and doing work that builds confidence. The coach also helps the client define a higher purpose for wellness and uncover their natural impulse to be well. Coaches with this orientation also work to help the client tap into their innate fighting spirit and address mental and physical health together with the coach (Moore & Boothroyd, 2006, p. 5).

It is in the spirit of this model of wellness where clients begin to identify areas of shifting that need to happen around their sense of "wellness" (living the life the client really wants, improving the client's health, performance and relationships, and helping the client feel better more often) toward fulfillment. This is where "Heartmath Voyage to Heart Intelligence" (IHM, 2008) can be used as an effective intervention to build mindfulness, an awareness of what needs to change, and the ability to see one's inner confidence poised to help create change.

***Paying attention to higher needs***. What is interesting to note is that when people move beyond their basic human needs such as food and shelter, they begin to "pay attention to higher needs such as self-actualization, fulfillment, and spiritual connection" (Williams & Menendez, 2007, p. xv). Abraham Maslow, in his "Hierarchy of Needs"

model (Maslow, 1998, p. xx), laid out in matrix form his belief that there are stages in life that need to be addressed before self-actualization or wellness can be achieved. Those stages start with the (a) physiological (basic survival needs), then move on to (b) safety, (c) social (interaction and approval of those around an individual), and (d) esteem (wanting to examine life and build a sense of self-esteem which consists of feeling good about one's self and a sense of accomplishment). It is when those needs are met, according to Maslow (1998), that self-actualization can be achieved.

William James was known for his writings on consciousness and his belief that human beings can experience higher levels or states of consciousness. He was an expert on will, attention, and habit. He too believed that human beings could become self-actualized and experience wellness if they "took the time to look deeply at their drives, passions, and motivations" (Williams & Menendez, 2007, p. xvii).

When we consider wellness as having a variety of facets which support overall well-being and the potential of arriving at that goal through holistic measures, we can begin to understand our need as a coach to work as an ally with our clients and the importance of helping them come more fully into themselves as they simultaneously develop motivation. Part of the coach's job is to explore and list with the client the lifestyle changes that will become necessary to be well and fully alive. It appears that a coach's role in and of itself can be a powerful catalyst for change in a client's life.

For example, Whitworth et al. (2007) stated, "The coach's role is to challenge clients to pursue their own fulfillment…even when clients don't want to go there your job is to be out front, encouraging, pointing the way" (p. 125). The coach has a very active role; it is about balance and dance—the ability to be flexible and agile, going with the

flow as the client's awareness emerges. His or her role is to "create an environment in which clients focus entirely on their fulfillment, balance and process…the client is the star" (Whitworth et al., 2007, pp. 125–127). The coach exists to draw out the client's innate ability to make the changes.

***Living awake.*** According to Whitworth, part of what life and wellness coaching provides is an opportunity to change from old ways of "being" which kept the client stuck, distressed, depressed, unwell, and sometimes immobile or out of ease, to becoming fully alive—in essence, fulfilled. Being fully alive is about the journey, not the destination. It is about learning to be fully alive each and every day: "It is about wholeness, satisfaction, a sense of rightness and harmony" (Whitworth et al., 2007, p. 117). This description sounds like a definition of wellness, which is at the core of being fully alive and feeling fulfilled. However, the sense of being alive and fulfilled is an evolutionary concept and changes as we grow. Our needs, desires, and our criteria for fulfillment can change as we grow and develop. What being alive today means for a client, can change a few years from now.

An optimal and visually graphic tool that a coach can use by which to get the client in a place where they can assess "the parts of their lives where they are unfulfilled" is called the "Wheel of Life" (Whitworth et al., 2007, p. 118). It is a visual representation of a variety of areas in one's life that make up the whole (e.g., physical environment, career, fun and recreation, personal growth, significant other/romance, career, money, health, friends and family). These areas of one's life are linked to an individual's value system. Using the Wheel of Life to assist a client in "clarifying their values is a way to

create a map that will guide them through the decision paths of their lives" (Whitworth et al., 2007, p. 119).

***Biofeedback and wellness.*** Biofeedback systems work efficiently as a coaching tool or as an addendum to a regular coaching session to empower clients to take wellness seriously and into their own hands in real time. Research has demonstrated, "The introduction of biofeedback equipment changes the focus of the interaction to include the real-time monitoring of physiological activity…it is introduced as a learning process intended to increase awareness of mind-body variables and stress reactivity" (McKee & Kiffer, 2000, p. 172).

The advantage of biofeedback is that while the coach guides the client with basic information and questions, clients are able to notice changes in their physiology, perception, emotions, and feelings in real time. It would support the competency goals of credentialing organizations like the ICF and others (i.e., setting the foundation, co-creating the relationship, communicating effectively, and facilitating learning and results), and is scientifically research-based. It is an excellent tool for clients to approach wellness and living life fully from a holistic perspective in a relatively immediate and conscious way. Furthermore, this intervention complements the traditional life and wellness coaching models. It is about creating an environment of wellness and discovering the various techniques to reduce stress, and to empower oneself to make choices that will support clients in reaching goals that are holistic in nature (mind, body, and spirit) and instrumental in creating a state of wellness.

Although the definitions of wellness are bountiful and diverse, it appears that practitioners in the field of life and wellness coaching have reached considerable

consensus around some components of a wellness definition. For example, Arloski (2007) stated, “Wellness is a conscious, self-directed and evolving process of achieving full potential. It is multi-dimensional and holistic—encompassing such factors as lifestyle, mental and spiritual well-being and the environment; it is positive and affirmative” (p. 12).

**Summary**

As the breadth of research described in this portion of the dissertation illustrates, both MBSR and Heartmath mindfulness tools are designed to provide clients with a shift in consciousness, awareness, changes in perceptions that can affect our physiology, biology, psychology, and the autonomic nervous center, thus creating a greater sense of ease, ameliorated states of “dis-ease,” heightened sense of satisfaction at work and in other environments, and a general sense of wellness (Bedell & Kaszkin-Bettag, 2010). Workplace managers as well as others with significant life responsibilities are often seen as having deficits in the areas of work/life balance, life satisfaction, and a general sense of well-being (Dane, 2011). MBSR and the protocols promoted by Hearthmath have similar goals and attributes related to health and harmonious living. Both practices can serve to create a “safe space” for individuals to begin to build an existence that is fully lived and improve health conditions through acquiring new principles and techniques.

# CHAPTER 3: METHODOLOGY

## Qualitative Multiple Case Study Approach

This chapter provides details on the methodology and approach that were used to facilitate the research. The role of the researcher, the setting the research was conducted in, the participant recruitment process, as well as the tools and research instruments that were used to gather information are discussed. Finally potential limitations of the research are explored.

### Choice of Method

A mindfulness-based stress reduction and quality of life theoretical approach based on validated scales, survey/questionnaires, notes, and semi-structured interviews were used to frame each individual case study and to capture relevant data, which were qualitatively analyzed and presented in this dissertation. This research utilized a multiple case study, a qualitative structured design to study six professionals who have self-disclosed and self-identified as a HLE, supervise others, work in dynamic environments, and have identified negative stress responses, issues with quality of worklife, and emotional regulation to be a challenge in their daily work lives.

### Role of the Researcher

The principal researcher worked directly with the participants in a one-on-one coaching consultation and interviews over an 8-week period for the purpose of conducting a research investigation to study the effects of a mindfulness-based coaching intervention on HLEs. All participants expressed a desire for change in the quality of their worklife and to work toward a shift in the areas of negative stressors, emotional regulation, and a sense of enhanced well-being which includes a sense of improved

relationships on the job. The principal researcher's primary role during the course of the study was to capture the experiences of participants and analyze, with the active support of a research assistant, a breadth of diverse data on the experiences and perceptions of participants, using the intervention tools noted in the Research Instrument section of this proposal.

The primary researcher has been an organizational effectiveness consultant for over thirty years and has licensure and certification in the following areas as these relate to this dissertation research: (a) licensed HeartMath biofeedback provider; (b) certified Mind-Body Medicine Practitioner for individuals and groups; (c) graduate of the Duke Integrative Medicine, Integrative Health Professional Coaching Program (Duke Integrative Medicine, 2011), and serves as a Integrative Health Coach in process of certification; (d) trained Mindfulness Based Stress Reduction Practitioner and Trainer since 1994—trained by monks in the tradition of Thích Nhất Hạnh, world-renowned Buddhist monk; and (e), faculty for the Center for Mind, Body Medicine.

**Participant Recruitment**

Following the IRB approval by Saybrook, the primary researcher recruited potential candidates from a nonclinical population. The strategy was a consultative approach using a one-on-one model and participant selection followed the convenience sampling. The researcher serves as a corporate consultant within businesses, government, and healthcare systems nationally and solicited her study participants from those demographics using resources such as the Chamber of Commerce, business databases and healthcare systems and resources within the Triangle North Carolina area and other Eastern states of the United States. All candidates had initial contact through email

communication that described the purpose of the research, the strategy, and the potential benefit of participation.

Once participants demonstrated interest in the study via their email response, the researcher followed up with phone calls to further describe the process and answer any questions from the candidates. The criteria for participation in this dissertation study required that the HLE: (a) self-identify as a HLE; (b) is responsible to supervise five or more people; (c) work in a dynamic environment; (d) is responsible for critical decision making in the work environment; (e) have identified negative stress responses, intermittent or ongoing quality of worklife issues, and emotional regulation to be a challenge in their daily work lives; (f) were committed to the full study protocol; and (g) cannot have taken an official MBSR course. While they can be regular yoga practitioners (the study will note the differential in the meditative aspects of yoga practitioners in the analysis of data), or have taken up to five meditation classes (participant number of meditation classes will be noted in the analysis of the data), participants were not regular mindfulness practitioners.

For the purposes of this study, the primary researcher recruited participants with no formal MBSR training. This study was for new practitioners. All of the participants received the informed consent form (see Appendix B), which explained that participants may withdraw from the project if they choose not to continue and guarantees confidentiality.

**Research Setting**

This study was 8 weeks and was based on a telephone coaching process. The breakout of the 8-week study included one 1.5-hour initial educational and experiential

coaching session, six one-hour coaching sessions and a 1.5 hours final coaching wrap-up session, which included a review of the final survey in a semi-structured interview format. All descriptive data were gathered through the validated research instruments, conversations, and notes taken during the interviews and conversations. All session notes were typed verbatim as participants spoke to the researcher during the coaching sessions.

Telephone coaching sessions were scheduled every week and were based on the availability of the participant and the coach. Between sessions, participants had an opportunity to practice the mindfulness-based interventions and engage in homework provided to them and described at the beginning of their first educational/experiential session.

**Research Design**

The multiple case study and qualitative analysis design was selected because of its flexibility of diverse and ample data collection options, which assisted the researcher in developing clear and descriptive individual case responses and profiles for each of the participants.

Participants partnered directly with the primary researcher in one-on-one coaching sessions by telephone during the 8-week study period. This particular coaching approach is designed to assist participants in enhancing their ability to be reflective, learning new skills and tools to support them in their desired shifts in perceptions around workplace stressors, relationships, quality of life, sense of well-being and performance, and emotional regulation. Mindfulness techniques including HeartMath and MBSR were used to facilitate this process within a mindfulness coaching framework.

**Research Instruments**

Diverse sources of data collection materials were used to capture evidentiary information for participants. Those sources included semi-structured interviews, composed of a pre-intervention questionnaire (Appendix C) and a post-interview questionnaire (Appendix D), Combined Maslach Burnout Inventory & Areas of Worklife Survey (MBI/AWS; Appendix E), Perceived Stress Scale (Appendix F), The Satisfaction of Life Scale (Appendix G), and the Five Facet Mindfulness Questionnaire (Appendix H).

Practice Intervention Tools used by participants during the duration of the study period and between coaching sessions included: *A Mindfulness-Based Stress Reduction Workbook* and CD (Goldstein & Stahl, 2010), HeartMath's EmWave PSR (Personal Stress Reliever) and Heartmath's *Voyage to Heart Intelligence Manifest Workbook* (IHM, 2008). The primary researcher paid for all assessments and educational materials prior to the commencement of the study. Participants were given the assessments at the beginning of the study and then again at the final week of the study. The MBI/AWS was the only assessment which was not re-administered at the end of the study.

**Pre- and post-semistructured interview questions**. Participants had the opportunity of responding to semi-structured interview questions designed by the researcher. The pre-intervention questions (Appendix C) were designed to assess quality of experiences related to workplace stressors, emotional regulation, perception of quality of life, and performance prior to the intervention. The post-intervention questions (Appendix D) were designed to assess if personal changes/shifts occur, and if so, to evaluate and investigate changes and shifts at work that occurred in perception, emotional

regulation, sense of performance, well-being, relationships, and quality of life after the intervention.

**Combined Maslach Burnout Inventory and Areas of Worklife Survey (MBI/AWS).** The MBI has been recognized for more than a decade as the leading measure of burnout (Maslach & Jackson, 1986). It incorporates the extensive research that has been conducted in the more than twenty-five years since its initial publication. The MBI surveys address three general scales: (a) Emotional exhaustion: measures feelings of being emotionally overextended and exhausted by one's work; (b) Depersonalization: measures an unfeeling and impersonal response toward recipients of one' service, care, treatment, or instruction; (c) Personal accomplishment: measures feelings of competence and successful achievement in one's work (Maslach & Jackson, 1984).

The AWS by Maslach and Leiter was created to assess executives' perceptions of qualities of work settings that play a role in determining whether they experience work engagement or burnout. It is a companion piece to the Maslach Burnout Inventory. The AWS is a short questionnaire with demonstrated reliability and validity across a variety of occupational settings. It produces a profile of scores that permit users to identify key areas of strength or weaknesses in their organizational settings. Used with the Maslach Burnout Inventory, the AWS helps organizations to identify the areas to change, with a potential for enhancing engagement with work (Maslach & Leiter, 1997).

**Perceived Stress Scale (PSS).** The PSS is the most widely used psychological instrument for measuring the perception of stress. It is a measure of the degree to which situations in one's life are appraised as stressful. Items were designed to tap how

unpredictable, uncontrollable, and overloaded respondents find their lives. The scale also includes a number of direct queries about current levels of experienced stress. The PSS items are easy to understand, and the response alternatives are simple to grasp. The questions in the PSS ask about feelings and thoughts during the last month. In each case, respondents are asked how often they felt a certain way (Cohen, Kamarck, & Mermelstein, 1994).

**The Satisfaction with Life Scale (SWLS).** The SWLS is a short 5-item instrument designed to measure global cognitive judgments of satisfaction with one's life. The scale usually requires only about one minute of a respondent's time. The questions in the scale focus on how respondents view their life from within a variety of contexts. Among the various components of subjective well-being, the SWLS is narrowly focused to assess global life satisfaction and does not tap related constructs such as positive affect or loneliness. The SWLS is shown to have favorable psychometric properties, including high internal consistency and high temporal reliability. Scores on the SWLS correlate moderately to highly with other measures of subjective well-being, and correlate predictably with specific personality characteristics (Diener, Emmons, Larsen, & Griffin, 1985).

**Five Facet Mindfulness Questionnaire (FFMQ).** This instrument is based on a factor analytic study of five independently developed mindfulness questionnaires. The analysis yielded five factors that appear to represent elements of mindfulness as it is currently conceptualized. The five facets are observing, describing, acting with awareness, nonjudging of inner experience, and nonreactivity to inner experience. The

FFMQ is considered a useful self-reporting assessment to explore facets of mindfulness (Baer et al., 2006).

**Participant Practice Intervention Tools**

**HeartMath's Voyage to Heart Intelligence Manifest (VHIM) Workbook.** Participants in this study were given a copy of the VHIM Workbook (IHM, 2008). This book was used by participants between coaching calls and took the role of coach and an accountability partner between sessions. This focused and practical workbook offers personalized instruction. Through its use, participants could better understand what happens to their body when they are stressed and how reactions to everyday challenges can either rob the life they want or be transformed into healthier, more satisfying, productive energy. This focused and practical workbook combines personalized coaching and a detailed practice plan to help meet participants' personal objectives. All participants were given the same assignments from each book every other week to practice, and reviewed their thoughts, responses, and reflections upon meeting with the primary researcher/coach at the next session.

**A Mindfulness-Based Stress Reduction Workbook.** Each participant received the MBSR workbook by Elisha Goldstein and Bob Stahl (2010). The foreword of this workbook is written by Jon Kabat-Zinn, the creator of the Western practice of MBSR. This workbook is an educational and experiential method that introduced participants to the practice of mindfulness, the cultivation of nonjudgmental awareness in day-to-day life. It provided participants with the simple tools and practices to help bring balance to their lives and reduce negative stress responses, even in the midst of stress.

**Coaching interview notes.** During the coaching interviews, the primary researcher typed conversations verbatim as they occurred during all one-on-one telephone conversations for each participant. The typed notes contain information on responses to surveys and questionnaires, experientials within the practice framework, coaching interactions, and commentary from their between-session assignments.

**EmWave Personal Stress Reliever (PSR).** The EmWave PSR is a portable, easy to use, and convenient tool to help participants bring awareness to their stress levels and the need to balance emotions. EmWave technology collects pulse data through a pulse sensor and translates the information from heart rhythms into easy to follow colored lights on the portable EmWave2 (IHM, 2006). It records low, medium, and high coherence (synchronicity of the autonomic nervous system) feedback represented by the color changes. It is a tool to be used just a few minutes a day and provided the potential to assist the participant to create shifts in feelings of anxiety and frustration into feelings of peaceful ease and clarity. Each participant received one PSR to use daily as a simple biofeedback tool. This device was not be used to measure any physiological changes; however, participants were asked if they noticed a shift in negative feelings and emotions to positive ones, during its use.

## Procedures

1. All six participants signed the informed consent form they received from the primary researcher via email. They either used a digital signature, or signed and scanned the document via email.

2. Upon receipt of all informed consent forms, the primary researcher called each participant to explain the process going forward, clarify expectations, explain the use of all materials to be used, and answer any questions participants might have. This call was approximately forty minutes. This call was not considered a coaching call.

3. The dissemination of materials occurred over the course of one week. Participants were required to complete The Areas of Worklife and Maslach Burnout Inventory online. Upon completion of the online survey, the primary researcher reviewed each participant's results and unlocked results to participants two days before their first coaching call. The results were reviewed with the participant during the first coaching call. Participants were sent a pre-intervention questionnaire, Perceived Stress Scale, the Satisfaction of Life Scale, and the Five Facet Mindfulness Scale, the week prior to the first coaching call via email. Participants completed each survey and returned them within three days of their first coaching call. The results of all surveys/questionnaires were reviewed with participants during their first coaching call.

4. The initial session took place one-on-one with each participant. This initial session was 90 minutes and participants began to identify the barriers, challenges and difficulties in their lives and what they wanted to change with some specificity around creating negative to positive shifts in their work lives on a daily basis. They also had an opportunity to review with the primary researcher, the results from their profile reports, surveys and questionnaire. Participants were introduced to mindfulness practice and had an opportunity of participating experientially in a mindfulness practice during the initial coaching call and every call thereafter.

5. The study took place over an 8-week period using a multiple case study approach to a coaching intervention. This intervention began with one 1.5 hour education/experiential coaching session that included information and education about mindfulness and the process as well as an experiential opportunity. Six 1-hour coaching sessions followed that were facilitated by telephone on a one-on-one basis. The intervention also included a final 90-minute coaching wrap-up session for a total of eight formal coaching calls over an 8-week period. All sessions were conducted by telephone for consistency and included checking in with participants on their previous coaching session homework, new reflections, insights, and skills learned during the current session. The primary researcher reviewed and opened dialogue around practice assignments between sessions. Sessions were typed verbatim and the coaching process allowed for reflection, additional inquiry, and confirming participants' comments made during the session.

6. A few days prior to the last session, participants took the PSS, FFMQ, SWLS again for the purpose of noting changes in baseline and any perception changes or specific shifts since the start of the first call. Participants also completed a post-intervention questionnaire in order to note or identify changes or shifts during the course of the intervention. All participants were provided with a copy of their final profile reports. The MBI/AWS was not re-administered as a post-instrument.

7. A final coaching session was facilitated to review the experiences of each participant during the sessions, and to capture thematic data from each participant which spoke to the purpose of the study and to ascertain if desired changes occurred from negative to positive experiences as they relate to perception shifts and emotional regulation around workplace stressors, sense of well-being and sense of performance on the job, quality of worklife and relationships, and negative workplace stressors. Each participant was given the opportunity to keep, at no cost to them, all of the resource materials (EmWave PSR and both workbooks), if they desired to continue their mindfulness practice, emotional regulation, and stress reduction. Participants also had the opportunity to review and comment on the typed notes of all their sessions for accuracy before these were included in the dissertation.

**Data Analysis**

An interpretive qualitative analysis was the approach used to analyze the data from the dissertation study. To prevent researcher bias, self-reflexivity and self-disclosure about the propositions related to MBSR and its impact on HLEs' perception shifts around emotional regulation, workplace stressors, sense of well-being, sense of performance, and quality of worklife were considered throughout the entire inquiry (Creswell, 2007, p. 219). The primary researcher worked with a research assistant who is a Masters level research analyst at the University of North Carolina. The data were organized and coded as follows:

1. A thematic analysis methodology software (Atlas.ti) was used to assist in the analysis of qualitative data, which was based on the completed coaching session notes.

2. The results from the questionnaires, assessments, and surveys were reported on and analyzed separately by the primary researcher and/or her assistant. The purpose of this methodological approach is to illuminate common themes and concepts that occurred among participant responses within text.

3. This process required entering all interviews into the Hermeneutic Unit (HU) of Atlas.ti and then marking and coding textual themes as they emerged in the data.

4. Themes were then separated out and all relevant textual quotations from the interviews were noted under each coded theme. Quotations were then grouped based on their similarity in meaning.

5. A copy of each coded theme with quotations was then printed to refer to as the written analysis was completed. The use of the Atlas.ti provided this researcher with the ability to look at cross-case participant synthesis. Cross-case synthesis is a technique used in multiple case study analysis that consists of at least two cases (Yin, 2003, p. 133).

6. A meta-matrix system using Microsoft Word, was displayed in multiple tables as codebooks and was used to organize the themes that were identified across all of the qualitative data points from each participant's last session. These tables were used to present results relative to the final sessions for each individual participant and overall cross-case analysis. Again, the last session focused on the outcomes of the full coaching experience and specifically addressed:

   (a) Participant's state as it relates to reduced stress and ability to manage stress, turning the stress response from negative to positive;

   (b) Participant's perception shifts, if any, in quality of worklife, confidence, relationships with peers, and those who report to participant;

   (c) Participant's ability to regulate emotions through heightened awareness in a healthy way;

   (d) Participant's shift if any in sense of perception around competence/ performance at work;

   (e) Shift in perception around quality of worklife and quality of life in general.

**Summary**

This multiple case study followed the written format that contains data and information on individual participant responses and examples as well as cross case-analysis (Yin, 2003, p. 147). This researcher found the benefits of the research to be far in front of any potential risks. The primary researcher's intent was to present personalized descriptive responses from participants that captured the lived experience of mindfulness and the changes and shifts which occurred over the duration of the intervention period. Lived experience by definition seeks to "explore concrete dimensions of meaning" (Toombs, 2001, p. 249). For the purpose of this study, participants were engaged in an

exploration of how their emotions, thoughts, behaviors and actions impacted their experiences before and after the intervention. The focus, within Human Science remains on "experience," because experience in real time and the exploration around it ensures an openness "that is a condition for discovering what can be thought and found to lie beyond it" (van Manen, 1997, p. 35). It is the power to break down barriers and "crack the constraints of conceptualizations, codifications and categorical calculations" (van Manen, 1997, p. 37). Participants to the study spent a significant amount of time considering themselves and their environment within the context of connection one to the other and the meaning those connections provided during and after the mindfulness intervention.

Special attention was paid to prevent researcher bias and to ensure that the primary researcher's assumptions were not projected in any way onto the experiences of participants during the course of the study. The primary researcher followed each ethical guideline which was provided within the informed consent, as the final report was being interpreted. All documents were crosschecked along with the interpretation of typed documents with study participants.

Participants remained anonymous throughout the study period. Questionnaires, surveys, and interviews were kept simple and positive in their design in order to ensure clear understanding of the protocol requirements. During each session, the researcher spent time with each participant checking in on issues around wellbeing, level of uncomfortableness, and the researcher was prepared at all times to refer a participant to a licensed mental health professional if the situation ever arose where participants needed additional intervention or therapy.

# CHAPTER 4: RESULTS

> *Our practice is to meet life exactly as it is and to notice whatever fear, anger, or doubt gets in the way of direct intimate contact with this moment, bringing attention to that as well. Rather than changing something or seeking to get somewhere we imagine we should be, practice is about seeing clearly exactly how things really are and how we relate to them*. (Phillips, 2003, para. 5)

## Results

Noticing without bias is the impetus to connecting authentically with the present moment in order to experience moment-to-moment reality and accept things as they are. This chapter looks at the transition of HLE participants from a place of unfamiliarity with mindfulness practice to a place of heightened awareness, acceptance, and change within a mindfulness coaching framework.

The chapter begins with a description of each of the research participants and the coaching process and continues with a presentation of the analysis relating to the aim of the research and the research questions. The summary of findings section presents the quantitative and qualitative data, associated patterns, and overarching themes across cases which emerged during the intervention. Patterns within the data, for the purpose of this dissertation, speak to "a regular and intelligible form or sequence, discernable in the way in which something happens or is done" ("Pattern," n.d., para. 2). Overarching themes within the data are defined as "particular subjects or issues that are discussed often or repeatedly; a specific and distinctive quality and or characteristic" ("Themes," n.d., para. 2).

Additionally, the MBI and AWS were administered only once at the beginning of the intervention to assess each participant's potential for burnout. The primary researcher felt the administration of the MBI would help identify at the outset areas of stress, burnout, and worklife that proved particularly challenging to each participant so that

participants could openly discuss which of those challenges they wished to address through the intervention. The results are noted within each participant description. The MBI assessed where participants were in the lived experience relating to the following areas:

Exhaustion: measures feelings of being emotionally overextended and exhausted by one's work. It is a depletion of emotional energy and a clear signal of distress in emotionally demanding work.

Cynicism: measures an unfeeling and impersonal response toward recipients of one's service, care treatment, or instruction.

Professional efficacy: measures feelings of competence and successful achievement in one's work. This sense of personal accomplishment emphasizes effectiveness and success in having a beneficial impact on people.

Workload: is the amount of work to be done in a given time. It captures the extent to which work demands spill into personal life, the social pressures, and the physical and intellectual burden of job demands.

Control: is the opportunity to make choices and decisions to solve problems and to contribute to the fulfillment of responsibilities. Control is one's participation in important decisions about their work as well as their range of professional autonomy.

Reward: relates to recognition—financial and social—one receives for contributions on the job. It includes praise, awards, perks, and salary.

Community: is the quality of the social context in which one works, encompassing the relationships with managers, colleagues, subordinates, and service

recipients. People thrive in communities characterized by support, collaboration, and positive feelings.

Fairness: is the extent to which the organization has consistent and equitable rules for everyone, or the quality of justice and respect while at work. It communicates respect for the members of an organization's community.

Values: is what matters to a person in their work. The focus is the consistency between the personal values one brings to the profession and the values inherent in the organization where one works.

Particularly interesting to observe was that the results of participants' MBI were often not in complete alignment with the responses during the mindfulness intervention coaching sessions. This point of interest is explored further in Chapter 5. Finally, a synthesis of the research results is presented.

The aim of the research was:

* To explore the lived experience of participants as it relates to shifts in perceptions, emotional regulation, sense of well-being and general quality of life during and as a result of the mindfulness coaching intervention.
* To describe the aspects of the intervention that held the most meaning to participants.
* To identify any patterns and themes which emerged as challenges or successes over the course of the intervention.
* To examine the effectiveness of the coaching modality used in this intervention to support participants in the change and shift process.

**Research Questions**

1. Does the 8-week mindfulness intervention create a significant shift in perceptions and emotional regulation for high-level executives as it relates to negative workplace stressors (both internal and environmental), interpersonal relationships, general quality of life, and sense of well-being?

2. How do participants describe any shifts in perceptions and/or emotional regulation and what is the impact of the shift(s)?

**Description of the Sample**

For the purpose of the research study, six participants were recruited through emails and announcements via the Chamber of Commerce and word of mouth from for-profit corporations, healthcare systems, and government systems within the Triangle North Carolina area and other Eastern states within the United States.

A total of 82 potential participants responded to the solicitation announcements. After considering each of the potential participant's rationale for participating and examining which participants matched criteria for participation, six participants were selected for participation.

Participant demographics were reasonably diverse relating to gender and included four females and two males, but less diverse when considering ethnicity with only one Black female, but three White females and two White males. Female participants' age ranged from 35 to 63 and male participants' age was 43 to 52. All participants were required to self-identify as HLEs and responsible to supervise more than five employees. Each executive worked in a dynamic environment and as part of their work was responsible for making critical decisions on a regular basis with relative autonomy. Each participant described having experienced some level of negative stress responses on a regular basis, and identified that within their job there existed a potential to experience a low to mid quality of worklife due to the pressures of the job. Participants also indicated emotional regulation to be a challenge in their daily work lives.

Each participant agreed to commit to the full study protocol, understanding the time, practice, and coaching commitment required. All participants were new to regular

mindfulness practice and none of the participants had taken a formal MBSR course. Two participants had limited Yoga experience and attended mediation retreats or workshops, although they could not have attended more than five meditation retreats or workshops over a 5-year period.

All six participants, at the outset, shared the sentiment that they had never previously had a mindfulness or life coach; they were initially a bit guarded and by virtue of their high-level status they did not share much of themselves very easily.

**The Coaching Process**

During the participant informational session, each participant and the primary researcher who served as the coach during this intervention, agreed to create a container of safety and trust between one another. Building trust and safety at the outset was integral to a successful and empowering coaching relationship. Caldwell, Gray, and Wolever (2013) posited: "In these empowering coaching relationships, the coaches convey to the clients confidence in their abilities to make and sustain changes while also conveying a sense of choice in how to do that" (p. 35). The coach expressed to each participant that because they had already committed to the time and work required during the process that the experience should be considered an adventure, an opportunity to explore the tenets and practice of mindful living to see if those resonated with the participant toward a life that could be lived with less negative stress response, a higher quality of life at work, improved general perception, and a greater awareness toward change. The coach was clear with each participant that if there was no change in their lives toward their goals for this intervention that they should not consider that a failing in any sense. Participants were advised that the purpose of lived experience during the

intervention was to provide concrete insights into the qualitative mean of phenomena of their lives (Toombs, 2001). If this did not happen, that did not speak to them doing anything wrong.

Each participant after learning the history, tenets, and research on the physiological, emotional, cognitive, and neurological benefits of mindfulness and practicing mindfulness with their coach, were given a comprehensive review of the materials provided for the intervention including the MBSR workbook, Mindfulness CD, HeartMath workbook, and EmWave PSR technology. Participants were given weekly assignments using any or all of the materials that they felt most comfortable with. In addition to their weekly assignments from the materials (i.e., body scan, mindful eating, mindful breathing), participants were asked to practice both formally and informally three times a day for 5–20 minutes each time. Participants were advised that if they had questions or needed additional support during their weekly practice they could call their coach or email her. Participants were asked at the beginning of the intervention if they would like each of their sessions to begin with a guided mindfulness practice. Four said "yes" and three said "no." All participants agreed to do their best to stick to the practice requirements of the intervention.

Participants were also advised that there would be no judging by the coach regarding participant experiences. The primary researcher/coach also advised participants that if they for whatever reasons were unable to practice for the agreed minimum period of time on a given day or week that they should advise their coach, and would not be judged; rather that information would be used to explore possible barriers that kept the participant from reaching their goals and would in fact provide an opportunity for the

participant to manage their obstacles in a way that would allow them the time they needed for practice in the future.

Each 1-hour coaching sessions served as an opportunity for participants to talk about the struggles during their week, to share any experiences of perception shifts, heightened awareness, enhanced experiences of wellbeing, performance, and interpersonal relationships during their daily practice and/or homework time. The coach provided a recap and facilitation of the previous week's mindfulness weekly assignments. Participants were also asked to notice if any shifts or changes extended beyond a few hours after practice.

The coaching sessions also provided the participant opportunity to ask the coach questions about his/her practice and seek suggestions to improve the practice. If participants felt they needed additional support or information regarding their experiences of practice, the coach provided the needed support. While there were homework assignments for participants, each coaching session was customized depending on the issues, challenges, or questions shared by the participant during the week.

**Participant Descriptions**

**Participant MI01.** Participant MI01 is a White, middle-age, male executive, age 52, who is in superior physical condition and looks to regular strenuous exercise to help him relieve stress. He shared that he is gay and that he is very happy with his sexual orientation and does not feel any pressure on the job related to being open about his sexuality. He resides in North Carolina and has had no prior experience with mindfulness practice. He heads up a nationally recognized high-end for profit hospitality/catering organization, hiring and managing over 100 employees, and is responsible for the

direction and change strategies that the organization implements. He is highly skilled coming to this position with over 20 years experience in the industry. He is creative and feels very fortunate to direct this organization.

MI01 shared that he is oriented toward perfectionism which causes him "to try and do everything perfectly." While he has a good relationship with his staff, he finds that "this tendency sometimes gets in the way of his ability to communicate effectively." He also shared that he has been in recovery from drug addiction for over 10 years and has since that time been a member of the "12-step community," which really helps ground him. His organization by definition is dynamic in nature with times that are static. His position carries with it a potential for unexpected and unanticipated occurrences throughout the work week. While he loves his job and feels that he is very good with what he does, he has stated that there are times that "emotions and feelings as well as self-judgment interferes with my ability to feel at peace, a sense of wellbeing and accomplishment." He indicated that these "are not new feelings or emotions, but have been a part of my life for many years even while in the throes of addiction."

During the pre-interview process to see if MI01 would be a good candidate for this study given the relatively strict criteria in place, he was asked why he wanted to participate in this study. His response was as follows:

> While I have no personal experience with mindfulness, I have read about it in various magazines. This mindfulness coaching opportunity appealed to me because I want to be able to manage emotions and feelings as well as the self-judgments that I contend with on a regular basis in the workplace and that impact the quality of my life overall. These emotions and feelings make stressful moments much more stressful. I need to be able to shift my perceptions and that by learning to shift how I see things when I'm unhappy with my conditions, that I will better be able to stop blaming myself and not get as anxious over communication issues or my sense of personal and organizational accomplishment. The truth is, I know deep inside I'm a really good boss; the

> outcomes and deliverables that I am responsible for producing with my team are stellar. I know that I run my organization well; however, it is the little monster on my shoulder that constantly wants to disregard my successes and rather focus on anything negative. It gets tiring and I don't really talk about my weaknesses with others. Having someone coach me through this process is very appealing to me.

**MI01 Results: Maslach Burnout Inventory and Areas of Worklife Survey Results.** MI01's result of the MBI indicated that he experienced Exhaustion once a month or less, receiving a rating of 2 out of 6 (6 being exhaustion on a daily basis). He felt that he was not engaged in Cynicism on any level, thereby receiving a rating of "0" out of "6." He indicated that on a scale of 1 to 6 his Professional Efficacy was a 5.7. When assessing his areas of Workload via the survey, he received a rating of 3.8 out of a possible 5 (5 being overwhelming). Control on the job was rated a 4.5 out of 5 (5 being complete control). With regard to Reward, he scored a 4 out of 5 (5 being the greatest system of reward). Community in the workplace he scored a 3.4 out of 5 (5 being the greatest sense of community). With regard to Fairness, he received a rating of 4.7 out of 5 (5 representing the most equitable workplace rules). Finally, with regard to Values, he received a rating of 4.5 out of 5 (5 representing the highest consistency between the values one brings to work and the values inherent in the organization).

**Participant MI02.** Participant MI02 is a 35-year-old Black female executive, who resides in New Jersey. She has not taken a mindfulness course nor has she ever had a formal mindfulness practice. She is the owner and founder of a nationally recognized staffing organization and has received national acclaim for her business savvy and accomplishments at such a young age. She feels she is motivated by a desire to be successful despite any difficulties she may encounter and prides herself on thinking

outside the box. She shared that although never diagnosed, she believes she has ADHD and, as a result, "never turns off."

MI02 has been a part of the corporate world for over 15 years and her company is 10 years old. She has been featured in several national magazines for her accomplishments in business. Her company is a multi-million dollar business and a highly fluid organization. She described her organization as "dynamic in nature and is never dull or boring. The pot is always being stirred and it is my job to keep up with all the changes and challenges of the business." In addition to her business accomplishments, she has a Ph.D. and is Dean of the School of Business at a nationally renowned university. She is also in the middle of a very stressful divorce and has a minor child.

When MI02 was asked why she wanted to be a part of this study she responded:

> I consider myself highly motivated, and while I love the work and the challenges of what I do, I often feel that I succumb to stress and negative feelings toward myself and often do not take care of myself the way I know that I should.

She shares that,

> being a high-level executive and a woman, I have been conditioned to succeed by ignoring my own personal needs. My orientation is to take care of everyone and everything. I am sometimes short with my staff, and don't often take time to smell the roses as I know I should. I need to be able to shift to a place of self-care more often than I do, so I can be in a place to appreciate my staff and clients and take the time to listen to them fully without thinking about what I'd like to say while they are talking. I need to relieve myself of frustration on the job and not worry about things I cannot control. My sense of wellbeing is impacted by my inability to not be present in the moment more often. Not being able to change my perceptions will make me old faster. This mindfulness coaching opportunity, I believe, will help me do this in a way that is confidential and supportive. I am committed to sticking to it, and when I commit to something I stick to it.

**MI02 Results: Maslach Burnout Inventory and Areas of Worklife Survey Results.** MI02's result of the MBI indicated that she experienced Exhaustion a few times month, receiving a rating of 3.3 out of 6 (6 being exhaustion on a daily basis). In

assessing the level of Cynicism, she received a rating of 2.4 out of 6 (6 being significant feelings of depersonalization). She indicated that on a scale of 1 to 6 her Professional Efficacy was a 5.8. When assessing her areas of Workload via the survey, she received a rating of 3 out of a possible 5 (5 being overwhelming). Control on the job was rated a 4 out of 5 (5 being complete control). With regard to Reward, she received a rating of 4 out of 5 (5 being the great system of reward). Community in the workplace she scored a 4.4 out of 5 (5 being the greatest sense of community). With regard to Fairness, she received a rating of 4.3 out of 5 (5 representing the most equitable workplace rules). Finally, with regard to Values, she received a rating of 3.8 out of 5 (5 representing the highest consistency between the values one brings to work and the values inherent in the organization).

**Participant MI03.** Participant MI03 is a 63-year-old professionally successful White female who has excelled in her area of expertise as the first woman Superior Court Judge in her state. She has served in government (judicial branch) for over 35 years. She is nationally renowned for assisting in the creation and implementation of Drug Courts across the country. While she has taken some Yoga courses over the years and done some meditation on an infrequent basis, she was unfamiliar with the specific concept of mindfulness practice.

Participant MI03 has experienced major professional achievements in her life as a female judicial trailblazer. She has also experienced significant amounts of stress and disappointment in her career which she attributes to “attempting to navigate in an environment that is primarily male and conservative.” She is now in the beginning phases of managing a very large project for the court system which, although creating a high

level of excitement for her, is also concerning considering the roadblocks resulting in significant stress she is sure to encounter. She wants to keep positive about this project but is concerned about expected challenges. Her desire is to be able to manage the diversity of thinking and partnerships with ease and not be given to periods of negative rumination and worry, which can overwhelm her whenever she is unable to shift her thinking to a more positive orientation.

She stated:

> My professional life has been incredibly busy and wrought with challenges that could at times be overwhelming. For me, I need to engage in a process that will help me see things more positively, and that will assist me to spend more time being aware of the present moment and awake to what is happening inside and around me. I need to connect with myself in that way and that is something that I do not do regularly. While I have a good life, there are places in my life where I need to learn to be aware, be present, stop, slow down, shift gears, notice, and find the flower within the thorns. I suspect that shifting my perception might happen when I can begin to get momentary glimpses of how things actually are without judging myself, while reducing my personal fear.

MI03 described her feelings on having a coach to help her as follows:

> Having a coach to work with me to become more mindful and less self-accusatory, paying attention to what is happening in the moment, I suspect will make a tremendous difference in my quality of life and commitment to self-care and in my relationships on the job with others. What I like about having a coach is that it will present a certain level of accountability that I will need to keep me on track and help move me forward toward the goals I've set for this process. I am committed to sticking to this process.

**MI03 Results: Maslach Burnout Inventory and Areas of Worklife Survey Results**. MI03's result of the Maslach Survey indicated that she experienced Exhaustion a few times a month, receiving a rating of 3.6 out of 6 (6 being exhaustion on a daily basis). She received a rating of 2.4 relative to Cynicism (6 being significant feelings of depersonalization). She indicated that on a scale of 1 to 6 her Professional Efficacy was a 5.3. When assessing her areas of Workload via the survey, she received a rating of 3.5 out

of a possible 5 (5 being overwhelming). Control on the job was rated a 3.5 out of 5 (5 being complete control). With regard to Reward, she received a rating of 3 out of 5 (5 being the great system of reward). Community in the workplace she scored a 3.4 out of 5 (5 being the greatest sense of community). With regard to Fairness, she received a rating of 1.7 out of 5 (5 representing the most equitable workplace rules). Finally, with regard to Values, she received a rating of 2.3 out of 5 (5 representing the highest consistency between the values one brings to work and the values inherent in the organization).

**Participant MI04.** MI04 is a 58-year-old, White, female executive, who is both the CEO of a burgeoning organizational healthcare consulting firm and an Associate Director of an international health organization. She is a MRN and has been a registered nurse for over 25 years transitioning from direct service care to administration. She is a Ph.D. student as well as a retired veteran.

MI04 described her life as getting busier as she gets older. Her work environment is highly dynamic and requires that she is constantly creating protocols, changing strategies, working with diverse populations, managing teams, and working with challenging people. She is familiar with meditation and has taken Yoga classes; however, she has not practiced mindfulness on a regular basis. Life for her does not seem to allow an opportunity to slow down and "collect herself." She is constantly on the move with very little time to just calm herself and ready herself for the next day's challenges. She often finds communicating with challenging people exceedingly difficult. When asked why she wanted to participate in the intervention she stated:

> I have many challenges and although I enjoy my job, I have stressors that cause rumination and worry. I am responsible for program development, employee management, and travel quite a bit. In essence, I am required to problem-solve, make people happy, and try and maintain a sense of accomplishment. Sometimes,

> communication with superiors can be challenging. Our styles of working are different. I also tend to beat myself up when things don't go the way I'd hope or I don't get the outcomes I'd like. My challenges are primarily that I just have so much to do and feel I don't have enough time to do it in. I also often have to make complex decisions relatively quickly and often experience a sense of ambivalence about what I should do. I travel a lot in my job. I often ruminate about how to and what to do next, and I often feel negative stress around both work concerns and concerns at home where I am a caretaker for an aging and ill mother. There are moments of overwhelm and I feel like I just need to stop. I am familiar with meditation but am not consistent in any type of practice and have found it difficult to begin.
>
> I need to learn more about mindfulness practice and develop a consistent practice where I can just let go and experience being with myself, which I don't do often nor do I do it well. I need to transform the way I see stress as always negative, and I need to be able to focus on the hopefulness of a situation and learn how to just let things be and go as I need to. It is difficult. I'm looking forward to finding ways to live each moment optimally and not let my daily life experiences at work or at home get in the way of my wellbeing.

For MI04, the need to stop and develop an authentic relationship with herself to better be able to function on the job was key in order to shift perceptions and improve her workplace relationships.

**MI04 Results: Maslach Burnout Inventory and Areas of Worklife Survey Results.** MI04's result of the MBI indicated that she experienced Exhaustion once a month or less, receiving a rating of 2 out of 6 (6 being exhaustion on a daily basis). She received a Cynicism rating of 0.4 (6 being significant feelings of depersonalization). She indicated that on a scale of 1 to 6 her Professional Efficacy was a 5.7. When assessing her areas of Workload via the survey, she received a rating of 3.5 out of a possible 5 (5 being overwhelming). Control on the job was rated a 4.5 out of 5 (5 being complete control). With regard to Reward, she received a rating of 4 out of 5 (5 being the greatest system of reward). Community in the workplace received a rating of 4 out of 5 (5 being the greatest sense of community). With regard to Fairness, she received a rating of 3.2 out of 5 (5 representing the most equitable workplace rules). Finally, with regard to Values, she

received a rating of 4 out of 5 (5 representing the highest consistency between the values one brings to work and the values inherent in the organization).

**Participant MI05**. MI05 is a 54-year-old, White, female HLE, who has worked in the healthcare environment for over 20 years. She is responsible for major innovative statewide initiatives within the healthcare system for which she works. Her work environment is dynamic in nature and she is always on the go. She described her stress level as being "through" the roof. In addition to managing 14 employees, she is responsible to interact with division staff in other parts of the healthcare system. She described her environment as "never still," and finds herself working far more hours a week than she considers healthy. When asked why she wanted to participate in this intervention, she responded as follows:

> I am responsible for overseeing multiple major statewide health initiatives through my organization. Not only do I have to manage in a highly dynamic environment, but I also have to deal with employees who are required to work within an environment that really requires their ability to do multiple things at one time. I put in far more hours than I am paid to, and often find myself working Monday through Sunday under stress. I really need to find and develop some skills and techniques where I can make time to just "be." I have an exceedingly difficult boss, who I am constantly at odds with. His behavior is so irrational that I do not know from one moment to the next what irrational demand he will make upon my time or work. My relationship with him is one of complete stress. I am hoping this mindfulness intervention will help me reduce my stress and learn to see a way clear within my current circumstances. I like the idea of being able to shift from a negative way of looking at things to a more positive one. I desperately need to do that. I also need to be able to experience a renewed sense of wellbeing. My thoughts of ruminating about whether I am good enough, if I am serving my staff in the way they need, are always present. I'd like them not to be.
>
> I don't often have a chance to talk in detail about the difficulties of my work environment and that is quite stressful for me as well as I am holding all of this inside. I need a release as this is not a healthy environment for me to function in.

MI05 was in crisis mode and really felt that the timing of this intervention would either serve her well, or not serve her at all if she was too stressed to experience what it

might hold for her. She described an enormous amount of anxiety attempting to decide whether or not she should participate. She explained that her dire need for some type of stress reduction intervention helped push her toward participating.

**MI05 Results: Maslach Burnout Inventory and Areas of Worklife Survey Results.** MI05's result of the MBI indicated that she experienced Exhaustion a few times a week, receiving a rating of 5 out of 6 (6 being exhaustion on a daily basis). She received a score of 3 out of 6 with regard to Cynicism (6 representing significant feelings of depersonalization). She indicated that on a scale of 1 to 6 her Professional Efficacy was a 2.8. When assessing her areas of Workload via the survey, she received a rating of 5 out of a possible 5 (5 being overwhelming). Control on the job was rated a 3 out of 5 (5 being complete control). With regard to Reward, she received a rating of 3 out of 5 (5 being the greatest system of reward). Community in the workplace she rated a 3.6 out of 5 (5 being the greatest sense of community). With regard to Fairness, she received a rating of 2 out of 5 (5 representing the most equitable workplace rules). Finally, with regard to Values, she received a rating of 3.3 out of 5 (5 representing the highest consistency between the values one brings to work and the values inherent in the organization).

**Participant MI06.** MI06 is a 43-year-old, White male. He is an HLE in a major international coffee company which is growing exponentially. He has been with the company for over 15 years and has moved up through the ranks to the position of company Senior Vice President. He described his worklife as "solid" and "good," and he is excited about the changes and challenges currently taking place in his worklife. When asked why he wanted to participate in this study he indicated that while he is a good

supervisor for the many employees he supervises, he needs to make some emotional and cognitive changes to better enjoy what he has been given in life.

He further stated,

> There are times when communication problems causes me distress and I get very upset when people are unhappy with me. These feelings and issues can make life on the job very difficult for me, causing me to question competence, performance, and abilities and seeming to put a wedge between me and those I am trying to communicate effectively with. When this happens, life at work can be very stressful and uncomfortable. I want to capitalize through this intervention on what is working well in a way that causes me to experience my life in the moment and not continually think about whether people approve of me or how I need to prepare to speak to folks. I want to be able to tune in to a mindful practice in order to experience my life in the moment and consistently experience a life that I am living more fully on a day-to-day basis. This change I believe will cause me to be better able to deal with the stressors that are a part of this dynamic environment.

MI06 is a recovering addict of over 15 years and is an active member of a "12-step program." He found that much of his desire to do well and please others can be a substantial barrier to a consistent sense of wellbeing.

**MI06 Results: Maslach Burnout Inventory and Areas of Worklife Survey Results.** MI06's result of the Maslach Survey indicated that he experienced Exhaustion once a month or less, receiving a rating of 2 out of 6 (6 being exhaustion on a daily basis). He received a Cynicism rating of 0.6 (6 being significant feelings of depersonalization). He indicated that on a scale of 1 to 6 his Professional Efficacy was a 5.2. When assessing his areas of Workload via the survey, he received a rating of 3.8 out of a possible 5 (5 being overwhelming). Control on the job was rated a 4.8 out of 5 (5 being complete control). With regard to Reward, he scored a 3.8 out of 5 (5 being the great system of reward). Community in the workplace he scored a 3 out of 5 (5 being the greatest sense of community). With regard to Fairness, he received a rating of 4 out of 5 (5 representing the most equitable workplace rules). Finally, with regard to Values, he

received a rating of 4.3 out of 5 (5 representing the highest consistency between the values one brings to work and the values inherent in the organization).

Participants entered the process with no experience in mindfulness practice but with a desire that whatever the experience held for them would be of benefit in order to improve their areas of worklife difficulty, particularly relating to improving their stress and regulation response as well as how they perceived their sense of wellbeing and interpersonal relationships. All participants described a need for improvement or change in these areas. The next section is a review of the research questions and the responses of participants that contribute to answer those questions.

**Research Questions**

1. Does the 8-week mindfulness intervention create a significant shift in perceptions and emotional regulation for high-level executives as it relates to negative workplace stressors (both internal and environmental), interpersonal relationships, general quality of life, and sense of well-being?
2. How do participants describe any shifts in perceptions and/or emotional regulation and what is the impact of the shift(s)?

This section provides a presentation of participants' responses that explore their lived experiences within the areas of the research questions as well as the aim of this research. The formal coaching intervention included one 90-minute educational/ experiential session and seven coaching sessions. Participants' responses are taken sequentially from the beginning of the intervention to the end; session numbers are not noted. Numerous direct quotes from each participant will be listed in relation to research questions and within the context of the aim of the research. Similar data were grouped together and clusters of meaning were identified.

Additionally, there is also an overlapping of patterns which emerged regarding participant experiences. One such example is the participants' experience of both

"awareness" and "being present," the both seem to overlap as patterns in participants' examples. Additionally, the patterns of "awareness" and "nonjudgment" seem to overlap in participants' responses.

**Lived experiences as they relate to shifts in perceptions, emotional regulation, sense of well-being, and general quality of life.** Several patterns emerged for participants as they began the intervention which laid the foundation for their desire to experience change. During the beginning sessions, all participants, in talking about their negative stressors, expressed the need to reduce stress in their lives, and discussed their desire to be able to manage how they perceive their stress while also changing how they respond to these stressors through mindfulness practice. The end goal for all participants was the need to experience an enhanced sense of wellbeing, including improving their relationships with others. Identified patterns and participant responses are noted as follows:

> MI01:"With this mindfulness coaching opportunity I am hoping to really get more in touch with myself and experiencing a respite from all the internal and external activity that causes me dread, anxiety, and stress in the workplace. While I'm good at managing problems, I need to be able to connect more to my core as I make decisions, and not make decisions out of fear or defensiveness. I want to experience what it feels like just to "be." I really don't have a lot of experience with meditation and no experience with mindfulness meditation. I'm not good at just being or being still; I'm never still, it's as if something inside of me keeps me moving, maybe that is why I'm so successful as an executive, because I'm never still. So, while I know about mindfulness practice, I've never done it because I didn't think I could be successful with slowing down and paying attention to me and my surroundings. That is not a normal state of being for me. Going, going, self-judgments, movement is how I normally function in the world. I think this is the right time for me to be coached to do this. With the personal assistance I think I can do this and make the change, shifting from negative to positive."

> MI01: "As an executive, I am being coached as a participant in this coaching intervention because I want to really optimize the good in my life and get better at how I manage the stressors in my worklife and just give up all the stuff I hold and blame myself for."

MI02: “It’s been a very hectic week. One of my clients owes me $67,000. That client is the city of….This is a very stressful situation. The loss would be devastating to my business. The resistance to payment caused me great stress today. The amount of duties, activities I am juggling between my two major professions and family is significant.”

MI02: “My hope is that with learning how to practice mindfulness that I will begin to see the stressors more as challenges and less as negative stressors. I guess this has to do with a change in perception and I’m really hoping to have that experience.”

MI03: “My professional life has been incredibly busy, and wrought with challenges that could at times be overwhelming. For me, I need to engage in a process that will help me see things more positively, that will assist me to spend more time being aware of the present moment and awake to what is happening inside and around me. I suspect that shifting my perception might happen when I can see things as they truly are instead of how I want them to be or how they are based on my subjective lens.”

MI03: “I am not familiar with the practice of mindfulness, although I have meditated a few times in my life; it is something I am not familiar with. There is a strong sense that despite my busyness, I can really use this practice in my life. I am in my 60s now and have held major positions of authority with high stress, and I have managed people for over the past 40 years. While I think I have a good life, there are places in my life that are still highly stressful and where I need to learn to be aware, be present, stop, slow down, shift gears, notice, and find the flower within the thorns.”

MI04: “Life is quite hectic, not only am I a MRN who is the CEO of a new consulting agency, I am the Associate Director of a World Health Organization which is building momentum. I am also in a Ph.D. program. I have many challenges and, although I enjoy my job, I have stressors that cause rumination and worry. I am responsible for program development, employee management, and travel quite a bit. In essence I am required to problem-solve, make people happy and try and maintain a sense of accomplishment. Sometimes communication with superiors can be challenging. Our styles of working are different and this causes me worry and stress.”

MI04: “My challenges are primarily that I just have so much to do and feel I don’t have enough time to do it in. I also often have to make complex decisions relatively quickly and often experience a sense of ambivalence about what I should do. I travel a lot in my job. I often ruminate about how to and what to do next, and I often feel negative stress around both work concerns and concerns at home where I am a caretaker for an aging and ill mother. There are moments of overwhelm and I feel like I just need to stop. I am familiar with meditation practice, but have not sustained a practice. I need to develop a consistent practice where I can just let go and experience being with myself, which I don’t do often

nor do I do it well. I need to transform the way I see stress (as always negative), and I need to be able to focus on the hopefulness of a situation and learn how to just let things be and go as I need to. It's difficult. I'm looking forward to finding ways to live each moment optimally and not let my daily life experiences at work or at home get in the way of my wellbeing."

MI05: "As an executive, I am responsible for overseeing multiple major statewide health initiatives through my organization. Not only do I have to manage in a highly dynamic environment but I also have to deal with employees who are charged with working within an environment that really requires their ability to do multiple things at one time. I put in far more hours than I am paid to, and often find myself working Monday through Sunday under stress. I really need to find and develop some skills and techniques where I can make time to just "be." I am hoping this mindfulness intervention will help me reduce my stress and learn to see a way clear within my current circumstances, I like the idea of being able to shift from a negative way of looking at things to a more positive one. I desperately need to do that. I also need to be able to experience a renewed sense of wellbeing. My thoughts of ruminating about whether I am good enough, if I am serving my staff in the way they need, are always present. I'd like them not to be."

MI05: "I have a boss that is really problematic right now, a boss who is mentally ill. It's a very dysfunctional environment. How much does this job matter in the grand scheme of things I've been thinking about that because I'm a senior director with an enormous responsibility within my division. My stress level is through the roof, I don't have time to even think about myself on the job because of the stress I am under."

MI06: "I have a very high position within my company as senior Vice President. Life is relatively good, as I have worked hard to attain this position. While I do get along well with others, I get very upset if someone is unhappy with me. For me that is where the stress comes in. I supervise many people and sometimes communication issues on the job in terms of future goals create friction between myself and those that work for me and even those I report to. I really want to find a way to de-stress around how I communicate and rather capitalize on what is working well so that I can enjoy more moments in a way that causes me to experience my life in the moment. I also want to not worry so much about what people think about me. I want to perfect my experiences so that I am living more fully in the moment on a day-to-day basis so that I am better able to deal with the stressors that are a part of this dynamic environment."

MI06: "I really have a desire to stop being so perfect, to allow myself to just sit with myself, to settle with myself, to trust myself more, to honor myself and my decisions more. Not being able to do that increases my stress level and my self-criticism. I need to be able to be good with things not going well sometime. I have so much to be grateful for. I enjoy my job, it is a job of enormous responsibility but I enjoy what I do and I think my biggest issue is trying to make sure

> everything is perfect. That everyone likes me. What I need to let go of is the fact that not everyone will like me all the time, that communication won't always be perfect and that I will not always be perfect and my environment will not always be perfect. I have to learn to accept this and be okay with this. That is where my stress lies and therein the challenge."

**Self-reflection and nonjudging.** As the intervention continued and participants became consistent with their daily practice, another pattern which seemed to emerge was that participants seemed to become more thoughtful as it related to "seeing" self and circumstances more clearly. A key factor for participants was the desire to see themselves and external conditions as they really are, not as they imagine them to be, and judging themselves less.

According to Dr. Maya McNeilly, faculty for the Duke Integrative Health MBSR program, "By training ourselves to tap into the mindfulness that is inherent within each of us, we have the ability to transform our harmful cause-effect reactivity chains into skillful ways of responding" (Duke Integrative Health Manual, 2014, p. 95; see Figure 1).

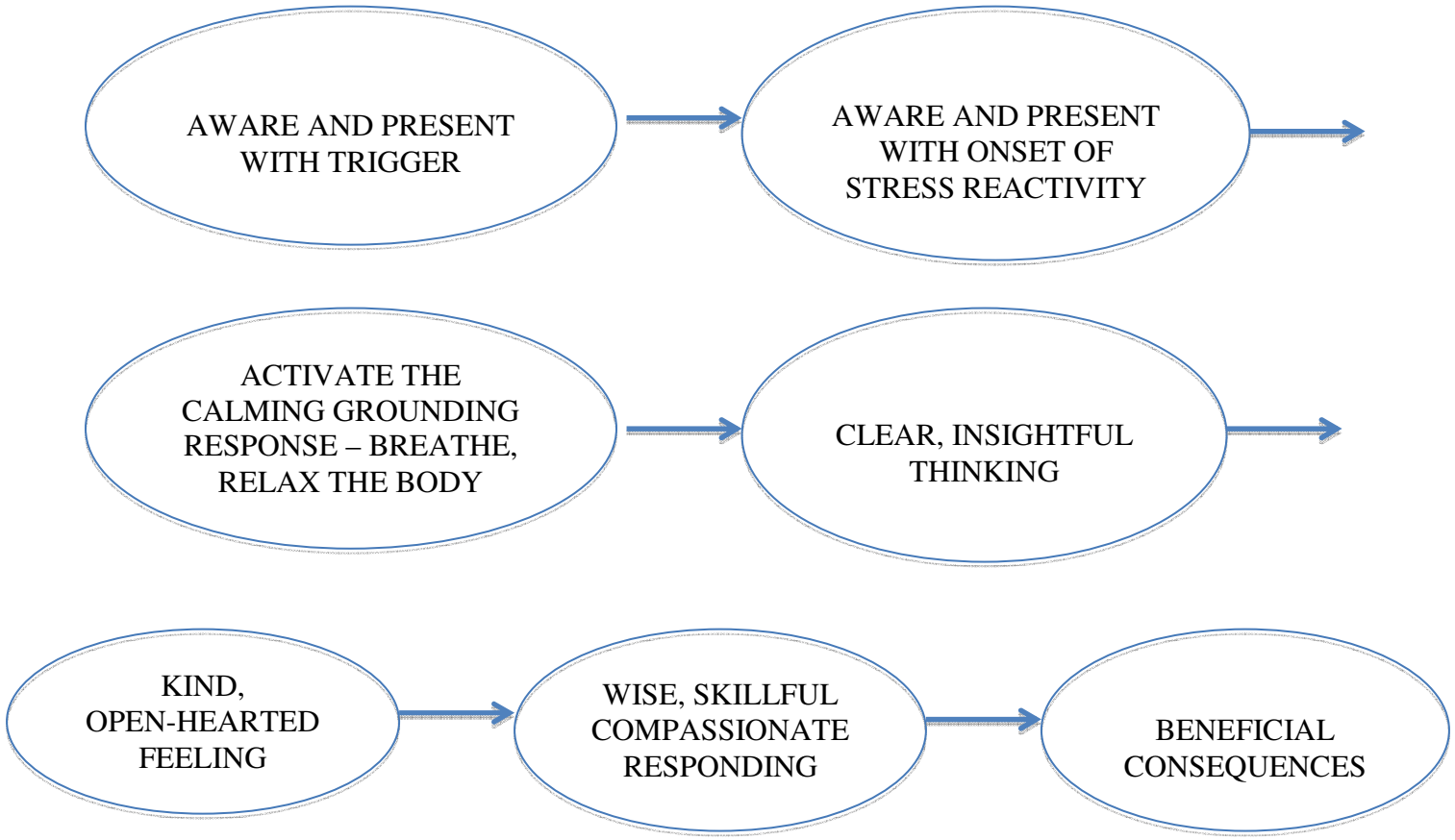


*Figure 1.* Response chain. From "Response chain" by M. McNally. In "Mindfulness Based Stress Reduction (MSBR) Foundation Program Course Manual" (p. 97), by Duke Integrative Medicine, 2014. Adapted from *Full Catastrophe Living* (p. 266), by Jon Kabat-Zinn, 1990. New York, NY: Dellacourt.

Participants began to share in their coaching sessions that as they practiced consistently, they began to become less judging of self and more aware of both internal and external states of being.

> MI01: "Wow, I was pleasantly surprised this week; I am becoming more aware of my internal state without too much judging when I practice…because, as you said, I did not focus on judging my thoughts or deciphering whether they were right or wrong, I was able to be kind to myself. I did have thoughts about what I needed to do for the rest of the day but because I didn't make them come to me, I was able not to be too judgmental, although I did have a few moments of telling myself that I'm not supposed to be thinking of anything. Guess I better be mindful of the judging and the criticism. I really enjoyed the practice because I felt really even keeled afterward and peaceful. I was anxious as you began to lead it, but after about 30 seconds I felt calmer, this is new for me so I'm sure I'll have some success and failures….Oh wait I'm judging myself again. I'm just really excited that I'm doing this and am hoping for success with my emotions, judging myself, shifting from a dark or stressed place to a more positive one, improving how I communicate with those I work with, and really starting to be the best I can be."

> MI01: "I am finding that after I practice mindfulness I am better able to notice others, to hear them better, to be present for them better. I am learning that as I accept myself without judgment or assumption, I am better able to accept others on the job and appreciate their value here in the workplace. I am constantly questioning myself however, if the shifts are occurring due to the practice or am I simply making them happen subconsciously. Either way, it's a good thing and I'm inclined to believe it is the constant practice of mindfulness because I did not have these experiences prior to this intervention."

> MI02: "I realize that this mindfulness exercise made me feel good, and that I sometimes do this subconsciously as it relates to noticing conditions around me. For example, I was not having a great traveling day last week as I have to drive hours to get to my university. I was ruminating about the ride when all of a sudden I noticed the sunset…I was able to witness the sunset and its beauty and I felt so much better. I didn't realize this is what being in the moment really is, but it was and it made me feel good."

> MI02: "Despite the craziness of my week and how much my husband hurt me, I made a promise when I signed on for this study to myself that I would do this practice daily. No matter what is happening I do the mindfulness practice and am able to go into that place of stillness and calm, nonjudgment, and during the process I seem to be able to just allow my thoughts to come and not judge them or how I'm feeling. I can feel the shift during and after, and the rumination stops. And it really does help me long after the fact. And I can come back down to a good place, it shifts where I am (a place of difficulty) to a place of expansiveness

and hope. Both at work with its craziness and at home with this divorce situation. The practice is proving a very important part of my daily life."

MI03: "I am allowing my thoughts to flow with ease in my crazy monkey mind. I am trying to relax, observe, and allow. I am seeing all of the allowing as it is actually happening and I'm judging less. You say that the only bad meditation is the one I don't do. I am coming to a place of belief around that. I am seeing the world in new ways and discovering my innate capacity to really practice. Rather than an actual shift, I am noticing an expansion of my ability to see things in a more positive light. I am noticing everything more without judgment, but rather in a more observing and appreciative way, even the difficult things."

MI03: "This week was more difficult than I expected getting back in synch. Maybe because I was sick and needed to catch up at work after a trip. Felt anxious and just did not make time for mindfulness practice. After three days at home with almost no mindfulness practice, suddenly, I was ready to restart. It was like I was dying of thirst and I drank and drank and drank. I played my favorite meditation tape and played it 3 times in a row before 5:30 in the A.M. All day, phrases from the tape came back to me. All day, I thought about what the phrases meant to me: thank yourself for taking time away from busyness to practice mindfulness—thank yourself, taking time away from busyness, mindfulness. All day, I marveled that our bodies breathe naturally. They breathe for us. All day, I felt like I had just come home whenever I practiced mindfulness. You have said continually that being kind to ourselves is difficult but necessary, that it brings a sense of freedom. I feel that now and now I get it."

MI04: "As I've said previously, I am familiar with meditation and mindfulness, and practiced occasionally, but I am not a regimented or regular practitioner. Since this intervention began…I can see that the biggest benefit so far for me is that I am able to better build awareness around what I am feeling and thinking. That is also the difficult thing for me as I try to practice mindfulness regularly. I am my own biggest critic and when the mind chatter tells me I shouldn't be thinking about this or that or I shouldn't be making judgments about this or that, I go along with it, instead of stopping it. The compassion part and the nonjudging part are the real challenges for me. For example, one of the assignments you gave me was to listen to a few sections on a meditation CD. One of the exercises I did not like, I did not like the sound of the person's voice, how he spoke and I began to feel irritated, I kept telling myself that I should not be feeling that way and the more I admonished myself, the more difficult it was to be mindful. I did notice that when I use my breath as an anchor it does help to stop the mind chatter. Again, I can see a difference in self-awareness. I need to work on compassion and judging myself less and that is happening."

MI05: "I tend to blame myself so I tried to remember your telling me there is no wrong way to practice and when the thoughts come just accept whatever comes and don't blame or judge, rather treat myself with loving kindness and I will eventually learn to trust my judgment. It felt good not to blame myself during the

> practice and during the day. There was a certain freedom associated with not trying to change anything during the practice, that anything I did was not wrong, rather normative and to be expected. Not judging myself and ruminating is quite challenging, but I felt that I was better able to really witness my own experience with a sense of acceptance. I found I was calmer with my employees this week at work. I can't qualify it but I'm sure it has something to do with the practice."
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> MI05: "I must say that my mindfulness practice this week has been very helpful. It seems that I am moving toward it during the particularly difficult moments. While I practice yoga and I've meditated before, it's been infrequent and not regular. I have never practiced mindfulness before and in practicing this week I was able to really pay attention to my body and recognized where I am holding my stress. I was calmer after a session and more mindful that it is my boss's attitude and pathology that is problematic and that I shouldn't take what he does and says personally. It's hard stuff to deal with at work but it seems to be easier after the mindfulness session."
>
> MI06: "What I noticed about the practice is that I am able to feel where my body is, where my mind is at and I am learning not to judge myself, but rather send kind thoughts to myself. I am also learning not to change my breath but to just notice it and notice everything. I like the feeling because when you are noticing things you are not trying to change things which is not normative to me. I try to change and fix things, that is, my job as a high-level executive. So this is good for me. I'm looking forward at getting better in all aspects of my life during this coaching intervention. I have things I need to work on that can improve my relationships with myself and others and I want to do that."
>
> MI06: "I am also struck by how the ability to slow down and just notice is somewhat alien to me. We move through time so quickly and I rarely take the time to slow down and just notice. As I've said, I've meditated in the past but never in this way. Taking the time to notice, not judge, accept and be kind to self is a new way of being and I can see that the investment of practicing mindfulness is really paying off with my sense of esteem in that I feel okay at the times I am most vulnerable."

**Being present/awareness.** As participants became more comfortable with their practice and the safe space the coaching partnership had created, they began to describe their desire and ability to be more present for themselves within their daily lives. The desire to find the time to practice became important to each participant in the midst of their busy lives.

> MI01: "This was an extremely busy week, one in which I could have excused myself from practicing because I was so busy. However, deep within I knew there

was no excuse. I had a mindfulness practice in a deli. Believe it or not it felt absolutely appropriate to do it there. I was present there and in the moment. I also had a 10 minute mindfulness session at my desk. It was a formal session. I simply closed the door and practiced. I also find I am practicing a lot of informal mindfulness as well. I am realizing this is not mystical or rocket science, it is really about being there for myself so I can be there for others. It really is about self-care."

MI01: "I am finding that my hearing is becoming more tuned into sounds even in a distance. This is about being present and it is very comforting. I heard a drum of a dishwasher in the distance, I hear the wheels on a suitcase in the airport. I hear deep noise, external things. I am more present, I am more aware. I am finding that through this practice I also spend more time watching, simply watching and observing. I watched a gentleman trying to get comfortable who was clearly in distress. I had a sense of gratitude, confusion and curiosity about this person. The experience of just being and observing without judgment was interesting."

MI02: "You say that striving is not a good thing but that is what keeps us as executives successful is striving. I can see I'm becoming more present for me. I'm beginning to understand with your coaching that I can have balance and be successful without striving. I'm liking that notion. I'm actually beginning to see my life through new lenses. Having the time to just sit and mindfully experience the precious texture of the moments of my life as they pass is pretty amazing. I haven't done that before and I need it."

MI02: "When I practice formal mindfulness I am taken by the energy it took initially for me to stop thinking about how wrong I was doing this process and just be. I'm getting so much better at identifying moments as they arise and appreciating them."

MI02: "Found out I won a national award for business success. Traveling makes me tired and I do a lot of it. This past week I was resting, found myself resting. I'm just tired. I am now noticing that I am much more able to recognize that I am tired. This is new for me, this recognizing of things internal and externally around me. I am paying attention with laser focus, I think it's the mindfulness process. I really believe that I am more mindful and I'm making it a habit so that I can walk in mindfulness during my day. Wow, it really makes a difference. I am much more aware of everything in my life and when I begin to act and move mindfully. During the day, I find myself recognizing things differently. I am not over the top in how I respond, my responses are more mindful. It's very difficult for me to sit still in one place to long, I get bored easily."

MI03: "For now, for today and hopefully in the future, I will continue to experience life daily and work to live in the moment. As you've suggested, we should be witness to our own experience without judgment. That is what I'm going to attempt to do daily. It makes a difference both in and out of work, I am calmer and better able to deal with personalities at work and find myself calmer

outside of work and with my animals when I am just being in the moment. It does make a difference in how I do my work, how I interact with others and how successful I am at acknowledging what I do well."

MI03: "I find I get relaxed and I have to get mindful about what I am reading. I am experiencing the difference between thought and emotion. I don't have to react negatively because a thought comes to me that is not comfortable, learning to be present allows me to feel and not react. This is an important, shall I say, talent in the workplace, to listen, to think but not react. I am learning how my thoughts interact with my emotions and vice versa. As a result of this understanding through mindfulness practice I am becoming better able to trust what is unfolding before me in the moment and not read into things making hasty decisions."

MI04: "I am learning what it means to be in the moment. As a result I notice that I am able to "feel" the feelings that come up for me no matter how harsh or difficult, and they are not having the same impact on me that they have had sometime in the past. That is I'm not relying on the feelings to make decisions for me and I am not running away from the pain of some of the feeling and thoughts – I am just feeling them and becoming okay with them for as you have said, the purpose of this practice is not to change things but to experience them. It seems change comes about through experiencing each moment."

MI04: "I am learning to sit with emotions, feelings and thoughts, not judge them but just sit with them. That's not always easy but so important to me. Sitting with things that are uncomfortable I believe can impact how we deal with difficult situations on the job and helps us not to jump into making decisions that are not good for our organization or the people who are our direct reports."

MI05: "This guided meditation felt really good. I kept telling myself I was doing it wrong, but you kept saying as if on cue, let thoughts come as they come without judgment, your job is to do nothing, to be compassionate to self, and just be a witness to your own experience. I kept wanting to judge but decided to stop and found that I was able to calm down and just "experience" being in the moment. There is power, it seems, in just being in the moment. Being able to experience moments in this way has caused me great relief and a sense of calm. I was able to stop ruminating. I realized I was holding stress in my body, in my shoulders, I was able to gently allow my body to relax."

MI05: "I feel like I'm feeling normalized… nothing has changed externally, but there have been changes internally. I am able to sit and focus on the moment with everything in me, I find that being a witness to moment-to-moment experience really calms me and gives me a feeling that all the negative rumination are simply thoughts and feelings that are not based in reality. By simply slowing down on purpose, everything becomes clearer for me. The freedom to just be is something I'm not regularly used to doing, it feels good. I can feel my sense of wellbeing widen."

> MI06: “When I am practicing it seems I am now becoming more present, slowing down and am able to really look at how the interaction with others is going, the outcomes I had hoped for and just let that go, and listen in the moment to what is being said, I think being able to be present helps me to feel as if I am accomplishing more and I watch my perception shift from “hurry up, hurry up” to “wow what he or she has to say is really interesting so I need to listen more fully.”

> MI06: “I am also struck by how the ability to slow down and just notice is somewhat alien to me. We move through time so quickly and I rarely take the time to slow down and just notice. As I’ve said I’ve meditated in the past but never in this way. Taking the time to notice, not judge, accept and be kind to self is a new way of being and I can see that the investment of practicing mindfulness is really paying off with my sense of esteem in that I feel okay at the times I am most vulnerable.

**Shifting perceptions/emotional regulation.** As participants began to move toward the last three sessions, all of them began to comfortably discuss the changes and shifts that were taking place, as well as the increased ability to manage emotions in their daily lives. They expressed that as their practice deepened and became more consistent they were able to develop a greater sense of control relating to their level of awareness, deepening their understanding of how they see the world around them as well as how they view their fluid internal landscape during. These statements were made as a result of the intervention and in support of the research questions to determine whether (a) the 8-week mindfulness intervention created a shift in perceptions regarding the regulation of emotions, negative workplace stressors (both internal and environmental), interpersonal relationships, general quality of life, and sense of wellbeing, and (b) what was the impact or intensity of the shift on the participant.

These changes or shifts both included short term outcomes (a few minutes or hours of change), and longer term outcomes. Perception shifts were generally described as impacting the way in which participants looked at their internal and external

environment and their ability to impact their own sense of wellbeing, relationships with others as well as regulating feelings and emotions.

> MI01: "The ability to be able to shift from the place of overwhelm to calmness is proving to be a valuable tool to me during my day. That shift happens relatively easily and seems to sustain me throughout the day. Not sure if it will last over the long term, but I need not to worry about that right now."

> MI01: "The shift for me is that I am learning to embrace without judgment. I am learning to accept what I would have called a "bad" mindfulness session when the thoughts are zooming in and out and I am having difficulty settling in. I know that if I simply observe and notice that I will ultimately have a better time during practice. It is a practice as you say and it takes time….I will make time as this particular focus on nonjudging is such a great benefit to me. I am also a man in recovery for many years. Those of us who are addicts tend to be good at judging ourselves, this practice is giving me an opportunity to cease and desist with those judgments. The break is awesome. I am in a much better place at work because of it. The shifts from darkness to light comes sooner, I'm in a brighter mood. It's a good thing, not sure it will last but again, this is where I am now."

> MI01: "The week has been a bit frenetic. Trying to compose myself…had a lovely weekend….I attended a meditation meeting. I was reflecting to on how far I've come. Positive thoughts. It seems that my mindfulness practice through this study is helping me reflect more and think more clearly. I am beginning to trust myself and not judge so much—this is a shift and it seems consistent, not a big shift but a shift. I am also beginning to understand the power of shifting from a negative place to a positive place. When I practice, I tend to take the good properties of the session with me throughout my day. I often look at what was upsetting me and realize that what I thought was a real problem really isn't and that in fact I can resolve this relatively simply. It is freeing, to be able to solve problems just by seeing things differently and changing my perception in what appears to be so seamlessly and so easily."

> MI02: "So for me, going through this difficult divorce and managing two successful careers I needed a reminder of how simply beautiful life can be in spite of the difficulty. This practice which I have a great capacity for is allowing me to touch that beauty, see it clearer and shift the way I see difficulty. It is providing me with a level of freedom I've been previously unfamiliar with even though I could have accessed the freedom if I could have seen it."

> MI02: "There is no magic to mindfulness, I still have problems and issues that need addressing but I can see that this process is impacting my sense of self, helping me to lighten up, I find I'm smiling more, enjoying my people more and actually enjoying my surroundings more. I'm experiencing nature in a more textured way, I'm becoming ok with myself when I am having an off day. I think mindfulness practice will end up being kind of a crutch because the affect is so

impactful. The most important affect I think is that I am becoming more comfortable in my own skin and am seeing things are they really are I think. They are usually not as bad as I have made them out to be. That's really cool."

MI02: "My intent is to continue to study and practice mindfulness on my own or with a coach, love myself, accept myself, and watch the impact as a result on my people, my personal life, and maybe even my feelings toward my soon to be ex-husband. I don't want to hate and I think what I see is happening for me is that as I become more compassionate to myself I am becoming more understanding and compassionate of others."

MI02: "My reaction to negative situations have become more relaxed and caring. I am changing the way I work—I am more alert, less judging, and more supportive. I am by nature a very hyper, high-strung person. I am learning to accept myself and, therefore, accept others since the mindfulness coaching. The energy is different now, I've really started to separate from the emotions and bad feelings and thoughts now, I am able to step back and allow things to come and appreciate them and accept them, then I am able to kind of trust my reactions. I now have a profound sense of enlightenment and awareness and a sense of I can do it—I can change without forcing myself to change, it will happen as I continue to trust myself and this practice is helping me make those shifts and changes."

MI03: "I listen to the mindfulness tapes every day. I practice a rather long mindfulness session about 30 minutes. However, I find informal mindfulness practice intrigues me the most—I find that I am now mindful about how I use the machines at the gym, anything you do that you do mindfully is so rich. It is enhancing my life, it creates a spirit of uplift, and it makes me happy. It validates my spirit. I am slowly transforming how I see my day and my decisions. I don't ruminate as much, I am able to shift out of negative spaces into more positive ones. The benefits of the practice is staying with me."

MI04: "I am focusing on practice and not technique. My challenge is balancing. And again the difficult people thing still looms, but I think the mindfulness is helping me pay attention to my internal being. I am more curious with my observation and less judging. The way I see things is changing. I like what's really going on with me and my reaction; like if I get frustrated, I now question without accusation, what is really causing that frustration within me, instead of the thought that the other person is wrong. I still own how I react again without judging. Mindfulness is helping me with that. My perceptions are changing for the better."

MI04: "I have taken two mindful walks in the last few days. Find that they help me to shift perceptions and see the beauty in not only what I'm seeing in front of me but what is in me. I am still experiencing challenges with impatience and being frustrated with myself, but I am becoming more accepting of those feelings and I am just letting them be. I'm a slow learner in some ways but the pieces of this process are coming together for me. I can feel the difference in how that I am

becoming less prone to blame and I am beginning to see things in a more positive light. This ability to see things in a more positive light and be kinder to myself is helping me to be more open to listening to a different point of view and engaging others even those who I am not particularly happy with. This is a good thing, learning to accept self is helping me to accept others and make decisions that are not emotion driven, rather thoughtful and insightful."

MI04: "It is amazing how just a little mindfulness even for a few minutes can make things different, the shift is immediate. When I did my body scan, I can see where my energy level is. Today my energy is low. I had a headache…but doing the brief mindfulness session this morning, I feel a tingling in my head. I am also seeing the transference of the skills from my practice into my life. My focus this week was really on the body scan and a walking meditation. I'm noticing my responses of how I was feeling different. I am more conscious in my business."

MI04: "Want to talk even more about the topic of difficult people. As per your mentoring, while I'm practicing I am becoming more aware of their positions and perspectives and realize that I don't want to enable or hurt them and that I need to see their position by listening to them. That is an interesting insight for me as it relates to relationships. Practicing is helping me come up with solutions. My perceptions are shifting around running around from stress and I am beginning to not see those relationships as stress filled, rather I am now seeing them as challenges that can have good outcomes."

MI04: "When I practice the loving kindness meditation it is becoming easier and easier for me to send kindness and compassion to those people I find most difficult. I am learning to accept the fact that I don't have to be a doormat with a difficult person rather I can try and understand what they are going through and how they see things. The practice is helping me with this. The "how can I wish that person well" piece is very freeing. Sending loving kindness to the difficult people in my life is helping me relax and engage better with others who may be difficult. Loving myself makes me more prone to love and care for others, even the difficult folks."

MI05: "Things are still stressful but better, I'm handling them better. It seems that things have settled down a little, things are still bad, but it seems as if my mindfulness practice is helping me. Now, I'm seeing things as different internal, like manageable. I'm seemingly somehow able to respond differently to what he is putting out."

MI05: "Not feeling so great in my body. My scoliosis is bothering me. I'm not exercising as much as I need to, but the mindfulness practice for 5 to 10 minutes several times a day is creating a manageable space for me and I have been consistent.…Even though this period is stressful, this intervention is actually helping me kind of be okay with things, and de-stress. Feeling better able to look at the current stress situation and actually know that what I am experiencing is not the end of the world."

> MI05: "I am also finding that my ability to move into a more positive place, seeing what I would normally say is a problem as something that is not as deep and dark as it appears, that my fear paints things darker and more dangerous than they actually are. That is the beauty of being a witness to my own experience because I am more and better able to just watch and notice, to be curious. Curiosity in all of this is exciting. Curiosity is the impetus to my watching everything in the moment and being aware of all things external and internal."
>
> MI06: "When I am practicing, I am pretty quickly able to move into heart breathing, and am a little less distracted by thoughts, although they do seem to keep popping in there, but realizing that they will always pop up but it is my perception of them that mindfulness practice helps me to better manage them when they come."
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> MI06: "The freedom associated with not focusing on what I am doing wrong in the practice translates and ripples out to my worklife. The ruminations of how this thing or that could be done better are slowing down, the beating myself up for one thing or another is also diminishing and I am finding I am beginning to focus on the importance of being authentic and as honest as I can with others."
>
> MI06: I have repeatedly said during this process that I have a good life and I do. I am happy in my job, I do realize that shifts in how I see things needed to happen for my wellbeing and reduced discomfort. I have also realized that by practicing daily I am able to shift my perceptions relatively quickly because I am not striving to be something or engage in something that is not currently happening and that feelings and thoughts do not necessarily represent reality. They most often do not…there is freedom in that understanding; I am better understanding that in order to be a saner, healthier person that it is important for me to remember that. I am able to sit still and practice for maybe 4 or 5 minutes formally, several times throughout the day and then informally much more. When I was angry or worried, I began saying a little mantra when I was practicing. I would say "it is okay to feel this way," over and over. It really seemed to help.

**Summary of Participant Responses to Shifts and Change**

Participant responses seemed to express an awareness and acknowledgment that as a result of their mindfulness practice over the course of the intervention, they were able to experience shifts related to enhancing the quality of their worklife and their ability to see challenges and stressors from a more positive orientation. They were better able to see events of the mind as not based in reality but rather steeped in fear, emotion, and feelings. Shapiro et al. (2006) described this ability to see things as they are and shift

perceptions as re-perceiving. Re-perceiving is the process of dis-identifying from individual thoughts and feelings and neutrally viewing the contents of the mind as just that contents of the mind.

**Effectiveness of coaching element during the intervention.** Effective mindfulness coaching is ultimately dependent upon the client's mindful awareness as well as their mind-body connection and the development of that mindful awareness and connection to the extent where change and shifts can occur. Mindfulness coaching can guide that process in partnership with the client. Participants reflected on the coaching element of the study during and after the intervention and described their various experiences working with a coach and what they found most impactful in the coach/participant partnership. Comments with an asterisk before the participant code are comments that were unsolicited and emerged during participant reflections over the course of weekly sessions. Comments relative to coaching without an asterisk were responses to a question posed within the post-intervention survey.

> MI01: "Having a weekly coach has kept my practice on track—it seems to be something I need and enjoy."
>
> *MI01: "I am really enjoying the coaching on the science behind the changes that occur during practice and that occur over the long term with consistent practice. Strengthening the brain is a good thing, taking care of my nervous system and improving creativity are all good for my health and my daily life at work."
>
> *MI01: "I find that the level of accountability having a coach is very helpful because I know I must share my experiences with you the following week. I want to be sure I am able to practice after this coaching experience is over for me. I really want to move forward with this for the long term."
>
> *MI01: "I have found the coaching aspect of this experience the key for the success I am experiencing; your gentleness, your willingness not to judge me, to encourage me and to care about how I am feeling on this journey has been a really inspiring and exhilarating experience. I am not so sure I would have had this great of a learning experience without my master coach."

MI02: “Having a coach has enabled me to feel safe, to be open and to vent during this process.”

*MI02: “Again I recognize now that I have had the capacity for this practice since I was born, because I feel as if my spirit has craved for this type of practice. I just didn’t put a name to it, but frankly, it feels natural to me. I just didn’t know how to define it. I found these coaching sessions have made me more aware; made me realize that I have always craved a mindful life and have experienced in some ways prior to this intervention, but now I do it more consciously.”

*MI02: “Coaching has helped me realize that I need support. I want to continue this journey with a coach to help me in the future.”

*MI02: “I need to start spending time with me. When I go into the formal practice I go to this place of calm, and when I practice informally, I do it in my car I can do it anywhere. I need to take mindfulness practice into action and spending time with me—just 5 or 10 minutes is good when I get into a challenge. I need to go on vacation and spend time with me. This coaching experience has helped me to face me and to learn to take care of me.”

*MI02: “Let me say that having a mindfulness coach has been such a beneficial experience for me. Not only did I feel safe and secure, I quickly built a trusting relationship with you as the coach and had the strong belief that you did not and would not judge me. What was critical to me was when you told me that if I didn’t get a chance to practice formally during a week, that I try to practice informally throughout the day and at least do some reading in some of the materials you gave me. Your willingness to be so supportive was critical to my success.”

*MI02: “Also the educational component of this intervention was so important to me. I learned about the history of mindfulness, its application, the science of mindfulness and its impact on my brain, my nervous system, and my life in general. This piece was very important because it helped me make sense of what was happening to me each time I practice, I experienced deep awareness and enhanced acceptance of myself. As an executive, what I realized is that I have a need to know and as coach you were always available to answer my questions, really helped me cement the concept. I also appreciated your weekly text to encourage me. They weren’t intrusive rather they were supportive and friendly and helped to keep me on task and remember what I needed to do as far as practice was concerned. I do not think I would have been as successful as I was without the coaching. I really appreciated your guidance, training, mentorship and support. Again could not have done this without your coaching.”

MI03: “Having a coach, my coach has been an integral part of my ability in being able to enjoy the benefits of mindfulness practice. The gentle guidance, the nonjudging and the encouragement allow me to be okay when a practice or an exercise didn’t meet my expectation. Being told by the coach that practicing is

just that “a practice,” give me the will not to abandon or give up the effort. The coaching aspect was invaluable.”

*MI03: “I am finding this intervention extraordinary. Because this process is effective and supportive particularly with a coach. All you have to do to succeed is to be there. Everyone is looking to succeed at something. To know that success is simply just being and not doing. I think it would revolutionize the court system. I have been a superior court judge, administrative law judging, supervising judge. Headed law guardian office, oversaw prison programming etc. To know that this gem of mindfulness has been available all along, I just didn’t know it. I’m glad I’m able to take advantage of it now.”

*MI03: “Noticing, I am better at noticing and being aware. Initially, I didn’t think I would be able to do this process, but I have been and have been having rare insights, and I think it’s from the combination of the meditation, and the coaching that really helped me see things better. I am looking at things in a deeper way, but yah its true…being able to slow down and look at things as they are very clear and direct has been very helpful.”

*MI03: “I’m sorry this is such a short intervention, I wish it was longer, a year perhaps. Having a coach is invaluable in this process. The check-ins, the conversations with you, the nonjudging you demonstrate and the support is really helping me to enjoy this process.”

MI04: “Having a coach helped to increase my self-awareness. Provided “required” space to often force a mindfulness stop and contemplation.”

*MI04: “Struggling with juggling…because I am having a more purposeful and deliberate practice (more formal), the coach is forcing me so that is good. Why do we not do things that are good for you, that is the question. So, to have a coach and a formal practice like this allows me to calm down quicker. Resistance to EmWave at first and I was “oh god, another piece of technology,” but then when I used it, I started in the red and then went into the green…I believe, I am more mindful than I was because I am doing a more formal practice through this intervention. The formal practice creates an easier transition to every day informal practice, noticing the trees, noticing my surroundings and all the beauty it holds.”

*MI04: “I believe having a mindfulness coach has been a wonderful asset in terms of having a partner who holds me accountable to my practice while demonstrating kindness, support, knowledge, education and coaching really was instrumental in my being able to stick with the practice on a regular basis and eventually be able to recognize that when I miss a practice, I truly am missing a practice. This was a wonderful growth experience and my intention is to continue practicing beyond this study.”

*MI04: “This intervention has come at a good time for me. This is a time of change, of ambivalence, of decision making and creating an agenda, of working

> with diverse groups of people and diverse personalities some of them challenging and a multi-tasking work day, it is so good to have a coach to support me through this process. I am very grateful for this opportunity."
>
> MI05: "Having a coach was the essence of this process for me. It puts what I'm going through—both the hard stuff at work and incorporating these new practices in my life—into context. I frequently hear my coach's words in my mind. They make a difference."
>
> *MI05: "There is structure and accountability because I have a coach. It helps me be disciplined. Even though this period is stressful, this intervention is actually helping me kind of be okay with things and de-stress. Feeling better able to look at the current stress situation and actually know that what I am experiencing is not the end of the world."
>
> *MI05: "This coaching experience has made such a difference. Having someone to process with, practice with, take on homework and have a safe space, accountability and someone to share my growth with through this process has been wonderful."
>
> MI06: "The coaching sessions are good as a review of my week and a reminder of what the point of the practice is."
>
> *MI06: "This coaching intervention has been an invaluable opportunity for me to learn skills and a practice that is not rocket science but something I can do to enhance my wellbeing, reduction in rumination and my shifting from negative place to a more positive one whenever I need to. I intend to continue using practice over the long term."
>
> *MI06: "Through the weekly coaching sessions…I have been able for the first time in my career to be okay with what comes when I sit in silently mindfulness practice."

Each participant described the importance, as they saw it, of having a coach to work with and how the coaching element of the intervention assisted them in moving forward in their lived experience of mindfulness. What became apparent across cases in this study of HLEs was that no matter how different or difficult participants' work lives or personal lives were at the time of the intervention, the coaching element assisted them in feeling safer, calmer, trusting, and empowered; setting the stage for each of them to

dive deeper into the lived experience of mindfulness and readying themselves to experience changes.

**Mindfulness in communication and relationships.** In an article of the Journal of Academic and Business Ethics, Fries (2009) described how interpersonal relationships and communication can be negatively impacted in a changing work environment filled with stress. The author posited that mindfulness practice can positively impact a practitioner's outlook, ability to relate and communicate, and can assist in the management of stress (Fries, 2009).

During their sessions and within their survey responses, participants in this study described the ways in which the mindfulness practice during this intervention assisted them in experiencing relationships and ways of communicating differently than they had before. Participant MI05 had a significant amount of workplace stress and dis-ease around her ability to make better her relationship with her department head. She described the situation this way as she was beginning the intervention:

> This week was just as maddening as the first week. My boss is still dysfunctional and is making life at work very difficult for me. He has bursts of chaos that he tries to draw me into and get me to do things for him which disrupts my work schedule and that of my staff. He doesn't give me the proper information to do what he has asked and when I tell him I need more information, he belittles me and I just fall into the trap of feeling miserable.

As participant MI05 continued engaging the practice of mindfulness, her perceptions and thoughts shifted and changed. She described the shift as follows:

> I must say that my mindfulness practice this week has been very helpful; it seems that I am moving toward it during the particularly difficult moments. I have never practiced mindfulness meditation before and in practicing this week, I was able to really pay attention to my body and recognized where I am holding my stress. I was calmer after a session and more mindful that it is my boss's attitude and pathology and that I shouldn't take what he does and says personally. It's hard stuff to deal with at work but it seems to be easier after the mindfulness session.

MI05 expressed that she believed she was becoming more compassionate and thus more resilient around work relationships and experienced a more positive response to her stress triggers as a result of the mindfulness coaching sessions. Other participants had similar experiences as shown in the following statements.

> MI01: "So I had a few challenges with staff and some communication issues. Because I had just practiced a mindfulness session at my office prior to a staff meeting, I seemed a lot more open to what was being said and didn't automatically decide how to fix what I thought was problematic. Instead, I listened and the clarity of my listening seemed clearer after a mindfulness session. I was listening without judging what I was hearing or without making internal decisions relative as to how I was going to handle the situation."

> MI01: "Being accepting of my imperfections and being okay with them is really setting the stage for how I'm able to look at others without judgment and with compassion."

> MI02: "I dropped everything and went to a very peaceful place, and sat mindfully for 15 minutes. Your teaching and guidance has helped me so much this past week. I let the rumination come, I let the angry thoughts come, I sank into my chair and grounded myself. I made sure I didn't judge myself—which is something I sometimes do. I tried to care for myself with compassion with the practice, which often eludes me. I kept using my breath as an anchor to bring me back to the moment and after the session was over. I literally felt like everything was going to be fine and while I still had to call the city to pull my employees, I didn't have the anxiety around the decision. I was clear headed, no longer angry. I was still sad, but not angry…that was big for me, because I was very angry prior to the mindfulness practice. After the practice had concluded, I stopped ruminating, I felt like I could make the call without anger or anxiety, and I realized that tomorrow is another day. The transformation within just that 15 minute practice was just—well transformative. I have been practicing twice a day since we have started the intervention, and I find that my stress shifts into a very calm and confident space once I'm done with the practice. I seem to gravitate toward the practice when things are rough for me. It is as if I'm using it as an antidote to difficult moments and events."

> MI02: "I love the loving kindness meditation you taught me. I use it all the time. As a result I find that I am more tolerant of my employees…I am beginning to listen better, I think the corollary to mindfulness is that because I'm listening to myself better without judging and I'm observing my thoughts and feelings not as reality but just as thoughts and feelings, I'm beginning to trust myself more. Because I am trusting myself more, I am really seeing my employees and clients in a more trusting fashion. That is, I am finding that I am really listening without thinking at the same time, and I am engaging better and more authentically."

MI03: “I can feel the difference in how that I am becoming less prone to blame and I am beginning to see things in a more positive light. This ability to see things in a more positive light and be kinder to myself is helping me to be more open to listening to a different point of view and engaging others even those who I am not particularly happy with. This is a good thing, learning to accept self is helping me to accept others and make decisions that are not emotion driven, rather thoughtful and insightful.”

MI03: “I am noticing that I tend to see things and communicate differently after a mindfulness practice. That is, I seem to be a lot calmer and see things less subjectively. I am listening better.”

MI04: “I am finding new ways of dealing with difficult people and building awareness around what part I own in the relationship or the issue, by practicing.”

MI04: “All too often decisions are made out of fear. For instance, I have to hurry up and take care of this task, if I don’t, the outcome could be disastrous, or ‘this person is going to be difficult, be on the defensive and ready for the attack,’ when in reality those perceptions may in fact be skewered. There may not be a disastrous outcome for waiting to take on a task and engage in it mindfully. Or, the person we think may be getting ready to attack us, may in fact not have any interest in communicating defensively or in an attacking way. I realize through mindfulness practice and with kindness that so much of what I think or feel is brought on by fear and that fear in that context is unhealthy.”

MI04: “While I’m practicing, I am becoming more aware of their positions (difficult people) and perspectives and realize that I don’t want to enable or hurt them and that I need to see their position by listening to them. That is an interesting insight for me regarding relationships; the practice is helping me come up with solutions.”

MI04: “When I practice the loving kindness meditation, it is becoming easier and easier for me to send kindness and compassion to those people I find most difficult. I am learning to accept the fact that I don’t have to be a doormat with a difficult person rather I can try and understand what they are going through and how they see things. The practice is helping me with this. The “how can I wish that person well” piece is very freeing. Sending loving kindness to the difficult people in my life is helping me relax and engage better with others who may be difficult. Loving myself makes me more prone to love and care for others, even the difficult folks.”

MI05: “I am curious to examine how this mindfulness intervention is beginning to help me feel better about my circumstances, something is happening, but I’m not sure how it is happening. I know, it is the mindfulness practice that is helping me. I feel the changes instantly toward calming down and accepting what comes. I take the calmness that I get through the practice and it stays with me throughout the day in my relationship with my staff and others I have to interact with. Even

my boss who is problematic. You've discussed the literature out there on the impact of mindfulness practice on brain change and nervous system change, I'd like to look into that more, but am definitely noticing that I can shift out of a dark place after practicing and have things not seem so bad. I am definitely calmer and seem to have the capacity after the practice to deal with work difficulties with not as much panic."

MI05: "Yep, I'm not sure how that is happening but I'm even noticing how sad my boss looks and his awkwardness when he tries to defend himself or make a point. I've never noticed that before, but am now. I have noticed how much of my mind and my emotional space the boss takes up. Through this process of mindfulness practice I am realizing this. I am noticing that my mind is shifting back to my boss periodically, but I am becoming okay with this. It seems as if my senses are heightened, and I am becoming aware of everything, internally and externally. Noticing without judging is really bringing a certain quality of wellbeing to my day. I am able to take this feeling of wellbeing into the work day. I am not blaming myself as much as I have for everything. The rumination seems to be in a state of reducing itself. Mindfulness is helping me to remember that I am good enough."

MI05: "I am also noticing the patterns of how I communicate with myself. I am noticing without judgment communication patterns that may not be the healthiest way to communicate for me. I want these emotions and feelings to drive my behavior less and less and I think that is what is happening through this practice. I am becoming okay with the fact that I don't have all the answers and don't know everything. Not having to take responsibility for everything all the time, good or bad, is freeing. Just being able to sit with things as they unfold is freeing. Not having to do anything is wonderful."

MI06: "I am also finding that when I ramble on in conversation that because of the practice which is teaching me to reflect on what I want to say before I say it, I am better able to engage people in conversation without the expectation that they will want something different from me or that the exchange won't be positive. I am finding that my own truth is enough. I am opening my heart even if what I am hearing is difficult. I am remembering to give loving kindness to myself whenever I feel a tendency to begin blaming myself or another. I also end the conversation with another when they leave by telling myself that my efforts were good and worthy."

MI06: "It appears, especially after practicing, I am less reactionary in relationships and respond in a mindful manner with a sense of compassion for others."

## Summary of Findings

### Quantitative Findings

**Satisfaction with Life Scale (SWLS).** The SWLS scores (Diener, 2006) are grouped into the following categories: extremely dissatisfied (5-9); dissatisfied (10-14); slightly below average in life satisfaction (15-19); average (20-24); high (25-29); very high/highly satisfied (30-35). The higher the participants' score, the higher their life satisfaction. At baseline, the average score for the six participants was 21.3, which would fall into the average category. At follow-up, the average score for the six participants was 28.0, which would fall into the high category. Table 1 details the scores for each participant at baseline and follow-up.

Table 1

*Satisfaction With Life Scale Participant Scores*

| Participant ID | Baseline Score | Baseline Category | Follow-up Score | Follow-up Category | Difference (Baseline to Follow-up) |
|---|---|---|---|---|---|
| MI01 | 25 | High | 28 | High | 3 |
| MI02 | 21 | Average | 29 | High | 8 |
| MI03 | 25 | High | 28 | High | 3 |
| MI04 | 16 | Slightly below average | 29 | High | 13 |
| MI05 | 16 | Slightly below average | 26 | High | 10 |
| MI06 | 25 | High | 28 | High | 3 |
| Total Average | 21.3 | Average | 28.0 | High | 6.7 |

**Perceived Stress Scale (PSS).** Higher scores on the PSS indicate higher stress levels. A score of ~13 is considered average, and scores of 20 or higher are considered

high stress (Cohen, n.d.). At baseline, the average score of the six participants was 23.5, which is considered high stress. At follow-up, the average score decreased to 15.83, which is near the average or slightly above average. Table 2 details the scores for each participant at baseline and at follow-up.

Table 2

*Perceived Stress Participant Scores*

| Participant ID | Baseline Score | Baseline Category | Follow-up Score | Follow-up Category | Difference (Baseline to Follow-up) |
|---|---|---|---|---|---|
| MI01 | 20 | High | 16 | ~average/slightly above average | -4 |
| MI02 | 18 | Above average | 16 | Above average | -2 |
| MI03 | 23 | High | 17 | ~average/slightly above average | -6 |
| MI04 | 30 | Very high | 16 | ~average/slightly above average | -14 |
| MI05 | 36 | Very high | 18 | Above average | -18 |
| MI06 | 14 | ~average | 12 | ~average | -2 |
| Total Average | 23.5 | high | 15.83 | ~average/slightly above average | -7.67 |

**Five Facet Mindfulness Questionnaire (FFMQ).** The FFMQ scores participants on five different constructs of mindfulness: observe, describe, act with awareness, nonjudging, nonreaction. There are no cutoff scores for this assessment, but the higher the score for each construct, the more mindful the participant is assumed to be in that area. On the "observe" items, participants' average score at baseline was 26.16, and increased to 31.75 at follow-up. Average "describe" score was 27.33 at baseline and 33.66 at follow-up. Average "acting with awareness" score was 26.5 at baseline and 31.0

at follow-up. Average "nonjudging" score was 30.0 at baseline and 33.17 at follow-up. Average "non-reaction" score was 17.16 at baseline and 23.0 at follow-up. Tables 3A-E detail scores for each participant in each construct. Combining scores from each construct, there was a total average difference (increase) in mindfulness of +4.24.

Table 3A

*Observe Scores*

| Participant ID | Baseline Score | Follow-up Score | Difference |
|---|---|---|---|
| MI01 | 24 | 39 | 15 |
| MI02 | 27 | 30 | 3 |
| MI03 | 28 | 30.5 | 2.5 |
| MI04 | 30 | 39 | 9 |
| MI05 | 21 | 23 | 2 |
| MI06 | 27 | 29 | 2 |
| Total Average | 26.16 | 31.75 | 5.58 |

Table 3B

*Describe Scores*

| Participant ID | Baseline Score | Follow-up Score | Difference |
|---|---|---|---|
| MI01 | 12 | 27 | 15 |
| MI02 | 37 | 39 | 2 |
| MI03 | 35 | 38 | 3 |
| MI04 | 21 | 27 | 6 |
| MI05 | 30 | 39 | 9 |
| MI06 | 29 | 32 | 3 |
| Total Average | 27.33 | 33.66 | 6.33 |

Table 3C

*Acting with Awareness Scores*

| Participant ID | Baseline Score | Follow-up Score | Difference |
|---|---|---|---|
| MI01 | 25 | 29 | 4 |
| MI02 | 33 | 37 | 4 |
| MI03 | 22 | 26 | 4 |
| MI04 | 23 | 32 | 3 |
| MI05 | 27 | 30 | 9 |
| MI06 | 29 | 32 | 3 |
| Total Average | 26.5 | 31.0 | 4.5 |

Table 3D

*Nonjudging Scores*

| Participant ID | Baseline Score | Follow-up Score | Difference |
|---|---|---|---|
| MI01 | 23 | 25 | 2 |
| MI02 | 36 | 39 | 3 |
| MI03 | 30 | 34 | 4 |
| MI04 | 25 | 29 | 4 |
| MI05 | 29 | 33 | 4 |
| MI06 | 37 | 39 | 2 |
| Total Average | 30.0 | 33.17 | 3.17 |

Table 3E

*Nonreaction Scores*

| Participant ID | Baseline Score | Follow-up Score | Difference |
|---|---|---|---|
| MI01 | 12 | 25 | 13 |
| MI02 | 15 | 20 | 5 |
| MI03 | 13 | 17 | 4 |
| MI04 | 22 | 25 | 3 |
| MI05 | 20 | 26 | 6 |
| MI06 | 21 | 23 | 2 |
| Total Average | 17.16 | 23.0 | 5.84 |

## Qualitative Findings

**Baseline questionnaire.** After reading through and memoing transcripts of the baseline qualitative questionnaire, a codebook of relevant ideas and considerations that participants discussed most frequently during the intervention was compiled. Each transcript was coded using Atlas.ti qualitative analysis software. The codebook was later revised by removing those codes that were not used significantly during analysis. Appendix I represents the fully revised baseline codebook, decision rules, and example quotes.

**Follow-up questionnaire.** As with the baseline data, after reading through and memoing transcripts of the follow-up qualitative questionnaire, a codebook was compiled of those ideas and considerations which participants discussed most frequently. Each transcript was coded using Atlas.ti qualitative analysis software. The codebook was later revised by removing those codes that were not used significantly during analysis. Appendix J represents the fully revised follow-up codebook, decision rules, and example quotes.

**Session transcript notes.** The typed transcripts from each of the primary researcher's seven sessions with each participant were memoed and coded. The content of these session transcripts mostly focused on how the mindfulness intervention was progressing for each participant, significant things happening in their lives, and the effect they felt mindfulness was having on their internal and external lives. The codebook for the session notes consists of both the baseline and follow-up codes in addition to several other codes.

**Themes.** While multiple patterns emerged continually throughout this study in sessions with participants, three overarching central themes from the baseline and follow-up surveys as well as the transcribed session notes surfaced: work stress management, acceptance, and heightened awareness. Although these themes are interconnected, they are distinct in some ways and were important enough on their own to be separate themes. They are described with participant quotations supporting each theme.

***Work stress management***. Most of the participants identified the way they perceived stress as a major factor for wanting to participate in the mindfulness intervention. All participants were HLEs and the majority of them experienced a significant amount of pressure simply as a result of the nature of their work and position or in dealing with difficult direct reports, coworkers, or their managers. Some participants even mentioned having experienced unpleasant physiological effects of stress, such as panic, difficulty sleeping, and blurred vision. Participants hoped that becoming more mindful would help them more effectively deal with stress at work and, therefore, become more efficient and effective workers as well as better people in their personal lives. The mindfulness intervention seemed to help significantly with participants' stress management as noted by the direct participant quotes and a summation of the data.

Participants discussed this theme in the following manner:

> This week has been a good week, very busy, some stressors but I am finding myself again having lots of moments of reflections that seem to be impacting how I function and manage during the day. (MI01, Session)

> I am finding that practicing is getting me to a place of resilience around stressors, and I am starting to shift my perceptions without even trying to. (MI02, Session)

> Generally, when I am on the program I am finding a new resilience to stress. The days I fell off the program I was as reactive as I had always been before. (MI03, Follow-up)

> Yes…confusion often paralysis, frustration. Unable to get anything out of my mind on paper or out of my brain through words. Especially in a caring, compassionate manner. (MI04 in response to being asked if ever experienced feeling overwhelmed at work, Baseline survey)

> I now have a quicker return to positive outlook when faced with a stressor. It becomes almost an out of body experience or maybe an out of the drama space experience. (MI04, Follow-up)

> I would like for this process to leave me more productive, less stressed, more emotionally balanced and with a better ability to maintain a healthy work-life balance. (MI05, Baseline survey)

> I would like some tools to cope better with a sense of unease that I sometimes feel when I believe someone is unhappy with me in my work. This goes for coworkers and customers. It happens infrequently, but when it does it is very disturbing and leads me to obsessive thought and difficulty with perspective. (MI06, baseline survey)

***Acceptance*.** Participants talked about how the mindfulness intervention increased their tolerance for others and their shortcomings, as well as tolerance for their own feelings, reactions, and so forth. Similarly, participants often mentioned how they were making efforts to, or effortlessly, stop judging themselves and others. This mirrors mindfulness practice itself, where participants are told not to judge their practice or the thoughts that come to their mind. Jon Kabat-Zinn has said mindfulness is all about "cultivating a non-judging attitude toward what comes up in the mind, come what may" (Kabat-Zinn, 2005, p. 196). While some of the participants reported in the baseline questionnaire that they had not previously thought about the impact of judging themselves and others, they all described, as the sessions continued that nonjudgment and acceptance was a benefit they derived during the sessions and they recognized the impact the benefit had on their personal self-esteem and their relationships with others.

This practice of nonjudgment seems to have made their lives, both personal and work, less stressful. In not judging others, participants were better able to recognize

others' realities and even accept their intolerance. In not judging themselves, they accept their emotions as temporary experiences and recognize that their emotions really cannot define their character. Participants expressed that acceptance and nonjudgment of others and self contributes to the sense of peace and calm the participants report feeling during and after the intervention. Furthermore, withholding judgment of others and self, allows participants to "be more present" in their lives, appreciating experiences and moments and interactions with others. Participants through the experience have described the important of being with the experience itself.

Participants' statements reflecting on this theme:

> Wow, I was pleasantly surprised. This is my first time and because as you said I did not focus on judging my thoughts or deciphering whether they were right or wrong, I was able to be kind to myself. I did have thoughts about what I needed to do for the rest of the day but because I didn't make them come to me, I was able not to be too judgmental, although I did have a few moments of telling myself that I'm not supposed to be thinking of anything. Guess, I better be mindful of the judging and the criticism. I really enjoyed the practice because I felt really even keeled afterward and peaceful. (MI01, Session)

> I am also beginning to become more open to seeing things as they currently unfold without judging them. This is giving me a doorway into the process of acceptance of myself, others, and conditions that are out of my control. (MI02, Session)

> Through this practice, I am better able to forgive myself, to just accept things as they unfold. In doing so my mental state, my focus on the work negative shifts to the positive without much effort. The ability to make that shifts impacts how well my day goes at work. (MI03, Session)

> I am also observing myself with curiosity relative to how I think, the way in which I make decisions, and I am noticing I am beginning to be kinder to myself and recognize that the more I take care of me the more I will be available to help others who need me during the day at work and home. Mindfulness practice is helping with this. There is a freedom that comes with nonjudging and nonstriving. I can breathe a sigh of relief and release. (MI04, Session)

> I am noticing the waves of my emotions, the ups and downs of them. But I am noticing them in a way that I'm not judging myself. Just being present and experiencing this awareness of self that comes moment by moment without

> assumption, evaluation, judgment, or negative reactions is helping me to become calmer and feel okay with whatever comes up for me. I find that I am noticing a lot more of how I feel about things, and perhaps how the other person is feeling. (MI05, Session)

> As I've said I've meditated on occasion in the past but never in this way. Taking the time to notice, not judge, accept, and be kind to self is a new way of being, and I can see that the investment of practicing mindfulness is really paying off with my sense of esteem in that I feel okay at the times I am most vulnerable. (MI06, Session)

***Heightened awareness*.** Participants were instructed to notice their sensations while practicing mindfulness, such as the textures and tastes they experience while eating. These practices translated into participants' everyday lives. They were able to notice or be witness to their experiences in a different, heightened way. This understanding led to increased appreciation of their own strength and personalities, lives and experiences, and the world around them. Participants really seemed to enjoy this aspect of the intervention and the effect it had on their everyday lives. Like acceptance, heightened awareness allows participants to be more present and experience each moment in an awaken state as documented in the following statements:

> I am finding that my hearing is becoming more toned into distances. I heard a drum of a dishwasher in the distance, I hear the wheeling of suitcases in the airport, deep noise. I hear external things. I am finding that through this practice I also spent time watching a gentlemen trying to get comfortable who was clearly in distress. I had a sense of gratitude, confusion…curiosity about this person. (MI01, Session)

> After a mindfulness practice, my perception about the terrible state of things changed within minutes and I was able to perceive things were not as bad as I had initially thought they were. Really a great feeling. (MI02, Follow-up)

> I also notice that because I am able to slow down and be less judgmental with myself, I am able to relax and be less rigid. I am actually beginning to ruminate less, and noticing the things that I like about myself and this is undoubtedly transferring over to those I work with. (MI03, session)

> I have an awareness that I never had before. I see there is a different way to eat and walk and breathe. I see that eating mindfully is unlike every other meal I have

> ever eaten. Walking a short path mindfully is vast—more expansive than world travel. I see belatedly that everything I need to have peace is right there inside, where it was all along, undiscovered. (MI03, Follow-up)
>
> Yep, I'm not sure how that is happening, but I'm even noticing how sad my boss looks and his awkwardness when he tries to defend himself or make a point. I've never noticed that before, but am now. I have noticed how much my mind and my emotional space that the boss takes up. Through this process of mindfulness practice I am realizing this. I am noticing that my mind is shifting back to my boss periodically, but I am becoming okay with this. It seems as if my senses are heightened, and I am becoming aware of everything, internally and externally. Noticing without judging is really bringing a certain quality of wellbeing to my day. I am able to take this feeling of wellbeing into the work day. I am not blaming myself as much as I have for everything. (MI04, session)
>
> What is really interesting is that through the mindfulness practice I am noticing things that are really uncomfortable to me. It's really interesting how that is happening to me. I am noticing the waves of my emotions, the ups and downs of them. But I am noticing them in a way that I'm not judging myself. Just being present and experiencing this awareness of self that comes moment by moment without assumption, evaluation, judgment or negative reactions, is helping me to become calmer and feel okay with whatever comes up for me. I find that I am noticing a lot more of how I feel about things, and perhaps how the other person is feeling. (MI05, Session)
>
> Not only do I now have a need to practice every day to take time out to do so, but I am also compelled to notice that, yes, my life was good to start with but I am much more aware of the good in myself and the good in others and this has impacted my ability to live without fear of others or the dark thoughts that sometime come. (MI06, Session)

What was clear from participant responses in considering the overarching themes which emerged was that their lived experience of mindfulness produced a diverse range of results which they felt added value. The new experiences of managing stress, acceptance, and heightened awareness within a mindfulness coaching framework significantly impacted participants in a variety of ways.

**Other impacts**. In exploring the value of the intervention during their final session, participants were asked to consider a variety of factors which are described below using a cross-case summative response.

Most clients entered the intervention with mixed feelings about their competency to complete the seven session requirement. Although there was excitement around beginning the process, there was also ambivalence and self-doubt. They also expressed issues with self-disclosure. The primary concern was they were not used to disclosing due to their high-level positions where they had learned not to share too much about themselves, their fears, weaknesses, or vulnerabilities.

***The lived experience of HLE as entry-level practitioners*.** In order to provide the level of support participants would need to potentially reach their stated goals for the intervention, the first telephone call in the intervention was holistic in nature and provided participants with a 90-minute educational and experiential session to explore the components of mindfulness practice and to directly experience the practice.

Over the duration of the study, participants made the transition from a state of nondisclosure, ambivalence, and self-judgment to a sense of comfort with disclosing and sharing experiences during the intervention, a sense of excitement for the possibilities of experiencing mindfulness in a meaningful way, and a sense of relief as comfort and identification with the experience of momentary awareness increased. As a result of heightened self-awareness and acceptance for their experiences during the process, participants were able to acknowledge the cognitive and behavioral changes and shifts, and articulated the benefits. All participants described a desire for ongoing mindfulness practice and felt that having a mindfulness coach would be their desired choice for engaging in the practice (see Figure 2).

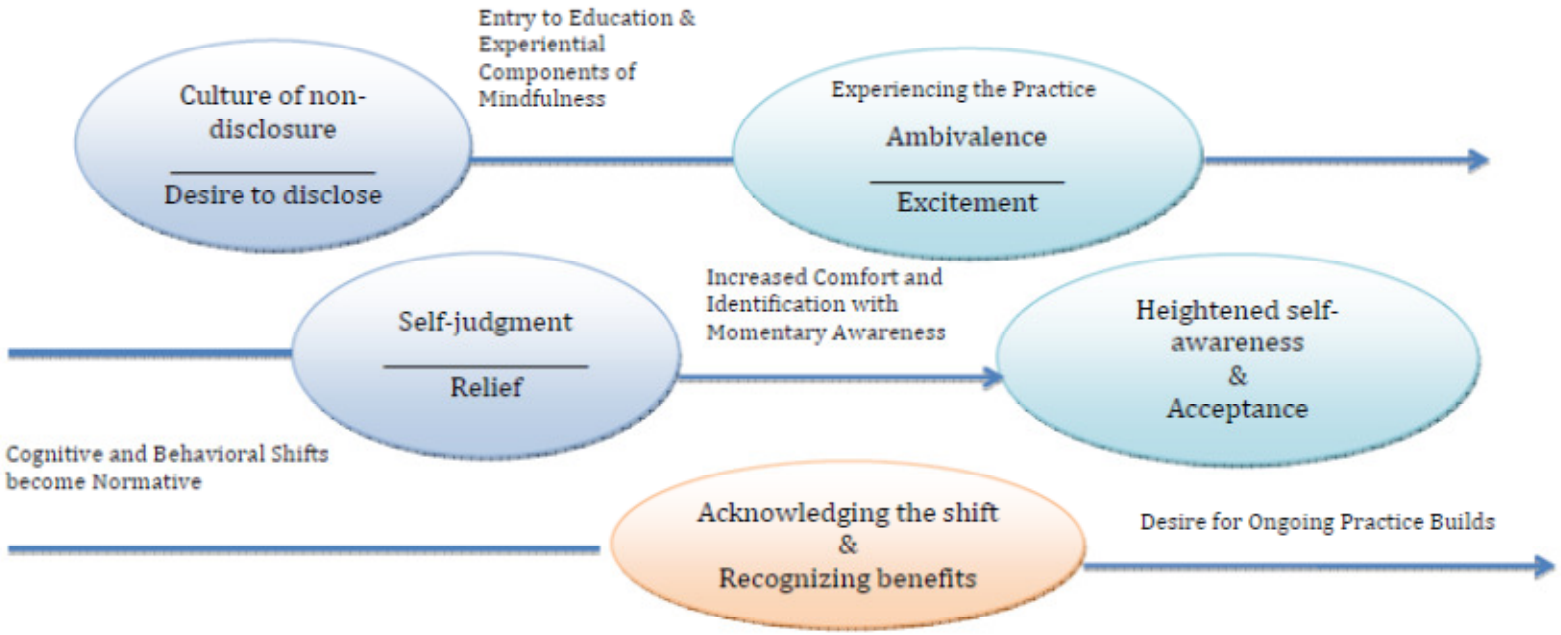


*Figure 2*. Lived experience and the tension of opposites.
The lived experience of high-level executives (entry level practitioners) in the 8-week mindfulness coaching intervention. Participants to the study indicate the difficulty in being comfortable disclosing information about themselves as high level executives and being open at the beginning of the process as a result of not wanting to be seen as vulnerable. There exists a tension of opposites for each of the participants in that while they had difficulty in disclosing, they had the desire to disclose and to become more comfortable with the process. As participants invested in the intervention, the fear of how they would engage in the process diminished and as a result they were able to experience shifts and changes in their perceptions of their vulnerability, self-judgment, and automatic feeling of ambivalence.

In the early stages of the study, the HLEs indicated a difficulty in being comfortable disclosing information about themselves and sharing emotions as a result of not wanting to be seen as vulnerable. This difficulty appeared to be a cultural norm for participants relative to their position or status in the workplace. Within that difficulty, however, there existed a tension of opposites for each of the participants. Although they had difficulty initially disclosing, they came to the process with the desire to disclose and to become more comfortable with their lived experience during the intervention. What is normative according to participants is the reliance on ego for HLEs to present the appearance of power and perfection. Appearing vulnerable was not an option for any of the participants in their workplace as it is considered a sign of weakness. As participants invested time, developed a relationship with the coach, and committed to participate fully in the intervention, the fear of how they would engage in the process diminished and, as a result, they were able to experience shifts and changes in perceptions of their understanding and experience of vulnerability, self-judgment, and feelings of ambivalence. They were then able to experience a heightened sense of awareness and acknowledge the changes that were occurring and the benefits to their lives as a result of the practice.

***Compliance to study criteria***. All six participants were in compliance to the study protocol, with no participant withdrawing from the study.

***Enhanced sense of well-being***. Although all participants indicated they felt the intervention was too short to speak to long-term effects, five of six participants said they have experienced an enhanced sense of wellbeing. One participant shared that his sense of wellbeing was strong prior to the intervention, but found that because his self-

awareness had been heightened that perhaps his sense of wellbeing may have been impacted as a result, but he was not sure.

***Emotional regulation and perceptions***. As previously noted in this chapter, all participants, by their comments, have described a significant shift in how they were able to regulate their emotions. They described the ways in which perception shifts impacted their daily lives after practice.

***Intensity of shifts and changes beyond daily practice***. While all participants expressed shifts and changes in their perceptions and emotional regulation during their practice and over the course of the intervention specifically relating to the transformation after practice from a negative stress orientation to a more positive one, an initial common issue that emerged was a concern as to whether or not these shifts would be permanent. Five of six participants indicated they were able to maintain the perception shifts beyond practice into the next day; however, all expressed that they realized without regular practice these shifts would more than likely return to baseline. Participants described their shifts as significant as they had never had the experience of being in a space of internal negativity and within minutes were able to move out of that space into one of a more hopeful and positive space.

## Conclusion

One of the most significant findings of the study was the ability of the participants to move beyond personal vulnerabilities, fears, and executive culture to a place of acceptance which enabled them to accept themselves as they were without judgment in order to begin the process of building authentic awareness of self and others.

Participants in this study described a progression of ability in building awareness, activating a calming response which promotes a chain of responses including clear thinking, generating open heartedness, and experience beneficial consequences. The response chain is a progression of experiences and begins with the building of awareness and being present with whatever is triggering a negative response. The practitioner then becomes aware of and present to the beginning of the stress reactivity, noticing the changes taking place within, whether it is an elevated heartbeat, feelings of anger, frustration, rage, or something else. Once the practitioner is aware of the stress reactivity they can then activate the calming, grounding response which involves breathing and relaxing the body. This grounding response allows for clear, insightful thinking and open-hearted feeling followed by a compassionate response resulting in beneficial and positive consequences (Duke Integrative Health, 2014, p. 97; see Figure 1).

Participants in the study also described an enhanced ability to be with themselves as a witness to their own experiences during mindfulness practice. As a result, they were better able to pay attention without judgment, noticing how they were feeling in their bodies, their emotional state and whether or not they were judging themselves in the moment. Participants reported that this noticing and enhanced awareness of what was occurring within and outside of themselves assisted in the shifting of negative emotions to more positive ones. It is this type of noticing which refers to "the immediacy with which something is grasped and which precedes all interpretation, reworking and communication" (Gadamer, 1975, p. 61). Often, shifts occur which participants cannot immediately put words to but those participants are certain of a shift. According to Hölzel et al. (2011), at the core of mindfulness practice (from a neurological and theoretical

perspective) the ability to experience perception shifts is reliant upon the mechanisms of attention regulation, body awareness, emotional regulation and change in perspective regarding the self. Hölzel et al. suggested that once inner and outer experience allows for sustained attention then mindfulness practice can actually begin to have positive effects because the practitioner is able to notice a stimulus that interferes with present-moment awareness. When this happens the practitioner becomes aware and takes notice of the cognitive and or physiological response of the interfering stimulus. When the practitioner becomes aware of the interfering trigger they can then activate an emotional regulation process which identifies the trigger as an event of the mind that is separate from the self (Hölzel et al., 2011). Practicing mindfulness to the extent where benefits are derived requires building of what Jeff Brantley (Duke Integrative Health, 2014) called the "Response Chain."

As evidenced by the results, each of the six participants in this 8-week mindfulness coaching study found the intervention of significant value as a HLE in their desire to increase the ability to manage stress, experience heighten awareness concerning their internal and external landscapes, become more comfortable with accepting life as it comes, and experience living awake with enhanced moment-to-moment awareness. All six participants have indicated an interest in continuing their mindfulness practice and have expressed the desire to work with a coach in addition to practicing on their own.

# CHAPTER 5: DISCUSSION

> I have an awareness that I never had before. I see there is a different way to eat and walk and breathe. I see that eating mindfully is unlike every other meal I have ever eaten. Walking a short path mindfully is vast—more expansive than world travel. I see belatedly that everything I need to have including peace is right there inside, where it was all along, undiscovered. (Participant MIO3)

## Mindfulness and Responding Versus Reacting

Mindfulness is essentially a word used to describe the state of awareness. The concept of mindfulness was theoretically divided into two constructs by Bishop et al. (2004). The constructs were: the self-regulation of attention and the attitude of openness, curiosity, and acceptance. Participants who were part of the study found themselves immersed in the building awareness about how their reactions to the dynamic environments in which they work, situations they encounter on a daily basis, and individuals they interact with regularly have caused discomfort and unrest. They also learned during the intervention how to utilize mindfulness to respond to crisis and negative stressors in a deliberate, calm, and nonjudging manner in order to alter the perception of difficulty concerning work and life experiences. Participants came to experience mindful moments which created opportunity for transcendence to impact how they experienced stressful situations and negative moments.

Participants also learned how to practice mindfulness and experienced a shift in perception of difficulty and struggle regarding daily worklife, thus benefiting from the change in physiological responses, behaviors, and other body changes. Kabat-Zinn (1990) described how mindfulness practice assists in diminishing our inclination toward reacting to negative stressors and negative habitual thought patterns and enhances our ability to respond to triggers using self-regulation, openness, and acceptance of what is without judgment. Arousal acts as a trigger related to external events, thoughts, feelings,

and bodily sensations. Those triggers emerge as a result of the stories we tell ourselves, and how we interpret those story, assumptions, and beliefs.

According to Kabat-Zinn (1990), the path of reacting produces an increase in heart rate, quicker blood pressure, shallower breath, adrenaline output, and other physiological responses. Reacting to stressors also jettisons negative emotions and feelings and increased physical symptoms such as headaches, anxiety, and negative thoughts. Many of the participants of the 8-week mindfulness coaching intervention expressed physical symptoms and negative emotions/body changes when talking about reacting to negative stressors. Elements of the intervention, specifically, learning through mindfulness practice supported the participants to connect with their innate capacity and to observe and recognize what was happening inside and around them as it was happening to them. Participants learned to be fully present on purpose.

Results of the intervention demonstrate participants beginning to shape the quality of their lives on purpose. The ability to respond with deliberation and intention in a way that supports nonjudgment and acceptance creates a path of responding that may have positive physiological effects on the body. It allows for milder autonomic activity and improved recovery from stress. There is more awareness and understanding of the body's reaction to stress and a decrease in negative feelings and symptoms. Behaviors can transition from passive, aggressive, passive-aggressive, or withdrawal to assertive communication, healthy self-soothing, and greater attention to self-care (Kabat-Zinn, 1990, p. 264; see also Figure 3).

| PATH OF REACTING | PATH OF RESPONDING |
|---|---|
| **Physiological Responses**<br>Increased heart rate, BP, quicker/shallower breath, adrenaline output, dryness of mouth, tightening of muscles, decreased blood flow to internal organs/GI tract, poorer immune function | **Physiological Responses**<br>*Milder* autonomic activity, enhanced sensitivity and improved recovery |
| **Feelings and Other Body Changes**<br>Negative emotions (mad, sad, fear), increased physical symptoms (GI, high BP, headaches, anxiety, etc.) negative thoughts | **Feelings and Other Body Changes**<br>Briefer increase in feelings and symptoms, but also awareness and understanding of the body's reaction (emotion, muscle, tension, breathing) awareness of full context of events, recognition of options |
| **Urge to Action**<br>Driven by strong emotions, discomfort in the body, and negative habitual thought patterns | **Urge to Action**<br>Informed by emotions but mediated by awareness |
| **Behavior**<br>Passive, passive-aggressive, aggressive communication; withdrawal, striking out, substance abuse, suppression of feelings, overworking | **Behavior**<br>Assertive communication, healthy self-soothing and self-care, appropriate problem-solving |
| **Implications for Experiencing Future Stress**<br>Stress continuation: chronic hyperarousal, continuation of stress reaction cycle | **Implications for Experiencing Future Stress**<br>Stress reduction: quicker recovery of mental and physical equilibrium |
| **Long-Term Outcomes**<br>Breakdown: Physical/psychological exhaustion, anxiety, depression, increased susceptibility to illness (cancer, heart attacks, etc.), deterioration in relationships | **Long-Term Outcomes**<br>Personal and interpersonal growth: confidence in coping abilities, sense of mastery, greater peace of mind, greater self-understanding and understanding of others, capacity to help others cope |

*Figure 3.* Coping with stress: Reacting versus responding. From *Full Catastrophe Living* (p. 264) by J. Kabat-Zinn, 1990. New York, NY: Dellacourt.

*Note*. Event/Stressors: (external events, thoughts, feelings, bodily sensations); Perception of difficulty/Arousal begins; Story (story we tell ourselves, interpretations, beliefs, assumptions)

**Moving from Negative to Positive**

Study participants described the transition directly after practice and some even far beyond the practice period to moving from a negative orientation about their work, crisis, relationships, and self-esteem to a more positive outlook and orientation. An example of this was made clear by participant MI02 as she described how the shift in her emotions after practice and beyond has increased her coping with life.

> Because I have learned to be aware of my emotions without judgment, I have a greater ability to cope which takes me into a greater place of peace. I am moving into a peaceful place quicker and staying there longer. I am more aware of the outcome if I do not engage a peaceful experience beyond the practice period. The affects go beyond the practice period, I take the affects home with me and now have a new awareness of taking care of me.

Participant MI03 described how awareness is sometimes painful for her but necessary and how she has learned to accept it.

> Some of the self-awareness is painful. I see more clearly what I could become, and how beneficial that would be to others I interact with. I see in painful clarity that only I can help myself distress and eventually live a life where calm reflection is my modus operandi and not an exception.

All participants described a greater ability after the intervention to focus awareness, an ability that each felt will serve them well going forward.

**Educational and Experiential Session**

While all of the coaching sessions contained some level of customized opportunity for deepening learning about the process of mindfulness and having participant questions answered about tenets and constructs, the first session which preceded the coaching sessions was specifically designed to introduce participants to the theoretical and educational concepts of mindfulness as well as provide an initial experiential period of practice for them.

During the initial 90-minute session, participants were provided with an educational experience to learn about mindfulness, the history and science behind the practice and then had the opportunity to practice with the coach. Participants also reviewed the materials and instrument that were given to them to use during the intervention. Participants were strongly encouraged to use the *Mindfulness Stress Reduction Workbook* by Elisha Goldstein and Bob Stahl and the HeartMath *Voyage to Heart Intelligence* and were given weekly assignments from the book between coaching sessions. In addition, participants were told that the EmWave PSR instrument (a biofeedback tool) was to be used as needed or desired to see how their body responded in real time after a mindfulness session and beyond. The EmWave records any shifts in synchronicity of the autonomic nervous system resulting in changes in heart rate variability (space between heartbeats).

Four of the six participants found the exercises in HeartMath Voyage to Heart Intelligence highly beneficial, particularly the heart breathing exercises. Learning to breathe from and into the heart resonated with these participants and they found it a grounding exercise which assisted in quickly calming them and getting their focus back on track.

All six participants found the educational component of significant value and particularly appreciated the scientific data on mindfulness. For example, participant MI04 stated,

> I was really intrigued with learning about how our brains work and that the left hemisphere is associated with rational analytics and logical process where as the right hemisphere is associated with nonverbal awareness thought and visual/special perception and the expression of emotions. I appreciated the fact that regular mindfulness practice can help us shift towards the right brain hemisphere and bring about a calm state. The body is amazing.

Three of the six participants found the EmWave useful. The other three felt they did not have the time to utilize it to their benefit but would find time after the intervention to explore its use and relevancy.

Participants shared they felt the duration of the intervention was not long enough. Each participant expressed—in one form or another—that a longer intervention, perhaps four or five months would have been helpful in assisting them in cementing their practice. They were new to mindfulness and still in the beginning stages of understanding the impact of their lived experience and how and why the benefits of mindfulness can be sustained if practiced regularly. All six participants indicated an interest in continuing with their practice in some form or fashion.

### Disparities Between Maslach Burnout Inventory and Areas of Worklife Survey and Session Disclosures

Participants were administered the MBI and AWS prior to their first official coaching session. Four of six participants described themselves as having manageable stress in their work lives, workload as not overwhelming, and had a generally good sense of wellbeing. However, within each of those participants' coaching sessions, participants began to describe circumstances relating to poor stress response, negative triggers, and the need to enhance relationships and wellbeing as needing intervention upon building trust with the coach. Essentially, the MBI results were dissimilar from participants' session responses, pre- and postsurveys, and other measures used to assess their states in the intervention.

The MBI was the only instrument used at the beginning of the intervention which was not administered post-intervention. Consequently, the researcher/coach theorized that participants had not yet developed trust with the researcher/coach and were still

acculturated within their paradigm of nondisclosure (see Figure 2). Consequently, to avoid appearing vulnerable to the coach, participants may not have provided full disclosure. Conversely, as one participant shared, self-awareness was not a very strong ability within their professional career, whereas fear and ego were. These four participants may have subconsciously bolstered their current status at work related to wellbeing, stress, and managing triggers because they were not in tune or aware of how they actually felt and, therefore, may have been detached from their current reality. One participant stated,

> I had developed an inflated ego of myself to make me feel stronger and better, I didn't realize it until the coaching sessions. It didn't work, but I tried to make myself believe that I was okay with myself, competent, and in charge. All the while I was as vulnerable as heck.

What appears to have happened during the study was that as participants' real time awareness of self—both internal and external landscapes—increased, fear diminished, they became more open, calmer, and kinder to themselves and others, and were more open to sharing their thoughts and feelings. Fear, which was a big motivator for nondisclosure, guarded communication and anticipation of negative outcomes, began to diminish as participants connected with moment-to-moment experience, without judging themselves or others and opening up to experiencing true reality which is seeing the unfolding of moments as they occur. Hafiz ("The Gift," 1999) has said "Fear is the cheapest room in the house. I'd like to see you in better living conditions" (p. 39). Being able to reduce fear allows one to live more fully; conditions are better and life becomes rich.

**Additional Coaching Support: Presencing and Other-Focused Listening**

Participants shared that they experienced a general sense of calmness as the coach continued to assure them that there was no wrong way to practice. Participants seem to need this reassurance that the coach provided. Mindfulness and integrative coaches are called upon to be fully present in their work with the client. The researcher, whose role with the participants was to coach them through the intervention, found that the attitudes of acceptance, openness, and deep curiosity were all necessary elements in working with each participant and being sensitive to the individual needs during the study. These attitudes assisted the coach in *presencing,* which is the ability to be focused on the client and the coaching relationship. The skill of presencing allowed the coach to be intentional with the client and to create an empowering, fully engaged, and deep connection with the client (Duke Integrative Health Manual, 2014). Participant MI06, when describing the coaching experience of this intervention, emphasized:

> Thank you for allowing me to participate—it was a fantastic experience to pair with my 12-step program. Even though the coaching took place by telephone, I felt heard and understood, I felt the coach was engaged with me. The fact that we were using the telephone did not matter in this case.

The coach also engaged in *other-focused listening*. This particular listening style requires the coach to be present and in the moment in order to fully hear and focus attention on the client (Duke Professional Training Certificate Manual, 2014). When a coach is utilizing other-focused listening he or she is open to the possibilities of the client that exist but have not yet been stated. The coach embraces an attitude of curiosity and remains open about what the client will say without judging, assuming or directing. The role of the mindfulness coach is to act as a flashlight and illuminate the issues the client

wants to address. Participants to the study responded well to the coach's support as per their responses. Participant MI03 stated

> The coaching piece of this process was huge. For a beginning practitioner, as lovely as the practice appears to be, for beginners it is not enough to stay committed without a coach who was there to support me no matter what challenges I presented, is warm, engaging, listened well and was filled with anecdotes and humor.

**Improved Stress Hardiness**

Participants appreciated their enhanced ability to move to a place of better stress management during the intervention. While some participants indicated they had a ways to go, all participants said they noted there were differences in how they felt about stressors and how they processed those stressors. Participants posited they had increased their ability—on some level—to look at the triggers that were negative in orientation to a more positive perception of themselves that included a more positive view of their strengths, increased level of control over their lives, and their enhanced ability to be present. In essence, they had developed some level of stress hardiness.

These differences support Kobasa's theory of stress hardiness which she described as a set of "beliefs about oneself, the world, and how they interact…which takes shape as a sense of personal commitment to what you are doing, a sense of control over your life, and a feeling of challenge" (Kobasa, Maddi, & Kahn, 1982, p. 45). In assessing the change in stress management, participants described the following differences since the intervention:

- Self-awareness had increased;
- Slower to react and heightened awareness of how they needed to respond in a more deliberate nonjudging manner;
- Increase in awareness of what physical symptoms were arising as a result of stress;

- Increased knowledge in how to counter stress and the ability to practice in doing so; and
- Increased self-kindness and compassion.

Being able to identify with their ability to see stress no longer as an insurmountable barrier, but rather as a pliable, malleable, and changeable challenge, allowed participants to feel hopeful and less doubtful of possibilities for a brighter outcome.

## Overarching Themes and Their Relevance to Mindfulness Practice

As presented in Chapter 4, there were overarching central themes from baseline, follow-up surveys, and interviews. These themes seemed to be interconnected and in some ways acted as bridges one to another. The central themes continually discussed by participants during the intervention were work stress management, acceptance, and heightened awareness. Those emergent themes and associated data are discussed next.

### Work Stress Management

According to a study by the American Institute of Stress (2001), in aggregate, job stress is very costly and carries a price tag estimated at over $300 billion annually for the U.S. economy. Not only does the stress cost the bottom line of a corporation but it also has cost to the individual working for the company. Recidivism rates increase, trust, cohesiveness among and between teams are diminished, individuals experience fear related to job safety and security, and employees sense of wellbeing can erode both within the workplace and outside in other relationships.

What is critical in order to have a workplace that can be managed competently are leaders who understand their emotions, values, and intuitions and use that knowledge to make decisions as well as accurately read and respond to other people's emotional states

in a very caring and deliberate way. Managing of emotions is critical for an efficient workplace and team. Deci and Ryan (2002) described emotions as

> the source of energy that facilitates people's innate striving for psychological need fulfillment. Healthy emotional regulation request internalization of the regulatory processes in a way that will permit awareness of the feelings and satisfaction of basic needs that are associated with reflective regulation. (p. 558)

In essence, it is about developing awareness before anything needing a shift can change.

All participants found—on different levels—that the stress response was an issue for them. In order to have identified that negative stressors in the workplace are an issue, there had to exist a sense of clarity and some level of reflection and awareness. The innate ability to identify issues and problems with self and environment, even if the self-diagnosis of the issues is skewed, appears to speak to the capacity of human beings to self-reflect. Mindfulness practice allows for the clear seeing not thwarted by assumptions, judgments, and mental heuristics. When emotions are regulated in a healthy way through the processes of awareness, then HLEs are better equipped to manage others in the workplace, negotiate with vendors, and partner in relationships with others including superiors with thoughtfulness and compassion, demonstrating true leadership.

Clear seeing is essential in making the transition from living in the past or the future to living awake. Seeing life clearly as it unfolds requires changes in attitudes. Kabat-Zinn (1990) posited that mindfulness practice contains an attitudinal foundation that creates the potential for change in human beings. Mindfulness practice also requires a commitment for continued practice to experience long-term results. Participants began to practice all of the foundational attitudes over the course of the study. Those attitudes include:

Nonjudgment is about being an impartial witness to one's own experience. To be able to stop judging, one must be able to see clearly the constant barrage of judging and reacting to experiences both inside and outside of us that one is normally engaged in. Kabat-Zinn (1990) described that the kind of attention that does not engage judgment can create more clarity, awareness, and acceptance of present-moment reality. If we are not fully present without judgment we often fail to realize the richness and the depth of our potential to transform and grow (Kabat-Zinn, 1990). Learning to step back from all of the judging is the attitude that needs to be adapted in order to open oneself to physiological, emotional, and cognitive changes. Becoming aware of the automatic judgments and fears can help one experience a deeper sense of wellbeing and can change the way in which one works with others.

Patience demonstrates that one is in a place of understanding and acceptance about the fact that things change and unfold in their own time. We learn through mindful practice that each practice period may not have the outcome one had hoped for. Cultivating patience is a process. The process of learning patience teaches one not to rush through moments to get to those that are more palatable, as "every moment is your life in that moment" (Kabat-Zinn, 2009, p. 34). Participant MI03 described the moment she began to become aware of who she was and who she could be, and how the person she had the potential to become would be of service to others:

> Some of the self-awareness is painful. I see more clearly what I could become and how beneficial that would be to others I interact with. I see in painful clarity that only I can help myself distress and eventually live a life where calm reflection is my modus operandi and not an exception.

This participant talked about the need to be more patient and loving with herself as the way to make the valuable transition to her best self.

Beginner's Mind makes clear that the richness of each momentary experience is really all about the richness of life itself. No moment is the same as another and beginner's mind reminds one that each moment is unique and contains possibilities that are unique.

Trust is an integral part of mindfulness training and practice. It relies on the individual beginning to develop a basic trust in their feelings and in themselves. To be able to trust oneself and one's basic wisdom allows the practitioner to cultivate an ease in trusting other people and seeing their basic goodness as well as one's own. Participant MI05 describes that she is since practicing trusting herself more and "not as reactive with others. I listen actively without formulating an immediate response."

Nonstriving is about "non-doing." This attitude presents a true challenge for most people, even more for HLEs. Striving is part of the human condition on many levels. We do everything for a purpose to achieve something, to go somewhere, to be better than the other person, and so on. Nonstriving "has no goal other than you to be yourself" (Kabat-Zinn, 2009, p. 36). The attitude of nonstriving assists practitioners in seeing themselves in a new and different way, where they are trying less and actually being more. One simply acknowledges what exists in the moment and just watch it. It is about "allowing anything and everything that we experience from moment to moment to be here, because it already is" (Kabat Zinn, 2009, p. 36). The foundation here is about seeing and accepting things in the moment just as they are and be alright with it. Participant MI01 expressed that he felt the most benefit received from the 8-week intervention was in the aspect of nonstriving,

> It was okay to just see and accept without trying to change things in the moment. That took the heat off me as I am so into trying to fix and change things. It was a relief and felt delicious.

Having the pressure off to just observe and accept allows for more openness because one is not constantly pulled into judging self and becoming defensive.

"Letting go" is about nonattachment and is a basic practice of mindfulness. Through the practice of mindfulness and the beginning of cultivating attention and awareness one learns that there are certain situations, feelings, and thoughts that our mind wants to hold on to. Of course, if the thoughts are happy and pleasant we want to hold on to them. If the thoughts are painful, we want to get rid of them. "Letting go" in mindfulness practice requires that one not elevate aspects of experience to reject others. Instead, one simply experiences what is and, as said previously in this chapter, just observe as moments unfold. Letting things be without trying to change them is a way of letting go. Participants in this study frequently discussed the difficulty of letting go, but found that with continual practice they were able to simply observe without judgment and found that the letting go process provided them with opportunities to relax more in the moment and experience less fear. Participants indicated that employing all of the mindfulness attitudes greatly supported their desire to experience a practice that yielded results.

**Commitment**

Another aspect of mindfulness practice that is important to practitioners in order to move to a place of seeing not just moments of differences but hours, perhaps days of enhanced wellbeing, is to be able to commit to practicing regularly. Commitment was a common theme for participants to this study and all said that if they did not have the level

of commitment they could never have stuck with the process. As participants began to develop a sense of commitment, they also developed a practice regimen; they began to notice that when they missed either an informal or formal practice session, they really longed for the next opportunity to experience the practice. Participant MI04 talked about the importance the practice had become in her life. She stated, “I will continue practicing into the future in order to achieve the highest level of well-being as well as emotional and physical health.” MI03 in the same vein commented, “Now that I have a glimpse of what life can feel like, I intend to keep going there to find it.” Commitment is an essential core element of seeing consistent change.

**Heightened Awareness**

When participants level of comfort increased and they began to disclose their difficulties within their work environment, including triggers that seemed to be responsible for physiological, emotional, and behavioral reactions, all six indicated a need to see things as they were in order to experience change. This understanding that awareness is key to transformation is a basic tenet of mindfulness practice. As participants became familiar with mindfulness practice and diligent in their commitment to practice both formally and informally, they indicated an enhanced ability to be a witness to each experience in a way that seemed to slow time down.

What is important to understand is that an executive’s competitive edge is not diminished by stopping, slowing down, paying attention on purpose. In fact, mindfulness assists in focusing attention and weakens negative tendencies of habitual thinking, distraction, fear, and worry; and, as a result, acceptance becomes easier as nonjudgment becomes a nonissue. Participants indicated as their practice continued their attention and

focus were enhanced, they were able to let go of distractions and just rest in the moment, felt calmer, and were able to accept things as they were without fear or worry and in a more relaxed manner. The science around mindfulness and focused attention indicates that brain alpha waves increase, the metabolism functions more efficiently, and the relaxation response is activated when attention is heightened during practice (Duke Integrative Health Manual, 2014).

An integral part of heightened awareness participants discussed during the course of the intervention, was in their ability to appreciate their personalities without judgment, their individual strengths, and all of their experiences. In describing the appreciation for self and others, participant MIO3 explained,

> Not only do I now have a need to practice every day and take the time to do so, but I am also compelled to notice that yes my life was good to start with but I am much more away of the good in myself and the good in others and this has impacted by my ability to live without fear of others or the dark thoughts that sometimes come.

Heightened awareness was also evident in participant sessions by their descriptions of how awareness was bringing more clarity to their state of being, circumstances and sense of wellbeing. Participant MI05 shared,

> What is really interesting is that through mindfulness practice I am noticing things that are really uncomfortable to me. I am noticing the waves of my emotions, the ups and down of them. But I am noticing them in a way that I'm not judging myself….I find that I am noticing a lot more of how I feel about things and perhaps how the other person is feeling.

For participants, it appeared, there was comfort in the process of observing, becoming more aware of actual reality without judging, but rather with a sense of curiosity and kindness. Focusing attention in this way opens the door for comfortable acceptance— rather than avoidance—of life as it is no matter how uncomfortable the circumstances,.

**Acceptance**

Denying and forcing seem to be part of the human condition. This tendency to deny what actually is and force situations to be the way we want them to be can actually cause tension, a sense of "dis-ease" or a diminished sense of wellbeing which might cause difficulties in the way we view ourselves and our relationships with others. Kabat-Zinn (2005) suggested that the denying and forcing demonstrates lack of awareness and intentionality. It also depletes us so that we have very little energy left for healing and growing. Acceptance is about taking every moment as it comes and being with it (Kabat-Zinn, 2005, p. 38). It is about coming to a place of willingness to see things as they are. As an executive, when one has a clear picture of what is actually happening, there is a greater possibility of knowing how to respond without self-judgment and fear.

Participants in the study talked about the value of acceptance in their shifts of perception, enhanced outlook, and sense of wellbeing, and in how they saw themselves and their strengths as well as their relationships. After living life at full speed, taking very little time to accept things without a desire to change them, MI02 shared how the attitude of acceptance has enhanced all aspects of her personal and professional life and her relationships. "I am also beginning to become more open to seeing things as they currently unfold without judging them. This is giving me a doorway into the process of acceptance of myself, others and conditions that are out of control."

To experience the full benefit of acceptance, one should not force what one might be feeling or thinking; instead, one is simply open to what is coming and is curious as it comes. Acceptance simply means that you come to a willingness to see things as they are. It is the ability to "slow down and nurture calmness and self-acceptance in yourself"

(Kabat-Zinn, 1990, p. 48). Participants expressed how important acceptance was to them in recognizing both strengths and weaknesses and being okay with it. It is acceptance, according to MI01, "that really calms me, teaches me compassion, kindness to both myself and others I interact with. I see things better because I have accepted them as they are not as I would want them to be."

One participant shared that prior to the intervention, he had an issue with self-love and found that they were very hard on themselves. As participants moved through the intervention they learned through the process of acceptance, focused attention, and reflection that they were worthy of love and that they had made some significant contributions to their profession. Seeing clearly was freeing for this participant and in some ways was a painful awakening particularly because they had never accepted themselves in this way before.

The overarching themes which emerged during the study, inclusive of work stress management, heightened awareness and acceptance were all conditions which participants understood to be of significant importance in improving the overall quality of their lives. They were identified as areas of change that participants wanted to continue to focus on and maintain beyond the duration of the study through ongoing mindfulness practice.

## Limitations and Research Issues

Research on the transpersonal effects of an MBSR intervention particularly focusing on business leaders and HLEs in the workplace, is becoming a point of interest, but research remains sparse. Existing data on impact focus more on clinical rather than nonclinical populations (Linger, 2012).

**Will Benefits Fade?**

The results of this dissertation research suggest that the mindfulness-based coaching intervention protocol supported changes and/or shifts in two or more of the transpersonal areas the participants were looking to change. However, more research is needed to delve deeper into discovering the ongoing hardiness of the shifts and changes as participants continue to practice mindfulness or determine if these changes and shifts are only temporary if practice becomes less or nonexistent.

**Opportunity for Longer Intervention**

Participants in the current study were new practitioners without mindfulness practice in the past. Because the intervention was 8 weeks from start to finish, most of the participants felt that they would have benefited from a longer intervention. It was generally thought that a 4 to 6 month personal coaching intervention would have been valuable as it relates to their ability of building a stable practice routine that could not easily be broken due to outside influences or pressures.

**Ethnic Diversity Issues**

Socio-economic status was not a significant limitation in this study as most HLEs in powerful positions can be assumed to draw significant revenue. The researcher would have preferred to work with a larger number and a more diverse group of participants. Five of the candidates were White and one was Black. Although the participants ranged in ages and life experiences, the primary ethnicity of the participants was White. Engaging more candidates from a variety of ethnic backgrounds would lend a broader perspective on how each comes to experience mindfulness and provide a richer exchange

about how problems and successes are seen, acknowledged, and acted upon based on the individual's background, values, and upbringing.

**Coaching Accountability**

This protocol required a significant commitment, a consistent weekly practice, and a coaching call every week. Despite their commitment to the process, participants could have become too busy with other life events and may not have been able to stick to the protocol. This was a concern of most participants in determining whether they would be a fit for the intervention. Once participants decided on their own that they would be able to stick to the protocol and agreed to participant, the researcher acted as an accountability coach, gently keeping participants on track and anticipating difficulties that may have interrupted their practice by asking each participant what they anticipated as a potential barrier in the coming week and working together to create space for the participant to maintain their practice between sessions.

What became increasing clear during the intervention was that the role of a mindfulness coach in this context is invaluable. The coach is responsible to keep a balance, hold participants accountable for sticking to their practice and homework; yet, leave a safe space for participants to admit that a week did not go as well related to their practice. Having the opportunity to talk about what did not work well in a safe space can provide both the coach and the participant with an advantage to manage any difficulties together that may present in the weeks ahead which could in turn keep the participant from being successful in their practice and living mindfully.

# Conclusion

## Full Compliance to Study Protocol

Participants in the study identified the need to make changes to their lives as HLEs in dynamic environments. While all of these participants had no previous mindfulness practice experience, they were all committed to participate and all six were in compliance with the study criteria throughout the 8-week intervention. The researcher was initially concerned regarding their ability to be compliant given their busy lifestyles. While the researcher acted as an accountability coach, gently keep participants on track and anticipating difficulties, all participants kept their coaching appointments and if changes in schedules needed to be made, would call in advance to schedule a new time for the session.

## Clear Benefit From Humanistic and Transpersonal Aspects of Mindfulness

During the study period, it became clear that these HLEs who worked in dynamic environments—whether they enjoyed their jobs or not—had certain challenges that required the ability to respond without thoughtless reaction, manage relationships, balance emotions, manage work and personal time, and find a way to respond to stress that would not require a change in career.

Participants were able to benefit from the humanistic and transpersonal aspects of the intervention in meeting their needs to better manage stress, shift perceptions around stressors, better manage and regulate their emotions, see themselves through a lens of competency, love, and kindness thus impacting their relationships both in the workplace and in their personal lives.

**Diverse Sample**

The participants in this study were a nonclinical population. They were diverse in terms of gender, life/work experience, but not ethnicity; the overall diversity lent credibility to the study in demonstrating that HLEs share commonalities related to the conditions that cause a diminished sense of wellbeing and produce stress and those mindful experiences that allowed them to shift to a more positive orientation evidenced by their description of new perspectives, new behaviors, and the ability to make different choices that occurred as a result of the intervention. As mentioned previously in this chapter, a larger study group and more ethnic diversity would have provided a broader perspective and cross-analysis on the application of mindfulness in the lives of ethnically diverse participants.

**Sparse Research in Area of Study**

Even as research continues to emerge concerning the impact of mindfulness practice and meditation on corporations' bottom line as well as the impact on employee performance, there exists a gap in research regarding the transpersonal aspects and benefits of mindfulness practice. The researcher hopes that the results of this dissertation contribute to the research on the transpersonal aspects of mindfulness tenets. This research study was steeped in exploration of experience and inquiry and lent itself well to the goals of human science which is charged with studying experiences and personal constructs in relation to human beings for developing bodies of knowledge which are cross-cultural in orientation.

**The Human Science Perspective: Mindfulness and Lived Experience**

*"The world is not what I think, but what I live through."*

(Merleau-Ponty, 1962, p. xvi)

Human Science is a discipline and a practice that interprets "meaningful expressions of the active inner, cognitive, or spiritual life of the human being in social, historical, or practical contexts" (van Manen, 1990, p. 37).

Within the Human Science tradition, human experience is the basis for qualitative research. Dilthey (van Manen, 1990), Husserl (1970) and Merleau-Ponty(1962), described the lived experience as the intent to explore the originary or prereflective dimensions of human existence. Dilthey (as cited in Van Manen, 1990) described "lived experience" as a reflexive or self-given awareness that lies innately within our consciousness silently investigating life as we live it. Dilthey further explained that only in our thoughts does the lived experience become objective (as cited in Van Manen, 1990, p. 223).

The lived experience is really about "a certain way of being in the world," and it concerns itself with two phenomena. First is "a preoccupation with both the concreteness (the ontic) as well as the essential nature (the ontological) of lived experience" (Magrini, 2012, p. 3). Considering how one exists in the world by considering the essential nature of their experience as well as its concreteness allows one to view the self holistically.

The spirit of inquiry and exploration of the lived experience was present during and beyond the mindfulness coaching sessions between coach and participant reaching into the daily lives of the participants. Because participants were not experienced practitioners, they engaged in a process of self-inquiry as they developed their practice

and were able to articulate what changes were occurring as a result of their practice. They asked themselves questions on a regular basis as they experienced their practice, such as, "What am I feeling? What am I saying to myself? What thoughts am I experiencing? What is coming up for me? How are things within and outside of me moving and shifting." These questions were answered without judgment but rather with curiosity and kindness.

Husserl (1970) suggested that it is an act of consciousness wherein meaning is given in intentional experiences. He further posited that "All knowledge begins with experience, but it does not therefore arise from experience" (p. 109). Experience, in Husserl's view, can be understood in an active sense as "an act of consciousness in appropriating the meaning of some aspect of the world" (Husserl, 1970, p. 109). When a person has experienced something in awareness, this experience can result in self-reflective and meaningful nuances which can add new dimensions to one's life.

The process of transpersonal inquiry in this study allowed for self-reflection and discussion about how each participant's identity of self extended beyond themselves as an individual to include extended aspects of others, humankind, and cosmos (Walsh & Vaughan, 1993). Human science promotes the autonomy of ideas and choice in how we act as human beings (Polkinghorne, 1983), as evidenced by the way in which participants came to identify and become familiar with the changes and shifts on an individual basis. Although there were commonalities between participants' experiences, each participant had relevant connections to make regarding the changes to other aspects of their human experience that were personal and individualistic in nature. Gadamer (1975) suggested that there are two dimensions of meaning to lived experience: the first is the immediacy

of the experience. The second is the content of what is being experienced. Participants to this study engaged in both dimensions having been new practitioners to the experience of mindfulness. The shared recounting of their experiences both as it relates to the immediacy of the experience and the content of the experience was the basis for their self-reflection and growth during this intervention.

**Desire to Continue Practice**

All six participants related that the mindfulness coaching intervention was one that brought about significant shifts in three or more areas of change under investigation in this research. What was markedly clear is that participants felt that the coaching aspects of the intervention allowed them to stay on task and follow through. All participants have indicated a desire to continue with mindfulness practice. Most participants felt that if they did not practice on a regular basis they would not be able to sustain the benefits they had experienced during the intervention.

## REFERENCES

Ackerman, S. (1992). *Discovering the brain*. Washington, DC: National Academic Press.

Adams, J. D. (1980). On consuming human resources: Perspectives on the management of stress. In W. B. Eddy & W. W. Burke (Eds.), *Behavioral science and the manager's role* (pp. 75-90). San Diego, CA: University Associates.

Adams, J. D. (1981). Health, stress and the manager's lifestyle. *Group and Organizational Studies, 6*(3), 291-302.

Adams, J. D. (1990). Creating and maintaining comprehensive stress-management training. In L. R. Murphy & T. F. Schoenborn (Eds.), *Stress management in work settings* (pp. 87-100). New York, NY: Praeger.

Adams, J. D. (2007). *The business case for stress management and health protection programs in the workplace*. Unpublished manuscript.

Adams, R. L. (2011). *Examining the effects of mindfulness-based stress reduction (MBSR) training on working adults* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (AAT No. 3444928)

Agarwal, R., & Karahanna, E. (2000). Time flies when you're having fun: Cognitive absorption and beliefs about information usage. *MIS Quarterly*, *23*, 665-694.

American Institute of Stress. (n.d.). Workplace stress. Retrieved from http://www.stress.org/workplace-stress/

American Institute of Stress. (2001). *Attitudes in the American workplace VII*. Retrieved from http://americaninstituteofstress.org/wp-content/uploads/2011/08/2001Attitude-in-the-Workplace-Harris.pdf

American Psychological Association. (n.d.). *Stress in the workplace*. Retrieved from https://www.apa.org/helpcenter/workplace-stress.aspx

Anderson, D. R., Serxner, S. A., & Gold, D. (2001). Conceptual framework, critical questions, and practical challenges in conducting research on the financial impact of worksite health promotion. *American Journal of Health Promotion, 15*(5), 281-288. http://dx.doi.org/10.4278/0890-1171-15.5.281

Arloski, M. (2007). *Wellness coaching for lasting lifestyle change*. Duluth, MN: Whole Person Associates.

Armour, J., & Ardell, J. (Eds.). (1984). *Neurocardiology*. New York, NY: Oxford University Press.

Asset. (n.d.) In *Merriam-Webster online dictionary*. Retrieved from http://www.merriam-webster.com/dictionary/assets

Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice, 10*, 125-143.

Baer, R. A., Hopkins, J., Krietemeyer, J., Smith, G. T., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment, 13*(1), 27-45.

Baer, R. A., Smith, G. T., & Allen, K. B. (2004). Assessment of mindfulness by self-report: The Kentucky inventory of mindfulness skills. *Assessments, 11*, 191-206.

Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology, 22*, 309-328.

Bargh, J. A., Gollwitzer, P. M., Lee-Chai, A., Barndollar, K., & Trötschel, R. (2001). The automated will: Nonconscious activation and pursuit of behavioral goals. *Journal of Personality and Social Psychology, 81*, 1014-1027.

Barrios-Choplin, B., McCraty, R., & Cryer, B. (1997). An inner quality approach to reducing stress and improving physical and emotional wellbeing work. *Stress Medicine, 13*(3), 193-201. doi:10.1002/(SICI)1099-1700(199707)13:3<193::AID-SMI744>3.0.CO;2-I

Baumeister, R. F. (1999). The nature and structure of the self: An overview. In R. F. Baumeister (Ed.), *The self-in social psychology* (pp. 1-20). Philadelphia, PA: Psychology Press.

Baumeister, R. F., Zell, A. L., & Tice, D. L. (2007). How emotions facilitate and impair self-regulation. In J. Gross (Ed.), *Handbook of emotion regulation* (pp. 408-426). New York, NY: Guilford Press.

Bazarko, D., Cate, R. A., Azocar, F., & Kreitzer, M. J. (2013). The impact of an innovative mindfulness-based program on the health and well-being of nurses employed in a corporate setting. *Workplace Behavior Health, 28*(2), 107-133.

Bazerman, M. H. (2006). *Judgment in managerial decision making* (6th ed.). Hoboken, NJ: Wiley.

Bazerman, M. H., & Watkins, M. D. (2004). *Predictable surprises: The disasters you should have seen coming, and how to prevent them*. Boston, MA: Harvard Business School Press.

Beauchaine, T. (2001). Vagal tone, development and Gray's motivational theory: Toward an integrated model of autonomic nervous system functioning in psychopathology. *Development and Psychopathology, 13,* 183-214.

Beckham, E., & Beckham, C. (2004). A personal guide to coping: Coping with negative thinking. Retrieved from http://www.drbeckham.com/handouts/CHAP03_COPING_WITH_NEGATIVE_THINKING.pdf

Bedell, W., & Kaszkin-Bettag, M. (2010). Coherence and health care cost—RCA actuarial study: A cost-effectiveness cohort study. *Alternative Therapies in Health and Medicine*, *16*(4), 26-31.

Benson, H., & Klippner, M. (1976). *The relaxation response*. New York, NY: Harper.

Bermudez, J. L. (1998). *The paradox of self-consciousness*. Cambridge, MA: MIT Press.

Berne, E. (1964). *Games people play: The psychology of human relationships*. New York, NY: Grove Press.

Billikopf, G. (1994, January 12). Coping with grief in the workplace. *The Modesto Bee*, pp. G1, G3.

Billikopf, G. E. (2003). *Labor management in agriculture: Cultivating personnel productivity*. San Francisco, CA: Regents of the University of California.

Biofeedback. (n.d.). In *Merriam Webster online dictionary.* Retrieved from http://www.merriam-webster.com/dictionary/biofeedback

Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z., …Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice, 11*(3), 230-241. doi:10.1093/clipsy.bph077

Bohm, D. (2002). *Wholeness and the implicate order*. New York, NY: Routledge.

Bourgeois, L. J., III, & Eisenhardt, K. M. (1988). Strategic decision processes in high velocity environments: Four cases in the microcomputer industry. *Management Science, 34,* 816-835. doi:10.1287/mnsc.34.7.816

Boxberger, R. (1962). A historical study of the National Association for Music Therapy. In E. H. Schneider (Ed.), *Music therapy* (pp. 125-166). Lawrence, KS: The Allen Press.

Briner, R., & Reynolds, S. (1993). The costs, benefits, and limitations of organizational level stress interventions. *Journal of Organizational Management, 20*(5), 647-664.

Briskin, A. (1998). *The stirring of the soul in the workplace*. San Francisco, CA: Berrett-Koehler.

Broderick, P. C. (2005). Mindfulness and coping with dysphoric mood: Contrasts with rumination and distraction. *Cognitive Therapy and Research, 29*, 501-510.

Bromet, E. J., Dew, M. A., Parkinson, D. K., Cohen, S., & Schwartz, J. E. (1992). Effects of occupational stress on the physical and psychological health of women in a microelectronics plant. *Social Science and Medicine, 34*, 1377-1383.

Brown, D. (1977). A model for the levels of concentrative meditation. *International Journal of Clinical and Experimental Hypnosis*, *25*, 236-273.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*, 822-848.

Brown, K. W., & Ryan, R. M. (2004). Perils and promise in defining mindfulness: Observations from experience. *Clinical Psychology: Science and Practice, 11*(3), 242-248.

Brown, K. W., Ryan, R. M, & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry, 18*, 211-237. doi:10.1080/10478400701598298

Browning, L. D., & Boudes, T. (2005). The use of narrative theory to understand and respond to complexity: A comparative analysis of the Cynefin and Weickian models. *Emergence: Complexity & Organization, 7*(3-4), 32-39.

Burrows, G. (1995). Stress in the professional. *Subtle Energies, 4*(3)*,* 1-26*.*

Burrows, G., Norman, T. R., & Stanley, R. (1999). *Stress, anxiety and depression*. Frenchs Forest, Australia: Aldis.

Buss, A. H. (1980). *Self-consciousness and social anxiety*. San Francisco, CA: Freeman.

Caldwell, K.L., Gray, J., Wolever, R.Q. (2013). The process of patient empowerment in integrative health coaching: How does it happen. *Global Advances in Health and Medicine, 2*(3), 34-43.

Canadian Centre for Occupational Health and Safety. (2012). Workplace stress. Retrieved from http://www.ccohs.ca/oshanswers/psychosocial/stress.html

Caulfield, N., Chang, D., Dollard, M. F., & Eishaug, C. (2004). A review of occupational stress interventions in Australia. *International Journal of Stress Management, 11*(2), 142-166.

Capra, F. (1988). *The turning point: Science, society, and the rising culture*. Toronto, Canada: Bantam Books.

Carver, C. S. (1998). Resilience and thriving: Issues, models, and linkages. *Journal of Social Issues, 54*(2), 245-266*.* doi:10.1111/j.1540-4560.1998.tb01217.x

Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation: A control-theory approach to human behavior*. New York, NY: Springer.

Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health (NIOSH). (2010). *U.S. Bureau of Statistics on stress* (Publication No. 99-101). Retrieved from http://www.cdc.gov/niosh/data/

Center for Mind-Body Medicine. (2011). *Clinical manual*. Washington, DC: Author.

Chandola, T., Britton, A., Brunner, E., Hemmingway, H., Malik, M., Kumari, M.,… Marmot, M. (2006). Work stress and coronary heart disease: What are the mechanisms. *European Heart Journal, 29,* 640-648. doi:10.1093/eurheartj/ehm584

Chatjut, E., & Algom, D. (2003). Selective attention improves under stress: Implications for theories of social cognition. *Journal of Personality and Social Psychology, 85*, 231-248.

Childre, D., & Cryer, B. (2000). *From chaos to coherence: The power to change.* Boulder, CO: Planetary.

Childre, D., & Martin, H. (1999). *The heartmath solution.* San Francisco, CA: Harper.

Childre, D., & Rozman, D. (2002). *Overcoming emotional chaos*. San Diego, CA: Jodere.

Childre, D., & Rozman, D. (2005). *Transforming stress*. Oakland, CA: New Harbinger.

Chu-Hsiang, D. C., Johnson, R. E., & Lord, R. G. (2009). Moving beyond discrepancies: The importance of velocity as a predictor of satisfaction and motivation. *Human Performance, 23*(1), 58-80. doi:10.1080/08959280903400226

Cohen, S. (n.d.). Cohen Perceived Stress. Retrieved from http://podcast.uctv.tv/webdocuments/COHEN-PERCEIVED-STRESS-Scale.pdf

Cohen, S., Kamarck, T., & Mermelstein, R. (1994). Perceived stress scale. *Journal of Health and Social Science Behavior, 24*, 385-396. Retrieved from http://www.psy.cmu.edu/~scohen/globalmeas83.pdf

Cohen, S., & Pressman, S. (2006). Positive affect and health. *Current Directions in Psychological Science, 15*(3), 122-125.

Collen, A. (n.d.). *Advancing human science*. Unpublished manuscript.

Conner, D. (1996). *Leading at the edge of chaos*. New York: NY: Wiley.

Conze, E. (1956). *Buddhist meditation*. London, United Kingdom: Allen & Unwin.

Cooper, C., & Palmer, S. (2002). *Conquer your stress*. London, United Kingdom: The Guernsey Press.

Cooper, C. L., & Cartwright, S. (1994). Healthy mind, healthy organization: A proactive approach to occupational stress. *Human Relations*, *47*(4), 455-471. doi:10.1177/001872679404700405

Cortes, C. (1991, March). *Cultural shock: Managing a diversified workforce*. Presentation given at the Agricultural Personnel Management 11th Annual Forum, Modesto, CA.

Cotton, D. H. G. (1990). *Stress management: An integrated approach to therapy*. New York, NY: Brunner/Mazel.

Creswell, J. W. (2007). *Qualitative inquiry and research design*: *Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. London, United Kingdom: Sage.

Culbert, T., McCraty, R., & Martin, H. (2004). *New tools for stress reduction and emotional management: A practitioner's guide to application of the freeze-framer interactive learning system*. Boulder Creek, CA: Institute of Heartmath.

Dane, E. (2011). Paying attention to mindfulness and its effect on task performance in the workplace. *Journal of Management, 37*, 997-1018. doi:10.1177/0149206310367948

Davidson, R. J., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S.F.,… Sheridan, J. F. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine, 65*(4), 564-570.

Deal, J. (2007). *Retiring the generation gap: How executives young and old can find common ground*. San Francisco, CA: Jossey Bass.

Deci, E. L., & Ryan, R. M. (1980). Self-determination theory: When mind mediates behavior. *The Journal of Mind and Behavior, 1,* 33-43.

Deci, E. L., & Ryan, R. M. (2002). Overview of self-determination theory: An organismic dialectical perspective. In R. M. Ryan & E. L. Deci (Eds.), *Handbook of self-determination research* (pp. 554-564). Rochester, NY: The University of Rochester Press.

Deikman, A. J. (1982). *The observing self.* Boston, MA: Beacon Press.

Demaree H. A., Robinson, J. L., Everhart, D. E., & Schmeichel, B. J. (2004). Resting RSA is associated with natural and self-regulated responses to negative emotional stimuli. *Brain and Cognition*, *56*, 14-23.

DeMent, J. (1996). Managers, leaders, and teams in a team-based environment. *Hospital Material Management Quarterly, 18*(1), 1-9.

DeWitt, D. (1980). Cognitive and biofeedback training for stress reduction with university athletes. *Journal of Sports Psychology, 2*(4), 288-294.

Diener, E. (2006). *Understanding scores on the Satisfaction with Life Scale.* Retrieved from http://internal.psychology.illinois.edu/~ediener/SWLS.html

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life. *Journal of Personality Assessment, 49*(1), 71-75. doi:10.1207/s15327752jpa4901_13

Drabek, T. E. (1985). Managing the emergency response. *Public Administration Review, 45,* 85-92.

Duke Integrative Health Coach Professional Foundation Training course manual. (2011). Available at http://www.dukeintegrativemedicine.org/professional-training/ihcpt-foundation-course

Duke Integrative Health Coach Professional Training Certificate manual. (2014). Available at http://www.dukeintegrativemedicine.org/professional-training/ihcpt-certification-course

Duke Integrative Medicine. (2011). Wheel of health. Retrieved from http://www.dukeintegrativemedicine.org/about-us/wheel-of-health

Duke Integrative Medicine. (2014, Winter/Spring). Mindfulness Based Stress Reduction (MSBR) Foundation program course manual. Available at http://www.dukeintegrativemedicine.org/classes-workshops-and-education/mindfulness-based-stress-reduction

Duval, S., & Wicklund, R. A. (1972). *A theory of objective self-consciousness*. New York, NY: Academic Press.

Dyak, M. (1999). *The voice dialogue facilitator's handbook Pt. 1: A step by step guide to working with the aware ego*. Seattle, WA: L.I.F.E. Energy Press.

Dychtwald, K., Erickson, T. J., & Morison, R. (2006). *Workforce crisis*. Boston, MA: Harvard Business School Press.

Easterbrook, J. A. (1959). The effect of emotion on cue utilization and the organization of behavior. *Psychological Review, 66*, 183-201.

Edwards, W. (1962). Dynamic decision theory and probabilistic information processing. *Human Factors, 4,* 59-73.

Eifert, G., & Forsyth, J. P. (2005). *Acceptance and commitment therapy for anxiety disorders: A practitioner's treatment guide to using mindfulness, acceptance, and values-based behavior change strategies*. Oakland, CA: New Harbinger.

Elder, L., & Paul, R. (2011). Becoming a critic of your thinking: Learning the art of critical thinking. Retrieved from The Critical Thinking Community: http://www.criticalthinking.org/pages/becoming-a-critic-of-your-thinking/478

Epstein, M. (1995). *Thoughts without a thinker: Buddhism and psychoanalysis.* New York: NY. Basic Books.

Eriksen, B., & Eriksen, C. (1972). *Perception and personality.* Morristown, NJ: General Learning Press.

Everly, G. S., Jr., & Lating, J. M. (2002). *A clinical guide to the treatment of the human stress response* (2nd ed.). New York, NY: Kluwer Academic/Plenum.

Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology, 43*, 522-527. doi:10.1037/h0076760

Fiol, C., & O'Connor, E. (2003). Waking up! Mindfulness in the face of bandwagons. *The Academy of Management Review, 28*(1), 54-70.

Fitzsimons, G. M., & Bargh, J. A. (2004). Automatic self-regulation. In R. F. Baumeister & K. D. Vohs (Eds.), *Handbook of self-regulation* (pp. 151-170). New York, NY: The Guilford Press.

Folkman, S. (1997). Positive psychological states and coping with severe stress. *Social Science Medicine, 45*(8), 1207-1221.

Folkman, S., & Lazarus, R. S. (1984). *Stress, appraisal and coping*. New York, NY: Spring.

Folkman, S., & Moskowitz, J. T. (2000). Positive affect and the other side of coping. *American Psychology, 55*(6), 647-654.

Fontana, D. (1998). *The meditator's handbook: Complete guide to eastern and western techniques*. Rockport, MA: Element Book.

Frederickson, B. L. (1998). What good are positive emotions? *Review of General Psychology*, *2*(3), 300-319. doi:10.1037/1089-2680.2.3.300

Frederickson, B. L. (2001). The role of positive emotions in positive psychology: The broad and build theory of positive emotions. *American Psychologist*, *56*(3), 218-226. doi:10.1037/0003-066X.56.3.218

Frederickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science, 22,* 1–32.

Fries, M. (2009). Mindfulness based stress reduction for the changing work environment. *Journal of Academics and Business Ethics, 2,* 1-10. Retrieved from http://www.aabri.com/jabe.html

Frisch, M. B. (1994). *Quality of life inventory manual and treatment guide*. Minneapolis, MN: NCS Pearson and Pearson Assessments.

Fruehauf, H. (1997). *The five organ networks of Chinese medicine*. Portland, OR: Institute for Traditional Medicine.

Gadamer, H. G. (1975). *Truth and method*. New York, NY: Seabury.

George, J. M. (2009). The illusion of will in organizational behavior research: Nonconscious processes and job design. *Journal of Management, 35*, 1318-1339.

*The Gift: Poems by Hafiz, the great Sufi master* (D. Ladinsky, Trans.). (1999). New York, NY: Penguin Books.

Giluk, T. L. (2009). Mindfulness, big give personality, and affect: A meta-analysis. *Personality and Individual Differences, 47*, 805-811.

Goleman, D. (1998). The emotionally competent leader. *Health Forum Journal, 41*(2), 36-76.

Goldstein, E., & Stahl, B. (2010). *Mindfulness-based stress reduction*. Oakland, CA: New Harbinger.

Gonzalez, C. (2005). Decision support for real-time, dynamic decision-making tasks. *Organizational Behavior and Human Decision Processes*, *96*, 142-154.

Gordon, A. (2007). Learn how the causes and effects of stress may be damaging your health and life. Retrieved from http://ezinearticles.com/?Learn-How-The-Causes-and-Effects-of-Stress-May-Be-Damaging-Your-Health-and-Life&id=596909

Grandey, A. A. (2000). Emotion regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology, 5*(1), 95-110.

Grant, A. (2003). The impact of life coaching on goal attainment, metacognition and mental health. *Social Behavior and Personality, 31*(3), 253-263.

The Greater GoodScience Center. (n.d.). Expanding the science and practice of gratitude: Too long we've taken gratitude for granted. Retrieved from http://greatergood.berkeley.edu/expandinggratitude

Green, E., & Green, A. (1977). *Beyond biofeedback.* New York, NY: Delta.

Green, L. S., Oades, L. G., & Grant, A. M. (2006). Cognitive-behavioral, solution-focused life coaching: Enhancing goal striving, wellbeing, and hope. *The Journal of Positive Psychology, 1*(3), 142-149.

Grof, S. (1993). *Realms of the human unconscious:* Observations from LSD research. New York, NY: Viking Press.

Gullette, E. C. D., Blumenthal, J. A., Babyak, M., & Jiang, W. (1997). Effects of mental stress on myocardial ischemia during daily life. *JAMA: Journal of the American Medical Association, 277*(20), 1521-1526.

Hamel, G. (2000). *Leading the revolution*. Boston, MA: Harvard Business School Press.

Hanh, T. H. (1976). *The miracle of mindfulness.* Boston, MA: Beacon Press.

Hanh, T. H. (1991). *Peace is every step.* New York, NY: Bantam Books.

Hayes, S. C., Bissett, R., Korn, Z., Zettle, R. D., Rosenfarb, I., Cooper, L., & Grundt, A. (1999). The impact of acceptance versus control rationales on pain tolerance. *The Psychological Record, 49*(1), 33-47.

Hede, A. (2002). Emotion: The essence of integrated leadership. In C. Barker & R. Cox (Eds.), *The heart and soul of leadership* (pp. 50-72). Sydney, Australia: McGraw-Hill.

Hede, A. (2010). The dynamics of mindfulness in managing emotions and stress. *Journal of Management Development, 29*(1), 94-100.

Herndon, F. (2008). Testing mindfulness with perceptual and cognitive factors: External vs. internal encoding and the cognitive failures questionnaire. *Personality and Individual Differences, 44,* 32-41.

Hershberger, P. J., Edwards, J. M., & Rudisill, J. R. (2005). Consultation to help individuals cope with lifestyle modification. *Consulting Psychology Journal: Practice and Research, 57,* 133-141.

Higgs, M. (2005). All changes great and small: Exploring approaches to change and its leadership. *Journal of Change Management, 5*(2), 121-151.

Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression. *Journal of Consulting and Clinical Psychology*, *78*(2), 169-183. doi:10.1037/a0018555

Hölzel, B. K., Carmody, J., Vangel, M. Congleton, C., Yerramsetti, S., Gard, T., & Lazar, S. (2011). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Research: Neuroimaging, 191*(1), 36-43. doi:10.1016/j.pscychresns.2010.08.006

Hopkins, A. (2002). *Safety culture, mindfulness and safe behavior: Emerging ideas.* Canberra, Australia: National Research Center for Occupational Health and Safety.

Husserl, E. (1970). *Logistical investigations* (Vols. 1-2). London, United Kingdom: Routledge & Kegan Paul.

Institute of Heartmath (IHM). (2005). Research overview. Retrieved from http://www.heartmath.org/research/research-home/research-center-home.html

Institute of Heartmath (IHM). (2006). EmWave 2. Available at http://www.heartmathstore.com/category/emWave2/

Institute of Heartmath (IHM). (2007). *Personal journey to health*. Boulder Creek, CA: Author.

Institute of Heartmath (IHM). (2008). *Voyage to heart intelligence*. Boulder Creek, CA: Author.

Institute of Heartmath (IHM). (2011). *1 on 1 provider program*. Boulder Creek, CA: Author.

International Coaching Federation. (2010). Need coaching. Retrieved from http://www.coachfederation.org/need/?navItemNumber=501

Izard, C. E. (2002). Translating emotion theory and research into preventive interventions. *Psychological Bulletin, 128*(5), 796-824.

James, W. (1924). *Memories and studies*. New York, NY: Longmans, Green, & Co. (Original work published 1911)

Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. *Journal of Managerial Psychology, 20*(2), 178-187.

Kabat-Zinn, J. (1982). An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: Theoretical considerations and preliminary results. *General Hospital Psychiatry, 4*, 33-47.

Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain and illness.* New York, NY: Dellacourt.

Kabat-Zinn, J. (2005). *Wherever you go there you are: Mindfulness meditation in everyday life*. New York, NY: Hyperion.

Kabat-Zinn, J. (2009). *Letting everything become your teacher: 100 lessons in mindfulness.* New York, NY: Dell.

Kabat-Zinn, J. (2012). *Mindfulness for beginners: Reclaiming the present moment and your life.* Boulder, CA: Sounds True.

Kabat-Zinn, J., Lipworthy L., & Burney, R. (1985). The clinical use of mindfulness mediation for the self-regulation of chronic pain. *Journal of Behavioral Medicine, 8*, 163-190.

Kabat-Zinn, J., Lipworthy L., Burney, R., & Sellers, W. (1987). Four-year follow-up of a meditation based program for the self-regulation of chronic pain: Treatment outcomes and compliance. *The Clinical Journal of Pain, 2,* 159-173.

Karasek, R. (1990). Health risks with increased job control among white-collar workers. *Journal of Organizational Behavior, 11*(3), 171-185.

Karasek, R. (2006). The stress-disequilibrium theory: Chronic disease development, low social control, and physiological deregulation. *La Medicina del Lavoro, 97*(2), 258-271.

Karavidas, M. (2008). Heart rate variability biofeedback for major depression. *Biofeedback*, *36*(1), 18-21.

Karren, K. J., Smith, L. Gordon, K. J., & Frandsen, K. J. (2013). *The health effects of attitudes, emotions and relationships* (5th ed.). Provo, UT: EMS Associates.

Kelly, C. (2012, April 28). Ok, Google, take a deep breath. *The New York Times*. Retrieved from http://www.nytimes.com/

Kirk, U., Downer, J., & Montague, P. R. (2011). Interoception drives increased rational decision-making in meditators playing the ultimatum game. *Frontier Neuroscience, 5,* 1-11.

Klein, G. (1998). *Sources of power: How people make decisions*. Cambridge, MA: MIT Press.

Kobasa, S., Maddi, S. R., & Kahn, S. (1982). Hardiness and health. *Journal of Personality and Social Psychology, 42*(1), 168-177.

Kokemuller, N. (2013). Advantages and disadvantages of a multicultural workforce. Retrieved from http://smallbusiness.chron.com/advantages-disadvantages-multicultural-workforce-18903.html

Kornfield, J. (2008). *The wise heart: A guide to the universal teachings of Buddhist psychology*. New York, NY: Bantam Books.

Kotter, J. P. (1995). Leading change: Why transformation efforts fail. *Harvard Business Review, 11*(16), 59-67.

Krantz, D. S., Whittaker, K. S., & Sheps, D. S. (2011). Psychosocial risk factors for coronary artery disease: Pathophysiologic mechanisms. In R. Allan (Ed.), *Heart and mind: Evolution of cardiac psychology* (pp. 56-78). Washington, DC: American Psychological Association.

Lambie, J. A., & Marcel, A. J. (2002). Consciousness and the varieties of emotion experience: A theoretical framework. *Psychological Review, 109,* 219-259.

Langer, E. J. (1997). *The power of mindful learning.* Reading, PA: Addison-Wesley.

Langer, E., & Piper, A. (1987). The prevention of mindlessness. *Journal of personality and social psychology*, *53*(2), 280-287.

Lawson, K. (2013). The four pillars of health coaching: Preserving the heart of a movement. *Global Advances in Health and Medicine, 2*(3), 6-10.

Lazar, S. W., Kerr, C. E., Wasserman, R. H., Gray, J. R., Greve, D. N., Treadway, M. T., …Fischl, B. (2005). Mediation experience is associated with increased cortical thickness. *Neuroreport, 16*(17), 1893-1897.

Lazarus, R. S. (1991). *Stress and emotion: A new synthesis*. New York, NY: Springer.

Lazarus, R. S. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual Review of Psychology, 44*, 1-21.

Lazarus, R. S. (2012). *Handbook of stress, coping and health.* Thousand Oaks, CA: Sage.

Lazarus, R. S., Kanner, A. D., & Folkman, S. (1980). Emotion: A cognitive phenomenological analysis. In R. Plutchik & H. Kellerman (Eds.), *Theories of emotions* (pp. 189-217) New York, NY: Academic Press.

Leadership challenges of 2012 that may impede path to corporate greatness. (2012, January 10). *The Economic Times Online*. Retrieved from http://articles.economictimes.indiatimes.com/

Leather, P., Beale, D., & Sullivan, L. (2003). Noise, psychosocial stress and their interaction in the workplace. *Journal of Environmental Psychology, 23*, 213-222. doi:10.1016/S0272-4944(02)00082-8

LeDoux, J. (1996). *The emotional brain: The mysterious underpinnings of emotional life.* New York, NY: Simon & Schuster.

Leka, S., Griffith, A., & Cox, T. (2013). *Work organization and stress*. Geneva, Switzerland: World Health Organization.

Lesser, M. (2005). *Z.B.A.: Zen of business administration*. Novato, CA: New World Library.

Lewis, S., Rapoport, R., & Gambles, R. (2003). Reflections on paid work and the rest of life. *Journal on Managerial Psychology, 18*(8), 824-841.

Linger, R. A. (2012). *Impact of a mindfulness based stress reduction program on designated leaders in corporate and healthcare environments*. Unpublished manuscript.

Lovallo, W. R. (2005). *Stress and health.* Thousand Oaks, CA: Sage.

Ludwig, D. S., & Kabat-Zinn, J. (2008). Mindfulness in medicine. *JAMA: Journal of the American Medical Association, 300*(11), 1350-1352. doi:10-1001/jama.300.11.1350

Mace, C. (2008). *Mindfulness and mental health: Therapy, theory and science*. London, United Kingdom: Routledge.

Macquarie Institute. (n.d.). Macquarie Institute stress and emotional management solutions for personal development. Retrieved from http://macquarieinstitute.com/self/stress/

Magrini, J. (2012). Phenomenology for educators: Max van Manen und Human Science research. *Philosophy Scholarship, 32*. Retrieved from College of DuPage Digital Commons website: http://dc.cod.edu/cgi/viewcontent.cgi?article=1032&context=philosophypub

Managers are key. (2007). *The Safety and Health Practitioner, 25*(5), 78.

Marlatt, G. A., & Kristeller, J. L. (1999). Mindfulness and meditation. In W. R. Miller (Ed.), *Integrating spirituality into treatment: Resources for practitioners* (pp. 67-84). Washington, DC: American Psychological Association. doi:10.1037/10327-004

Martin, J. R. (1997). Mindfulness: A proposed common factor. *Journal of Psychotherapy Integration, 7*, 291-312.

Maslach, C., & Jackson, S. E. (1984). Burnout in organizational settings. In O. S. Oskamp (Ed.), *Applied social psychology annual: Vol. 5. Applications in organizational settings* (pp. 133-153). Beverly Hills, CA: Sage.

Maslach, C., & Jackson, S. E. (1986). *Maslach Burnout Inventory Manual* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., & Leiter, M. P. (1997). *The truth about burnout.* San Francisco, CA: Jossey Bass.

Maslow, A. (1962). *Toward a psychology of being.* New York, NY: Wiley & Sons.

Maslow, A. (1998). *Maslow on management.* New York, NY: Wiley & Sons.

Mattke, S., Schnyer, C., & Busum, K. R. (2012). *A review of the U.S. wellness workplace market*. Santa Monica, CA: Rand.

McArthur, D., & McArthur, B. (1997). *The intelligent heart. Transform your life with the laws of love.* Virginia Beach, VA: A.R.E. Press.

McCraty, R. (2001). *Science of the heart: Exploring the role of the heart in human performance*. Boulder Creek, CA: Institute of HeartMath.

McCraty, R. (2004). *The making of emotions* (Publication No. 03-015). Boulder Creek, CA: HeartMath Research Center, Institute of HeartMath.

McCraty, R., Atkinson, M., Tomasino, D., & Bradley, R. T. (2009). The coherent heart: Heart-brain interactions, psychophysiological coherence, and the emergence of system-wide order. *Integral Review, 5*(2), 10-115.

McCraty, R., Barrios-Choplin, B., Rozman, D., Atkinson, M., & Watkins, A. D. (1998). The impact of a new emotional self-management program on stress, emotions, heart rate variability, DHEA and cortisol. *Integrative Physiological and Behavioral Science, 33*(2), 151-170.

McKee, M. G., & Kiffer, J. F. (2000). Biofeedback and stress. In D. T. Kenny, J. G. Carlson, E. J. McGuigan, & J. L. Sheppard (Eds.), *Stress and health: Research and clinical applications* (pp. 163-178). Sydney, Australia: Harwood Academic.

Merleau-Ponty, M. (1962). Phenomenology of perception. London, United Kingdom: Routledge & Kegan Paul.

Michie, S. (2002). Causes and management of stress at work. *Occupational Environmental Medicine, 59,* 67-72.

Mills, P. J., Davidson, K. W., & Farag, N. H. (2004). Work stress and hypertension: A call from research into intervention. *Annals of Behavioral Medicine, 28*(1), 1-3.

Mittleman, M. A., Maclure, M., Nachnani, M., Sherwood, J. B., & Muller, J. E. (1997). Educational attainment, anger and the risk of triggering myocardial infarction onset. *Archives of Internal Medicine*, *157,* 769-775.

Moore, M., & Boothroyd, L. (2006). *The obesity epidemic: A confidence crisis call for professional coaches.* Wellesley, MA: Wellcoaches.

Morris, J., & Long, B. (2002). Female clerical workers' occupational stress: The role of person and social resources, negative affectivity, and stress appraisals. *Journal of Counseling Psychology, 49*(4), 395-410. doi:10.1037/0022-0167.49.4.395

Moss, D., Lehrer, P., & Gevirtz, R. (2008). Special Issue: The emergent science and practice of heart rate variability biofeedback. *Biofeedback, 36*(1), 1-4.

Moss, D., & Shaffer, F. (2003). Heart rate variability training. Retrieved from Biofeedback Foundation of Europe website: http://www.bfe.org/articles/hrv.pdf

Motowidlo, S. J., Borman, W. C., & Schmit, M. J. (1997). A theory of individual differences in task and contextual performance. *Human Performance*, *10,* 71-83.

Nadkarni, S., & Barr, P. S. (2008). Environmental context, mangerial cognition, and strategic action: An integrated view: *Strategic Management Journal, 29,* 1395-1427.

National Institute of Health, National Institute of Neurological Disorders and Stroke (2005). The brain: Our sense of self. Retrieved from http://www.science.education.nih.gov/supplements/nih4/self/guide/info-brain.htm

National Institute of Mental Health (NIMH). (2008). Mental disorders in America. Retrieved from http://www.nimh.nih.gov/health/statistics/index.shtml

Nauroz, S. (2004). *Working with the heart: A case study of caregivers of individuals with autism* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (AAT No. 3138623)

Nelson, C. A., Zeanah, C. H., Fox, N. A., Marshall, P. J., Smyke, A. T., & Guthrie, D. (2007). Cognitive recovery in socially deprived young children: The Bucharest early intervention project. *Science, 318*(5858), 1937-1940.

Nichols, M. P. (1995). *The lost art of listening: How learning to listen can improve relationships*. New York, NY: The Guilford Press.

Northrup, C. (2002, Spring). Cultivating gratitude. *A Grain of Salt*, 1, 7. Retrieved from http://www.selinanaturally.com/content/Newsletter/SPNL02.pdf

Nyanaponika, T. (1962). *The heart of Buddhist meditation*. London, United Kingdom: Rider.

Nyanaponika, T. (1972). *The power of mindfulness*. San Francisco, CA: Unity Press.

Olsen, J. M., & Nesbitt, B. (2010). Health coaching to improve healthy lifestyle behaviors: An integrative review. *American Journal of Health Promotion*, *25*(1), 1-12.

Orsillo, S. M., Roemer, L., & Holowka, D. W. (2005). Acceptance based behavioral therapies for anxiety: Using acceptance and mindfulness to enhance traditional cognitive behavioral approaches. In S. M. Orsillo & L. Roemer (Eds.), *Acceptance and mindfulness-based approaches to anxiety: Conceptualization and treatment* (pp. 3-35). New York, NY: Springer.

Passmore, J. (2010). *The Wiley-Blackwell handbook of the psychology of coaching and mentoring*. Chichester, United Kingdom: John Wiley & Sons.

Patanjali. (1970). *Yoga sutras of Patanjali: The book of the spiritual man – an interpretation* (C. Johnston, Trans.). London, United Kingdom: Stewart & Watkins.

Patel, C. (1984). Yogic therapy. In R. L. Woolfolk & P. Lehrer (Eds.), *Principles and practice of stress management* (pp. 70-107). New York, NY: The Guilford Press.

Pattern. (n.d.). In *Merriam-Webster online dictionary*. Retrieved from http://www.merriam-webster.com/dictionary/pattern

Pearsall, P. (1998). *The heart's code: Tapping the wisdom and power of our heart.* New York, NY: Energy Broadway Books.

Pennebaker, J. W. (1990). *Opening up: The healing power of expressing emotions.* New York, NY: The Guildford Press.

Phillips, D. (2003, Spring). On the cushion. *Tricycle Magazine,* p. 23. Retrieved from http://www.tricycle.com/-cushion/cushion

Polkinghorne, D. (1983). *Methodology for the human science systems in inquiry*. Albany: State University of New York Press.

Polzer, J. T., Mannix, E. A., & Neale, M. A. (1998). Interest alignment and coalitions in multiparty negotiation. *Academy of Management Journal, 41*, 42-54.

Pugliesi, K. (1999). The consequences of emotional labor: Efforts on work stress, job satisfaction and well-being. *Motivation and Emotion, 23*(2), 125-154.

Quotations collected by David Moursund. (2013, February 8). Retrieved from http://iae-pedia.org/Quotations_Collected_by_David_Moursund#Authors_D_to_F

Rajendra, U. A., Joseph, P. K., Kannathal, N., Lim, C. M., & Suri, J. S. (2006). Heart rate variability: A review. *Medical and Biological Engineering and Computing, 44,* 1031-1051. doi.10.1007/s11517-006-0119-0

Rau, H. (2013). Better living through mindfulness: University study connects traits of mindfulness to emotional wellbeing. Retrieved from http://unews.utah.edu/news_releases/better-living-through-mindfulness/

Reich, H. (2010). *A qualitative study of heart-mind coherence techniques for stress relief and mental and emotional self-management* (Doctoral dissertation). Available from Proquest Dissertation and Theses database. (AAT No. 3416485)

Riskin, L. (2004). Teaching and learning from the mediations in Barry Werth's Damages *Journal of Dispute Resolution*, *1*. Available from the Social Science Research Network website: http://ssrn.com/abstract=1465204

Rizavi, S, Ahmed, I., & Ramazan, M. (2011). Studying stress and its job related costs: An empirical evidence from telecom sector of Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, *2*(11), 653-659.

Rothbard, N. P. (2001). Enriching or depleting: The dynamics of engagement in work and family roles. *Administrative Science Quarterly, 46,* 655-684.

Rothbart, M. K., & Sheese, B. E. (2004). Temperament and emotion regulation. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 331-350). New York, NY: The Guilford Press.

Ryan, C., & Jethá, C. (2005). Universal human traits: The holy grail of evolutionary psychology. *Behavioral & Brain Sciences, 28*(2), 292-293. doi:10.1017/S0140525X05390054

Salner, M. (1986). Validity in human science research. *Saybrook Review, 6*(1), 107-130.

Schabracq, M. L., & Cooper, G. L. (2000). The changing nature of work and stress. *Journal of Managerial Psychology, 15*(3), 227-241. doi:10.1108/02683940010320589

Schnall, P. L., Schwartz, J. L., Landsbergis, P. A., Warren, K., & Pickering, T. G. (1998). A longitudinal study of job strain and ambulatory blood pressure: Results from a three-year follow-up. *Psychosomatic Medicine, 60*(6), 697-706.

Selye, H. (1973). The evolution of the stress concept. *American Scientist, 61*(6), 692-699.

Service Employees International Union (SEIU). (2010). The high cost of workplace stress. Retrieved from http://www.seiu503.org/files/2013/03/CostOfStress.pdf

Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freeman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology, 62,* 373-386.

Shepherd, D. A., & Cardon, M. S. (2009). Negative emotional reactions to project failure and the self-compassion to learn from the experience. *Journal of Management Studies, 46,* 923-949.

Sher, L. (2005). Type D personality: The heart, stress and cortisol. *QJM, 98*(5), 323-329. Retrieved from http://qjmed.oxfordjournals.org/

Shilpashree, R., & Sathish Kumar, Y. B. (2011). A study on anti-stress property of nardostachys jatamamsi on stress induced drosophila melanogaster. *Journal of Stress Physiology & Biochemistry, 7*(3), 159-164.

Silananda, U. (1990). *The four foundations of mindfulness*. Boston, MA: Wisdom.

Singh, K. (2005). *Organisation change and development.* New Delhi, India: Excel Books.

Society for Human Resource Management (SHRM) Foundation. (2007). *SHRM foundation research on human capital challenges.* Alexandria, VA: Author.

Solomon, R. C. (2007). *True to our feelings: What our emotions are really telling us*. New York, NY: University Press.

Spence, G. B., & Grant, A. (2007). Professional and peer life coaching and the enhancement of goal striving and well-being: An exploratory study. *The Journal of Positive Psychology, 2*(3), 185-194.

Staw, B. M. (2004). The dispositional approach to job attitudes: An empirical and conceptual review. In B. Schneider & B. Smitt (Eds.), *Personality in organization* (pp. 163-191). Mahweh, NJ: Erlbaum.

Stober, D. R., & Grant, A. M. (2006). Toward a contextual approach to coaching models. In D. R. Stober & A. M. Grant (Eds.), *Evidenced-based coaching: Putting best practices to work for your clients* (pp. 355-364). Hoboken, NJ: Wiley.

Stockton, P. (2006). Disorders of extreme stress (DESNOS) symptoms are associated with type and severity of interpersonal trauma exposure in a sample of healthy young women. *Journal of Interpersonal Violence, 21*(11), 1399-1416.

Stone, H., & Stone, S. (1989). *Embracing our selves: The voice dialogue manual*. Novato, CA: New World Library.

Stress. (n.d.). In *Merriam-Webster's online dictionary*. Retrieved from http://www.merriam-webster.com/dictionary/stress

Stress. (2012). Retrieved from http://www.medterms.com/script/main/art.asp?articlekey=20104

Suls, J., & Bunde, J. (2005). Anger, anxiety, and depression as risk factors for cardiovascular disease: The problems and implications of overlapping affective dispositions. *Psychology Bulletin, 13*(2), 260-300. doi:10.1037/0033-2909.131.2.260

Swenson, R. (2006). Review of clinical and functional neuroscience. Retrieved from http://www.dartmouth.edu/~rswenson/NeuroSci/chapter_9.html

Taylor, F. W. (1947). *The principles of scientific management.* New York, NY: Harper and Row.

Taylor, S. E., Kemeny, M. E., Reed, G. M., Bower, J. E., & Gruenewald, T. L. (2000). Psychological resources, positive illusions and health. *American Psychologist, 55,* 99-109.

Thayer, J. F., & Lane, R. D. (2009). Claude Bernard and the heart brain connection: Farther elaboration of a model of neuro-visceral integration. *Neuroscience & Biobehavioral review, 33*(2)*,* 81-88.

Theme. (n.d.). In *Merriam-Webster online dictionary.* Retrieved from http://www.merriam-webster.com/dictionary/theme

Thondup, T. (1996). *The healing power of the mind.* Boston, MA: Shambhala.

Tolle, E. (2013). The power of now and the end of suffering. Retrieved from http://www.eckharttolle.com/article/The-Power-Of-Now-Spirituality-And-The-End-Of-Suffering

Toombs, S. K. (2001). Reflections on bodily change: The lived experience of disability. In S. K. Toombs, (Ed.). *Handbook of phenomenology and medicine* (pp. 247-261). Boston, MA: Kluwer Academic.

Trahan, K. (2010). *A grounded theory of building capacity in organizational leadership through the cultivation of* awareness*, attention, and caring* (Doctoral dissertation). Available from Proquest Dissertation and Theses database. (AAT No. 3423970)

Travis, J. W., & Callander, M. G. (1994). *A change of heart: The global wellness inventory.* Owosso, MI: Arcus Press.

Travis, J. W., & Ryan, R. (2004). *The wellness workbook: How to achieve enduring health and vitality.* New York, NY: Ten Speed Press.

Troup, C., & Dewe, P. (2002). Exploring the nature of control and its role in the appraisal of workplace stress. *Work and Stress, 16*(4), 335-355. doi:10.1080/0267837021000056913

Tsuji, H., Larson, M. G., Vendetti, F. J., Manders, E. S., Evans, J. C., Feldman, C. L., & Levy, D. (1996). Impact of reduced heart rate variability on risk for cardiac events*. Circulation, 94,* 2850-2855. Retrieved from http://circ.ahajournals.org/

Tugade, M. M., & Frederickson, B. L. (2000). Psychological resilience and positive emotional granularity: Examining the benefits of positive emotions on coping and health. *Journal of Personality, 72*(6), 1161-1190. doi:10.1111/j.1467-6494.2004.00294.x

Tulgan, B. (2004). The under-management epidemic. Retrieved from http://rainmakerthinking.com/assets/uploads/2014/04/Undermanagement-Epidemic-WP1.pdf

Ucok, O. (2006). Transparency, communication and mindfulness. *Journal of Management Development, 25*(10), 1024-1028.

van Manen, M. (1997). *Researching lived experience: Human science for an action sensitive pedagogy*. London, Ontario: Althouse.

Veloutsou, C. A., & Panigyrakis, G. C. (2004). Consumer brand managers' job stress, job satisfaction, perceived performance and intention to leave. *Journal of Marketing Management*, *20*(1), 105-131.

Walach, H., Buchheld, N., Buttenmuller, V., Kleinknecht, N., & Schmidt, S. (2006). Measuring mindfulness: The Freiburg Mindfulness Inventory (FMI). *Personality and Individual Differences, 40,* 1543-1555.

Walsh, R., & Vaughan, F. (1993). On transpersonal definitions. *Journal of Transpersonal Psychology, 25*(2), 199-207.

Warr, P. B., & Downing, J. (2000). Learning strategies, learning anxiety, and knowledge acquisition. *British Journal of Psychology*, *91,* 311-333.

Weber, M. (1947). Legitimate authority and bureaucracy. In A. Henderson & T. Parsons (Eds.), *The theory of social and economic organization* (pp. 15-27). Glencoe, IL: Free Press.

Weick, K. W. (1993). The collapse of sense making in organizations: The Mann Gulch disaster. *Administrative Science Quarterly, 38,* 628-652.

Weins, S. (2005). Interoception in emotional experience. *Current Opinion in Neurology, 18*(4), 442-447.

Weisstein, E. W. (2003). Herophilus of Chalcedon. Retrieved from http://scienceworld.wolfram.com/biography/Herophilus.html

Westen, D. (1999). *Psychology: Mind, brain, and culture* (2nd ed.). New York, NY: Wiley.

Wilber, K. (2000). *Integral psychology: Consciousness, spirit, psychology, therapy*. Boston, MA: Shambhala.

Wild, T. C., Kuiken, D., & Schopflocher, D. (1995). The role of absorption in experiential involvement. *Journal of Personality and Social Psychology, 69,* 596-579.

Williams, C. (2006). Sources of workplace stress. *Perspectives on Labor and Income*, *9*(8), 5-16.

Williams, P., & Menendez, D. S. (2007). *Becoming a life coach: Lessons from the Institute for Life Coach Training*. New York, NY: W. W. Norton.

Whitworth, L., Kimsey-House, K., Kimsey-House, H., & Sandahl, P. (2007). *Co-active coaching: New skills for coaching people toward success in work and life*. Mountain View, CA: Davies-Black Books.

Wright, J. (2007). Stress in the workplace: A coaching approach. *Work: Journal of Prevention, Assessment and Rehabilitation, 28*(3), 279-284.

Wright, T. A., & Cropanzano, R. (2007). The happy/productive worker thesis revisted. In J. Martocchio (Ed.), *Research in personnel and human resource management* (vol. 26, pp. 269-313). London, United Kingdom: Emerald.

Yang, M. H., & Damasio, A. (2007). We feel therefore we learn: The relevance of affection and social neuroscience to education. *Mind, Brain and Education, 1*(2), 3-10.

Yeganeh, B., & Kolb, D. (2009). Mindfulness & experiential learning. *OD Practitioner, 41*(3), 13-18.

Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA: Sage.

Zeidan, F., Johnson, S., Diamond, B., David, Z., & Goolkasian, P. (2010). Mindfulness meditation improves cognition: Evidence of brief mental training. *Consciousness and Cognition, 19*(2), 597-605.

# APPENDICES

## Appendix A: Mindfulness-Based Stress Reduction—Course Outline

**Week 1:**

Themes: More Right with You than Wrong with You, Cultivating a Beginner's Mind and Reflect on Individual Intentions

Class 1 Outline:

I. Introduction to MBSR

II. Brief Meditation (reflections on why you are in the class, what you hope to get out of it, note something positive about yourself)

III. Group Introductions

IV. Mindful Movement

Guided Body Scan [1]

VI. Small Group Discussions about the Body Scan

VII. Homework Exercises

(a) Begin STOP breathing exercise at desk (STOP exercises are those that help participants become more familiar with how the mind works around a wandering mind and how paying attention to self and actions, slowing down the pace can assist in STOP negative perceptions, emotions and stress response).

(b) Review 7 Foundations in workbook

(c) Begin MBSR body scan meditation (5-6x/week)

(d) Read chapters 1-3, 9

(e) Do the 9-dots exercise in workbook

[1]The body scan is a practice of devoting moment-to-moment attention to the body just as it is. Typically the body scan is performed lying down but can be practiced in any position. It can even be done in the workplace – sitting at a desk or standing. Participants first direct a broad, expansive attention to the body as a whole, then focused attention in systematic fashion to various regions of the body and then once again an expansive awareness of the entire body. Through this process participants discover a lot about how the body feels, its sensations, and the mental reactions to paying attention to various parts of the body. As more attention is paid in this way, without trying to fix or change anything, participants become more inclined to be less critical of their body's perceived imperfections and to cultivate greater acceptance and appreciation for our body as we find it at this very moment (Goldstein & Stahl, 2010).

(f) Practice mindfulness in daily life (eat mindfully, drive mindfully, wash dishes mindfully, etc.).

Handouts: Course Workbook, Body Scan/Sitting Meditation CDs.

**Week 2:**

Themes: Perception on How We See Things, Living with Blinders and Expanding our View

Exercises: Awareness of the Wandering Mind, Body Scan

Class 2 Outline:

I. Body Scan Meditation
II. Mindful Movement
III. Universality of the Wandering Mind
IV. Small Group Discussion on Challenges
V. Large group Discussion on STOP exercises
VI. Brief Guided Sitting Meditation
VII. Review of Homework for Next Week

(a) Continue "STOP" breathing exercise at desk
(b) Fill out Pleasant Events Calendar in workbook
(c) Continue MBSR body scan mediation (5-6x/week)
(d) Read chapters 5-17, 20
(e) Practice mindfulness in daily life (eating mindfully, drive mindfully, wash dishes mindfully, brush teeth mindfully, take out the garbage mindfully, etc.)

Handouts: Mindfulness at Work, Your Body as a Storehouse

**Week 3:**

Themes: the Benefits of Being Present, Nonstriving (acknowledge, acceptance, "letting it be"), Looking at Reacting and Responding, How Stress Affects Your Behavior, Relationship of Emotional Reactivity to Illness/Health

Exercises: Body Scan, Begin in Sitting Mediation, Mindful Breathing

Class 3 Outline:

I. Awareness of Breathing Meditation

II. Mindful Movement

III. Review Additional Movement Exercises Participants, can include in Mindfulness Practice

IV. Small Group Discussion (checking in)

V. Health Feedback Loop (Workbook Chapters 11-16)

VI. Large Group Discussion on above

VII. Brief Guided Sitting Meditation

VIII. Review Homework for Next Week

(a) MBSR Body Scan mediation (5-6x/week)

(b) Read chapters 6, 21-25

(c) Reflections: What pulls you off center? What triggers you? What do you most not want to look at?

(d) Practice mindfulness in daily life (as previously stated)

Handouts: Stress Diagram (A stress diagram is a visual representation of the effects a negative stress response can have on emotion, mood, and behavior. It is also a visual representation of the effects of stress on various systems, organs, and tissues all over the body).

**Week 4:**

Themes: Getting Stuck and Unstuck, Understanding Nonjudgment of Self and Others

Exercises: Sitting Meditation, Mindful Breathing, Mindful Walking

Class 4 Outline:

I. Sitting Mediation (or awareness of breath) (30 minutes)

II. Mindful Movement

III. Group Discussion – What is Stress?

IV. Review Stress Research

V. Autobiography in 5 chapters/Banana story

VI. Brief Guided Sitting Mediation (“What is your banana? – [Stuck Patterns])

VII. Review Homework for Next Week (5 minutes)

(a) Begin using MBSR sitting meditation CD (5-6x/week)

(b) Read chapters 26-32

(c) Record one pleasant communication

(d) Practice mindfulness in daily life as stated previously in course outline)

VII Circle Sharing (begin and continue from the next class)

Handouts: Autobiography

**Week 5:**

Themes: Acknowledgment, Reacting and Responding

Exercises: Mindful Breathing, Sitting Mediation

Class 5 Outline:

I. Brief Mindful Breathing Meditation and Reflections (Am I learning, growing, changing? Where am I now? Am I practicing the way I originally committed to? Can I recommit to the second half of the classes?)

II. Sitting Mediation

III. Mindful Movement and Walking Mediation

IV. Small Group Discussion

V. Positive Psychology Review and Discussion

VI. Review Homework for Next Week

(a) Sitting Meditation CD (5-6x/week)

(b) Read chapters 4, 11-13

(c) Record one Unpleasant Communication

VII Circle Sharing (continue from the last class) (30 minutes)

Handouts: Positive Psychology Materials[2]

**Week 6:**

Themes: “Let it Be” and Skillful Communications

[2] Positive Psychology is a recent branch of psychology whose purpose was summed up by Martin Seligman and Mihaly Csikszentmihalyi: “We believe that a psychology of positive human functioning will arise, which achieves a scientific understanding and effective interventions to build thriving individuals, families, and communities (Cskiszentmihalyi, 1990; Seligman, 2012,). Positive psychologists seek "to find and nurture genius and talent, and to make normal life more fulfilling, rather than merely treating mental illness” (p. 18).

Exercises: Sitting Mediation, Group Discussions, Aikido-based walking exercises

Class 6 Outline:

I. Sitting Meditation

II. Mindful Movement/Walking Meditation

III. Aikido-based exercises/Communications Examples (20 minutes) (Avoidance and denial, passive/aggressive, victim, aggressive, entering and blending)

IV. Small Group Discussion (20 minutes)

V. Review Homework for Next Week (5 minutes)

(a) Alternate sitting mediation and body scan CDs (5-6x/week)

(b) Read chapters 7, 8, 31

(c) Look at what you take in/consume (media, food, beliefs, the world around you virtual and physical)

(d) Practice mindfulness in daily life

Handouts: Mindful Sayings

Between Week 6 and 7, a Day-Long Silent Day of Practice is held from approximately 9 A.M. to 4 P.M. Practice with all forms of mindful living are used throughout this day.

**Week 7:**

Themes: Trust/Self-Reliance

Exercises: Sitting Mediation, Discussions

Class 7 Outline:

I. Sitting Mediation

II. Mindful Movement/Walking Meditation

III. Observation of the "Self" (nonjudgment, self-reliance)

IV. Small Group Discussion on what was "consumed" in the last week

V. Large Group Discussion, Ideas for Realistic Change

VI. Review Homework for Next Week

(a) Alternate 1 day with and then 1 day without the sitting meditation or body scan CD (i.e., begin to meditate without the guided CD) (5-6x/week)

(b) Read chapters 14-16

(c) Practice mindfulness in daily life

Handouts: CBT (Cognitive Behavioral Therapy) Worksheet on Changing Behaviors

**Week 8:**

Themes: Integrating the Mindfulness Foundations, Keeping up the Practice Exercises, Sitting Meditation, Discussion, Review instructions for final and 1-month follow-up online assessments.

Class 8 Outline:

I. Sitting Meditation
II. Mindful Movement
III. Large Group Discussion/Meditative Reflections
IV. Review Final Assessment Details/Instructions
V. Final Intention Setting
VI. Loving Kindness Meditation
VII. Homework to Continue
    (a) Integrate a meditation into each day (from 5-30 minutes daily)
    (b) Read chapters 33-36
    (c) Practice mindfulness in daily life

Handouts: Final and Follow-Up Assessment Instructions, Evaluation

## Appendix B: Informed Consent to Participate in Research

**Purpose:**

The purpose of this research is to provide a customized one-on-one integrative health and life coaching intervention for professional adults in high-level executive positions in the work place. The focus of the research is to study the impact of a mindfulness intervention for perception and emotional regulation shifts around workplace stressors, sense of wellbeing, sense of productivity, relationships with others and quality of worklife. This study is being conducted and funded by Rita Anita Linger, a PhD Candidate of Saybrook University as part of the dissertation requirement.

**Principal Researcher:**

Rita Anita Linger
[address]
[email]
[phone]

**Procedures:**

1) The length of this study will be eight weeks, which involves a total of 8 coaching sessions. The first session is a 1.5 initial educational/experiential coaching session, the following six sessions are 1 hour, followed by a 1.5 hour wrap up and closure coaching session. Coaching sessions will be scheduled weekly and will be scheduled according to your availability. The required time commitment for your participation is approximately 22 hours over the duration of the 8 week period (including your practice work).

2) Diverse methods of gathering data will be used to collect qualitative and descriptive information throughout the course of the coaching intervention: a) two brief online surveys (each survey will take approximately 20 minutes to complete), b) several questionnaire/surveys (which will take approximately 5- 10 minutes each to complete, c) total of seven coaching sessions and one final wrap up session, d) primary researchers notes typed during the 8 week period with each participant. Researcher will pay for all of the educational and assessment resources provided to participant.

3) The coaching intervention involves several assessments and educational resources as articulated below:

**Quality of Life Inventory (QOLI)**

The QOLI assessment is brief yet comprehensive. It yields an overall score and a profile of problems and strengths in 16 areas of life such as love, work and play. The QOLI test is a measure of positive psychology and positive mental health. It assesses wellbeing and quality of life as well as positive health. It provides an opportunity for the researcher to provide feedback to participants on the quality of life and feedback on the 16 areas of life that makeup human happiness and fulfillment in cultures around the

world. QOLI was developed by Michael Frisch who is a positive psychologist. It is a paper/pencil 32-item questionnaire that will require approximately five minutes for each participant to complete. Participants are asked to describe how important certain parts of their life are and how satisfied they are with each domain. The scores range from very low, low, average and high based on the weighed scales of answers (Frisch, 1994).

**Combined Maslach Burnout Inventory & Areas of Worklife Survey**

*The Maslach Burnout Inventory (MBI)* has been recognized for more than a decade, as the leading measure of burnout. It incorporates the extensive research that has been conducted in the more than 25 years since its initial publication. The MBI Surveys address three general scales: 1) Emotional exhaustion - measures feelings of being emotionally overextended and exhausted by one's work, 2) Depersonalization - measures an unfeeling and impersonal response toward recipients of one's service, care, treatment, or instruction, 3) Personal accomplishment - measures feelings of competence and successful achievement in one's work (Maslach, 1984).

*The Areas of Worklife Survey (AWS)* created by Maslach and Leiter was created to assess executives' perceptions of qualities of work settings that play a role in determining whether they experience work engagement or burnout. It is a companion piece to the Maslach Burnout Inventory. The AWS is a short questionnaire with demonstrated reliability and validity across a variety of occupational settings. It produces a profile of scores that permit users to identify key areas of strength or weaknesses in

their organizational settings. Used with the Maslach Burnout Inventory, the AWS helps organizations to identify the areas to change, with a potential for enhancing engagement with work (Leiter & Maslach, 1997).

**Perceived Stress Scale**

The Perceived Stress Scale (PSS) is the most widely used psychological instrument for measuring the perception of stress. It is a measure of the degree to which situations in one's life are appraised as stressful. Items were designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives. The scale also includes a number of direct queries about current levels of experienced stress.

The PSS items are easy to understand, and the response alternatives are simple to grasp. The questions in the PSS ask about feelings and thoughts during the last month. In each case, respondents are asked how often they felt a certain way (Cohen, Kamarck, & Mermelstein, 1994).

**The Satisfaction with Life Scale**

The SWLS is a short 5-item instrument designed to measure global cognitive judgments of satisfaction with one's life. The scale usually requires only about one minute of a respondent's time. The questions in the scale focus on how respondents view their life from within a variety of contexts.

Among the various components of subjective well-being, the SWLS is narrowly focused to assess global life satisfaction and does not tap related constructs such as positive affect or loneliness. The SWLS is shown to have favorable psychometric properties, including high internal consistency and high temporal reliability. Scores on

the SWLS correlate moderately to highly with other measures of subjective well-being, and correlate predictably with specific personality characteristics (Diener, 1985).

**Five Facet Mindfulness Questionnaire (5FFMQ)**

This instrument is based on a factor analytic study of five independently developed mindfulness questionnaires (Appendix B). The analysis yielded five factors that appear to represent elements of mindfulness as it is currently conceptualized. The five facets are observing, describing, acting with awareness, nonjudging of inner experience, and non-reactivity to inner experience. The 5FFMQ is considered a useful self-reporting assessment to explore facets of mindfulness (Baer, Hopkins, Krietemeyer, Smith, & Toney, 2006).

## Participant Practice Intervention Tools

**HeartMath's Voyage to Heart Intelligence Manifest (VHIM)Workbook.** Participants to this study will be given a copy of the award winning VHIM Workbook. This book will be used by participants between coaching calls and will take the role of coach and an accountability partner between sessions. This focused and practical will offer personalized instruction. Through its use, participants will better understand what happens to their body when they are stressed and how reactions to everyday challenges can either rob the life they want or be transformed into healthier, more satisfying, productive energy. This focused and practical workbook combines personalized coaching and a detailed practice plan to help meet participants' personal objectives.

All participants will be given the same assignments from each book every other week to practice and will review their thoughts, responses and reflections upon meeting with the primary researcher/coach at the next session.

**A Mindfulness-Based Stress Reduction Workbook**. Each participant will receive the MBSR workbook written by renown MBSR authors, Dr. Bob Stahl, and Dr. Elisha Goldstein. The foreword of this workbook is written by Jon Kabat-Zinn, the creator of the Western practice of MBSR. This workbook is an educational and experiential workbook which will introduce participants to the practice of mindfulness which is the cultivation of nonjudgmental awareness in day-to-day life. It will teach participants the simple, profound tools and practice that can help participants bring balance to their life and reduce negative stress responses even in the midst of stress.

**EmWave Personal Stress Reliever (PSR).** The PSR is a portable, easy to use and convenient tool to help participants bring awareness to their stress levels and the need to balance emotions. EmWave technology collects pulse data through a pulse sensor and translates the information from heart rhythms into easy to follow colored lights on the portable emWave2. It records low, medium and high coherence (synchronicity of the autonomic nervous system) feedback represented by the color changes.

The PSR is a tool to be used just a few minutes a day and can potentially assist the participant to create shifts in feelings of anxiety, frustration into feelings of peaceful, ease and clarity. Each participant will receive one PSR to use daily. This device will not be

used to measure any physiological changes however participants will be asked if they noticed a shift in negative feelings and emotions to positive ones.

**Possible Risks and Safeguards**:

This study is designed to minimize as much as possible any potential physical, psychological, and social risks to you. Although very unlikely, there are always risks in research, which you are entitled to know in advance of giving your consent, as well as the safeguards to be taken by those who conduct the project to minimize the risks. Some of those risks might include experiencing feelings of anxiety, embarrassment or emotional discomfort while engaged in the mindfulness coaching intervention, over the course of the 8 week study.

I understand that:

[1] My participation shall in no way have any bearing on my employment status, academic standing course grade, etc.), or deprive me of any or all services presently received in the institution and setting in which participate, as well as those provided by the institutions or persons, sponsoring, funding, and providing oversight, inclusively, for this research project.

[2] Although my identity shall be known to the Principal Researcher, all identifying information shall be removed at the time of data analysis including the transcription of tape recordings.

[3] My responses to the questions will be pooled with others and all identifiers, such as names, addresses, employers, and related information that might be used to identify me, will be deleted.

[4] This informed consent form will be kept separate from the data I provide, in a locked file for five years, known only to the Principal Researcher, after which it will be destroyed.

[5] The data collected in their raw and transcribed forms are to be kept anonymous, stored in a locked container accessible only to the Principal Researcher for five years, after which it shall be destroyed.

[6] Transcribed, anonymous data in the form of anonymous response listings from all participants will be kept indefinitely for future research.

[7] All the information I give will be kept confidential to the extent required by law. The information obtained from me will be examined in terms of group findings, and will be reported anonymously.

[8] There is to be no individual feedback regarding the interpretations of my responses. Only general findings will be presented in a Summary Report of which I am entitled a copy, and my individual responses are to remain anonymous.

[9] None of the personal information I provide associated with my identity will be released to any other party without my explicit written permission.

[10] If quotes of my responses are used in the research report for this research project, as well as any and all future publications of these quotations, my identity shall remain anonymous, and at most make use of a fictitious name.

[11] I have the right to refuse to answer any question asked of me.

[12] I have the right to refuse at any time to engage in any procedure requested of me.

[13] I have the right to withdraw from participation at any time for any reason without stating my reason.

[14] I have the right to participate without prejudice on the part of the Principal Researcher and other persons assisting the Principal Researcher.

[15] It is possible that the procedures may bring to my mind thoughts of an emotional nature that may upset me. In the unlikely event that I should experience emotional distress from my participation, the Principal Researcher present shall be available to me. She shall make every effort to minimize such an occurrence. However, should an upset occur and become sufficiently serious to warrant professional attention, as a condition of my participation in this study, I understand that a licensed mental health professional will be made available to me. If I do not have such a person, the Principal Researcher will refer me and reasonable costs up to the first two visits will be paid by the Principal Researcher.

[16] By my consent, I understand I am required to notify the Principal Researcher at the time of any serious emotional upset that may cause me to seek therapy and compensation for this upset.

[17] I will receive a copy of this signed consent form for my records.

Regarding any concern and serious upset, you may contact the Principal Researcher,

Rita Anita Linger at: [email] or [phone]. You may also contact the Research Supervisor of the project, Dr. Eric Willmarth, at [email]. Should you have any concerns regarding the conduct and procedures of this research project that are not addressed to your satisfaction by the Principal Researcher and her Research Supervisor, you may report and discuss them with Dr. M. Willson Williams [wwilliams@saybrook.edu], the Director of the Saybrook Institutional Review Board.

**Possible Benefits:**

I understand that my participation in this study may have possible benefits:

[1] I may obtain a greater personal awareness, knowledge, and understanding of the ways in which mindfulness practice and experiential activities can create perception shifts from negative to positive.

[2] Through future communications and possible applications of the findings of the research, indirectly my participation may bring future benefits to others who are also high-level executives in dynamic business environments.

[3] My participation may enable the Principal Researcher and others working in the topic area to contribute to knowledge and theory of the phenomenon to be studied.

[4] Retention of the educational and technological resources.

**Summary Report:**
Upon conclusion of this study, a summary report of the general findings will become available. If you would like a copy of the report, please check the box below and provide the address to which you would like it sent (your email or postal address):

□ I would like to receive a copy of the Summary Report

Postal or Email Address:_____

_____

**Consent of Principal Researcher**

I have explained the above procedures and conditions of this study, provided an opportunity for the research participant to ask questions, and have attempted to provide satisfactory answers to all questions that have been asked in the course of this explanation.

_____ _____
Principal Researcher Signature Date

_____ _____
Principal Researcher Name Date

**Consent of the Participant**

If you have any questions of the Principal Researcher at this point, please take this opportunity to have them answered before granting your consent. If you are ready to provide your consent, read the statement below, then sign, and print your name and date on the line below.

I have read the above information, have had an opportunity to ask questions about any and all aspects of this study, and give my voluntary consent to participate.

_____ _____

Participant Signature Date

_____ _____

Participant Name Date

## Appendix C: Interview Questions—Pre-Intervention

### Mindfulness Coaching Intervention for Perception Shifts and Emotional Regulation Around Workplace Stressors, Productivity, and Quality of Life

1. Briefly describe your role/function in the workplace.

2. Do you consider your daily work environment "dynamic" (changing tasks/responsibilities and challenges, fast paced and production driven) or "static" (slower paced, more focused on developmental aspects of the job, creative writing, curricula development, program development, etc.).

3. Briefly describe your current perceived level of performance and productivity at work.

4. Describe the type of interpersonal relationship you currently experience with each of the following: direct reports, peers, superiors (describe if the relationships are easy, difficult, complex, etc. and what you perceive is the basis for your current experience within that relationship)?

5. Have you experienced a sense of feeling overwhelmed at work? If so what does that sense feel like to you?

6. What does the word "stress" mean to you personally? If you experience it, when do you experience it most often, and how does it make you feel?

7. What particular outcome (s) are you hoping for as a result of this intervention?

8. Are you hoping for any changes or shifts in your perceptions or emotions as a result of this coaching intervention? If so what level:

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | A Little | Moderately | Quite A Bit | Life changing impact |

9. Are you expecting any changes are shifts in your perceptions or emotions as a result of this coaching intervention? If so what level:

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Not at all | A Little | Moderately | Quite A Bit | Life changing impact |

# Appendix D: Interview Questions—Post-Intervention

Mindfulness Coaching Intervention for Perception Shifts and Emotional Regulation Concerning Workplace Stressors, Productivity, and Quality of Life

PLEASE TAKE YOUR TIME TO RESPOND TO THESE 24 QUESTIONS (YOU MAY ANSWER WITHIN THIS DOCUMENT) AS THOROUGHLY AND AS DEEPLY AS POSSIBLE. PLEASE REMEMBER THIS QUESTIONNAIRE IS NOT ABOUT PASSING OR FAILING. IF THERE HAS BEEN NO CHANGE EITHER DURING YOUR PRACTICE OF BEYOND YOUR DAILY PRACTICE DURING THIS INTERVENTION PLEASE SHARE THAT EXPERIENCE AS WELL.

1. As a high-level employee, over the course of the mindfulness coaching intervention, has your mindfulness practice including the techniques you have learned impacted your day to day experiences on any level in your work environment or beyond, in your personal life? If so, how and in what way(s)? If not, why do you think it has not?

2. How often do you practice mindfulness (informal and/or formal) a week and how long (minutes) do you practice each time?

3. What have you noticed about how you are managing your emotions since the intervention?

4. Have you become more aware of self and self in relationships to others since the intervention? If so please describe if not, please articulate that experience.

5. Are you ruminating less or are you able to manage your ruminations better? If so please describe if not please articulate that experience.

6. Do you find you tend to move into a more peaceful place quicker? If so please describe, if not, please articulate your experience.

7. Are you experiencing an improved sense of wellbeing after practice? If so please describe, if not, please articulate that experience.

8. Is your sense of well-being extending beyond your day after practice? If so please describe, if not, please articulate your experience.

9. Are you better able to see things in a more positive orientation after practice? If so, is that positive orientation extending into your day beyond your practice, if so please describe, if not please articulate your experience.

10. How has the coaching piece of this process aided you in your practice and experience?

11. Has the way in which you work with others (i.e. direct reports, peers, superiors), experienced a change (no matter how small) as a result of the intervention? If so how, and in what way(s)? If not, why do you think it has not?

12. Has your sense/perception of your workplace performance increased as a result of the intervention? If so, how and in what way(s)? If not, why do you think it has not?

13. Has your sense/perception of your direct reports workplace performance increased as a result of the intervention? If so, how and in what way(s)? If not, why do you think it has not?

14. Has your sense/perception of negative stressors and how you manage them internally or within your work environment changed or shifted in any way? If so, how and in what way(s)? If not, why do you think it has not?

15. Are you better able to bring a particular quality of attention to your moment to moment experiences than you were before this intervention? If so, how do you accomplish this and what is important about this for you?

16. Do you find that you are better able to regulate your emotions than you were before this intervention? If so, how do you accomplish this and what is important about this for you?

17. Has there been a change (no matter how small) in how you perceive your overall quality of life and sense of wellbeing? If so, how and in what way(s)?

18. What new insights if any have you gained about your ability to connect with your higher self, as well as your ability to shift and change current perceptions relating to negative situations, emotions and relationships with others?

19. Are you better able to observe yourself without judgment? If so, describe your observation to this regard.

20. Are you better able to connect your practice and experiences of mindfulness to how you function in the larger world outside of yourself? If so, please explain how you are experiencing that connectedness.

21. Are you interested in continuing your mindfulness practice into the future? If so, how and why? If not, why not?

22. Did you find this mindfulness intervention of benefit to you? If so please describe the benefit you found in facilities MBSR activities and practice, as well as the Heartmath exercises and practice. If not, please describe what did not work for you and why.

23. Do you perceive your general outlook on the quality of your life more positive than prior to beginning this intervention? If so, in what ways are you noticing a more positive orientation in your life?

24. Did the EmWave PSR assist you in any way in thinking about and/or connecting your feelings, emotions and perceptions to the way in which your body responds to them or have you not used the tool regularly or found it not useful to your specific needs?

## Appendix E: Combined Maslach Burnout Inventory and the Area of Worklife Survey (MBI/AWS)

Due to copyright restrictions, a copy of this survey could not be included.

## Appendix F: Perceived Stress Scale (PSS)

The questions in this scale ask you about your feelings and thoughts during the last month. In each case you will be asked to indicate by circling how often you felt or thought a certain way.

Name _____Date _____

Age _____ Gender (Circle): M F Other

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

1. In the last month, how often have you been upset because of something that happened unexpectedly?.....0 1 2 3 4

2. In the last month, how often have you felt that you were unable to control the important things in your life? ..... 0 1 2 3 4

3. In the last month, how often have you felt nervous and "stressed"? .....……0 1 2 3 4

4. In the last month, how often have you felt confident about your ability to handle your personal problems? ..... 0 1 2 3 4

5. In the last month, how often have you felt that things were going your way?..... 0 1 2 3 4

6. In the last month, how often have you found that you could not cope with all the things that you had to do? ..... 0 1 2 3 4

7. In the last month, how often have you been able to control irritations in your life?.....0 1 2 3 4

8. In the last month, how often have you felt that you were on top of things? …. 0 1 2 3 4

9. In the last month, how often have you been angered because of things that were outside of your control?.....0 1 2 3 4

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? .....0 1 2 3 4

Please feel free to use the Perceived Stress Scale for your research.

## Appendix G: Satisfaction With Life Scale (SWLS)

By Ed Diener, Ph.D.

DIRECTIONS: Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number in the line preceding that item. Please be open and honest in your responding.

1 = Strongly Disagree

2 = Disagree

3 = Slightly Disagree

4 = Neither Agree or Disagree

5 = Slightly Agree

6 = Agree

7 = Strongly Agree

_____1. In most ways my life is close to my ideal.

_____2. The conditions of my life are excellent.

_____3. I am satisfied with life.

_____4. So far I have gotten the important things I want in life.

_____5. If I could live my life over, I would change almost nothing.

## Appendix H: Five Facet Mindfulness Questionnaire (FFMQ)

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Never or very rarely true | Rarely true | Sometimes true | Often true | Very often or always true |

| | Before | After |
|---|---|---|
| 1. When I'm walking, I deliberately notice the sensations of my body moving. | | |
| 2. I'm good at finding words to describe my feelings. | | |
| 3. I criticize myself for having irrational or inappropriate emotions. | | |
| 4. I perceive my feelings and emotions without having to react to them. | | |
| 5. When I do things, my mind wanders off and I'm easily distracted. | | |
| 6. When I take a shower or bath, I stay alert to the sensations of water on my body. | | |
| 7. I can easily put my beliefs, opinions, and expectations into words. | | |
| 8. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted. | | |
| 9. I watch my feelings without getting lost in them. | | |
| 10. I tell myself I shouldn't be feeling the way I'm feeling. | | |
| 11. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions. | | |
| 12. It's hard for me to find the words to describe what I'm thinking. | | |
| 13. I am easily distracted. | | |
| 14. I believe some of my thoughts are abnormal or bad and I shouldn't think that way. | | |
| 15. I pay attention to sensations, such as the wind in my hair or sun on my face. | | |
| 16. I have trouble thinking of the right words to express how I feel about things. | | |
| 17. I make judgments about whether my thoughts are good or bad. | | |
| 18. I find it difficult to stay focused on what's happening in the present. | | |
| 19. When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it. | | |
| 20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing. | | |
| 21. In difficult situations, I can pause without immediately reacting. | | |
| 22. When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words. | | |

| | | |
|---|---|---|
| 23. It seems I am “running on automatic” without much awareness of what I’m doing. | | |
| 24. When I have distressing thoughts or images, I feel calm soon after. | | |
| 25. I tell myself that I shouldn’t be thinking the way I’m thinking. | | |
| 26. I notice the smells and aromas of things. | | |
| 27. Even when I’m feeling terribly upset, I can find a way to put it into words. | | |
| 28. I rush through activities without being really attentive to them. | | |
| 29. When I have distressing thoughts or images I am able just to notice them without reacting. | | |
| 30. I think some of my emotions are bad or inappropriate and I shouldn’t feel them. | | |
| 31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow. | | |
| 32. My natural tendency is to put my experiences into words. | | |
| 33. When I have distressing thoughts or images, I just notice them and let them go. | | |
| 34. I do jobs or tasks automatically without being aware of what I’m doing. | | |
| 35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about. | | |
| 36. I pay attention to how my emotions affect my thoughts and behavior. | | |
| 37. I can usually describe how I feel at the moment in considerable detail. | | |
| 38. I find myself doing things without paying attention. | | |
| 39. I disapprove of myself when I have irrational ideas. | | |

# Appendix I: Baseline Codebook

| Code Name | Sub-Code Name | Code ID | Decision Rules | Example Quote | Code Type |
|---|---|---|---|---|---|
| Goals | | G 1.0 | Rule: Apply this code when a participant talks about what they would like to get out of the Mindfulness intervention | Q: What particular outcomes are you hoping for as a result of this intervention?<br><br>A: "Identify stressors before they cause panic." | Topical |
| Performance | | P 1.0 | Rule: Apply this code when participants talk about their productivity at work. | "I feel like I am spread too thin to perform at the level that I would like. My supervisor continuously adds to my responsibilities and frequently shifts expectations, making it difficult to make and stick with a work plan. I would say that I generally perform reasonably well, but it sometimes comes at a cost to my personal life. My goal in the next period is to find a way to do my job well without working on the weekends." | Topical |
| Personal Life Factors | | PL 1.0 | Rule: Apply this code when participants talk about their personal lives either as a source of stress or as something they would like to improve. | "I would like for this process to leave me more productive, less stressed, more emotionally balanced and with a better ability to maintain a healthy work-life balance." | Topical |
| Work | | R 1.0 | Rule: Apply this | "My supervisor is an | Topical |

| Code Name | Sub-Code Name | Code ID | Decision Rules | Example Quote | Code Type |
|---|---|---|---|---|---|
| Relationships | | | code when participants talk about the nature and quality of the relationships they have at work. | extremely difficult person to work for…He can be a bully and, although he has not done so with me, sometimes yells at staff and treats them in ways that I believe to be abusive. For me, the most frustrating parts about working for him are that he is very impulsive, frequently changing expectations on a dime, and is often not clear about what his goals are with a project." | |
| Stress | | S 1.0 | Rule: Apply this code when participants talk about stress but do not fall into the sub-codes below. | "To me, a little stress can push productivity, and is not a bad thing, as long as you are resilient enough to cope without it, but, prolonged, extreme stress is another story. I experience stress most when I feel like I don't have time to do all the things I need to do. In the most extreme moments, it can make me feel panicked." | Topical |
| | Work Stress | S 1.1 | Rule: Apply this code when participants talk about stress they experience as a direct result of their worklife. | "Yes, I recently passed through the most stressful month of my entire working life. I felt exhausted, demoralized, like there was no way I | Topical |

| Code Name | Sub-Code Name | Code ID | Decision Rules | Example Quote | Code Type |
|---|---|---|---|---|---|
| | | | | could possibly meet the entirely unreasonable expectations put on me. When things were at their worst, I actually felt anxiety so profound that I felt my chest tighten and was unable to sleep." | |
| | Physiological Effects of Stress | S 1.2 | Rule: Apply this code when participants talk about physiological manifestations of stress they experience | "It means to me a sense of being overwhelmed and inability to know what to do next in an effort to get caught up. I seldom experience stress, but when I do it makes it hard for me to concentrate. I also experience warm flushed feelings, and my vision will become unusual, almost surreal." | Topical |

# Appendix J: Follow-Up Codebook

| Code Name | Sub-Code Name | Code ID | Decision Rules | Example Quote | Code Type |
|---|---|---|---|---|---|
| Tolerance | | T 1.0 | Rule: Apply this code when participants talk about how the intervention has impacted their tolerance but does not fall into any of the sub-codes below. | "A little better, I think. Work has been very stressful, but I haven't experienced terrible dread, just a little overwhelmed. Acceptance has helped." | Topical |
| | Tolerance of others | T 1.1 | Rule: Apply this code when participants talk about how mindfulness has impacted their tolerance of others. | "Yes, for all the reasons described herein: A new found love for self, a new perception of others, and a new found respect for the intolerance of others." | Topical (Sub Code) |
| | Tolerance of self | T 1.0 | Rule: Apply this code when participants talk about how mindfulness has impacted their tolerance of self. | "I don't really judge myself at all. I have long accepted who I am and how I feel, and understand that my character defects are part of me. They are to be worked on, but never experienced with judgment. I am becoming more aware of that in practice." | Topical (Sub Code) |
| Awareness | | A 1.0 | Rule: Apply this code when participants talk about how mindfulness has impacted their awareness but does not fall into any of the sub-codes | "I have an awareness that I never had before. I see there is a different way to eat and walk and breathe. I see that eating mindfully is unlike every other meal I have ever eaten. | Topical |

| Code Name | Sub-Code Name | Code ID | Decision Rules | Example Quote | Code Type |
|---|---|---|---|---|---|
| | | | below. | Walking a short path mindfully is vast—more expansive than world travel. I see belatedly that everything I need to have peace is right there inside, where it was all along, undiscovered." | |
| | Emotional Awareness | A 1.1 | Rule: Apply this code when participants talk about how mindfulness has impacted their awareness of their own emotions. | "Yes, I have become more aware of my feelings and how they will or have impacted my current situation and how I perceive the circumstances and my response to it." | Topical (Sub Code) |
| | Awareness of impact | A 1.2 | Rule: Apply this code when participants talk about how mindfulness has impacted their awareness of how they impact others and the world around them. | "Yes, some of the self awareness is painful. I see more clearly what I could become, and how beneficial that would be to others I interact with. I see in painful clarity that only I can help myself distress and eventually live a life where calm reflection is my modus operandi, and not an exception." | Topical (Sub Code) |
| Emotional Regulation | | E 1.0 | Rule: Apply this code when participants talk about how mindfulness has impacted their ability to regulate their emotions. | "There has been a change, albeit this has been such an unusually difficult time for me, emotionally. I am still not able to manage my emotions as completely as I would like. However, I am | Topical |

| Code Name | Sub-Code Name | Code ID | Decision Rules | Example Quote | Code Type |
|---|---|---|---|---|---|
| | | | | much more aware of my emotions and have MUCH more frequently made an effort to use the skills I've learned to calm myself down." | |
| Relationships | | R 1.0 | Rule: Apply this code when participants talk about how mindfulness has impacted their relationships. | "However, I did try to consciously be aware during one conversation with my boss, with what I would characterize as some limited greater awareness." | Topical |
| Peace | | P 1.0 | Rule: Apply this code when participants talk about how mindfulness has impacted their ability to be peaceful or calm. | "I have been better able to calm down and focus when I am angered or frustrated. I do it by stepping away and practicing informally for a few moments or a few minutes. It has been important, because it helps me prevent making decisions that are rash or reactionary, but are better thought out." | Topical |
| Self-care | | SC 1.0 | Rule: Apply this code when participants talk about how mindfulness has changed their sense of self-care. | "Yes, a realization that I need to take care of me." | Topical |
| Response to Challenges | | RC 1.0 | Rule: Apply this code when participants talk | "There has been a very small positive change in an important facet | Topical |

| Code Name | Sub-Code Name | Code ID | Decision Rules | Example Quote | Code Type |
|---|---|---|---|---|---|
| | | | about how mindfulness has impacted their response to challenging situations but do not fall into any of the sub-codes below | of my life. That is one where I am able to calm down more quickly and be more thoughtful about my responses to challenging interactions or situations." | |
| | Work Challenges | RC 1.1 | Rule: Apply this code when participants talk about how mindfulness has impacted their response to challenges at work. | "While, I don't yet see a consistent change—its' too soon—I do, however, see and feel breakthrough moments when I feel calmer, clearer, lighter than usual. Most of the change I notice is with myself….I remain hopeful that as I grow stronger in my ability to go beneath the daily hubbub that I will become more peaceful outwardly also." | Topical (Sub Code) |
| Coaching | | C 1.0 | Rule: Apply this code when participants talk about the role coaching has played in their mindfulness practice. | "The coaching sessions are good as a review of my week, and a reminder of what the point of the practice is. If I was doing this again, I think I would take the coach up on her offer to do a guided mindfulness mediation before each session. That would have been very helpful." | Topical |
| Stress | | S 1.0 | Rule: Apply this | "A little different, I | Topical |

| Code Name | Sub-Code Name | Code ID | Decision Rules | Example Quote | Code Type |
|---|---|---|---|---|---|
| | | | code when participants talk about how mindfulness has impacted their experience of stress. | think. Work has been very stressful, but I haven't experienced terrible dread, just a little overwhelmed. Acceptance has helped." | |
| Other Impacts | | O 1.0 | Rule: Apply this code when participants talk about any other impact that mindfulness has had in their lives that does not fall into any of the other codes or sub-codes. | "So far the new insights seem to be that there is a place deep inside where I can go. When I get there I can truly rest and be judgment free. There is no failure no matter how the time is spent. When I return I will feel lightened. There are no gimmicks—no counting or visualizing. Only being there with my breath." | Topical |
| Minimal effect | | N 1.0 | Rule: Apply this code when participant expresses that mindfulness has not impacted them or certain aspects of their lives. | "I already see most things with a very positive orientation; so the practice may have added a little to that for me..." | Topical |
| Practice Techniques | | PT 1.0 | Rule: Apply this code when participant talk about the techniques they used for practicing mindfulness. | "The first thing I do when I wake up is a short mindfulness meditation. (I have my favorite one memorized.) I love listening to the coaching in that tape. But I find during the day phrases from the | Topical |

| Code Name | Sub-Code Name | Code ID | Decision Rules | Example Quote | Code Type |
|---|---|---|---|---|---|
| | | | | meditation come to me when I pause at a traffic light; while I wait for the computer to boot up." | |
| Barriers | | BR 1.0 | Rule: Apply this code when participants talk about the barriers to practicing mindfulness they experienced. | "Trying to manage too many initiatives in my life has prevented me or I have allowed that to prevent full benefit of an active formal practice." | |
| Future Practice | | FP 1.0 | Rule: Apply this code when participants talk about their plans to continue practicing mindfulness or not. | "Yes, I will continue to practice it every day through daily meditation and relaxing." | |