

ARISING AND PASSING: THE EMBODIED AND EMOTIONAL EXPERIENCES OF  
MEDITATORS

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## DEDICATION

To the lineage of meditation masters who have preserved and passed on these teachings  
to the modern world

## ABSTRACT

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Meditation has been recognized for centuries across cultures as a means for personal development and spiritual growth. Over the last 40 years, meditation practices have gained in popularity due to their therapeutic value (Ospina et al., 2007). Scientific research on meditation has grown significantly in recent years exploring the physical, psychological, emotional, and spiritual benefits of meditation (Baer, Smith, Hopkins, Krietemeyer & Toney, 2006; Brown & Ryan, 2003; Chiesa & Serretti, 2009; Grossman, Niemann, Schmidt, & Walach, 2004; Keng, Smoski, & Robins, 2011; Shapiro & Walsh, 2003). While there have been significant gains made in understanding the effects of meditation through quantitative studies on the concept of mindfulness, there remains a lack of in-depth phenomenological understanding within the scientific literature of the meditative process. Furthermore, there have been very few studies exploring the lived experiences of long-term meditators, including formal practice through meditation retreats. This study explored the lived experiences of eight practitioners of Vipassana meditation, a form of insight meditation. More specifically, the study aimed to understand the embodied and emotional experiences of Vipassana meditators through their accounts of intensive meditation practices. This inquiry used interpretive

phenomenological analysis of semi-structured interviews to understand meditators' experiences. Results yielded 10 major themes: Understanding of Meditation, Experience of Sensations, Experience of Emotions, Interpretation of Emotions and Sensations, Awareness, Equanimity, Processes of Change, Changes and Motivations, Challenges and Barriers and Individual Experiences. Each major theme was composed of subthemes, with 52 subthemes outlined in detail. The results were consistent with existing literature, while also adding to the theoretical and philosophical understandings of meditation. The investigator has provided additional interpretations in understanding the mechanisms of action and processes of change underlying meditation, as well as implications for research and practice. The findings of this study may guide the development of further research models and provide insight for clinical practice.

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## CHAPTER I

### INTRODUCTION

*“Your work is to discover your work and then with all your heart to give yourself to it.”*

- Buddha

#### **Background**

Meditation has been practiced for spiritual and healing purposes in various parts of the world for more than 5,000 years. Over the past 40 years, interest in meditation has risen in the West. In a national survey, 8% of U.S. adults (18 million people) reported engaging in a meditation practice in 2012 (Clarke, Black, Stussman, Barnes, & Nahin, 2015). Historically, meditation has been practiced within the Indian tradition of yoga, and has been a central discipline of contemplative traditions within Buddhism (Shear, 2006). While Buddhism originated in northern India tracing back to Siddhartha Gautama, the tradition began spreading across many parts of Asia as well as to the US in the 1950s and 1960s (Duerr, 2010). During this period, various Buddhist teachers and meditation masters emigrated to the US and established meditation centers, particularly after the Chinese occupation of Tibet (Glowski, 2013). Alongside, in the 1960s and 1970s many Americans traveled to Asia after becoming interested in the contemplative traditions in search of meditation teachers. Many of these travelers returned to establish institutes and organizations making meditation more accessible to those in the West (Duerr, 2010). As this transition occurred, meditation that was originally rooted in Buddhist philosophy and spirituality, evolved into the secular, Western, mindfulness movement (Wylie, 2015). In the past few decades, mindfulness practices became recognized as a method of self-

improvement and stress reduction (Kabat-Zinn, 1984). Mindfulness-based interventions were then introduced into the treatment of various mental health and medical conditions. Today, training programs in mindfulness have made their way into schools, prisons, sports, the U.S. military, and U.S. corporations (Wylie, 2015).

As the therapeutic effects of meditation have increasingly been recognized, research has exploded within the scientific disciplines. Studies exploring the physical, psychological and neurological benefits of meditation have grown tremendously, and have informed treatment for various mental health concerns serving as an alternative or complimentary treatment modality (Keng, et al., 2011). While meditation research has shown promising results as a new method for understanding how the mind and body work, there remain significant definitional and methodological issues and debates (Awasthi, 2013).

Within the literature, meditation has been referred to a state, trait, as well as the processes and practices to reach such states (Davidson & Kaszniak, 2015). Meditation has been defined as a way of being, self-regulation practices aimed at training attention and awareness, focused concentration, and heightened alertness while achieving restfulness and relaxation along with many other definitions (Jevning, Wallace, & Beidebach, 1992; Kabat-Zinn, 2015b; Walsh & Shapiro, 2006). The term *meditation* has also been used interchangeably with the term *mindfulness*. Mindfulness has been referred to impartial watchfulness, or nonjudgmental awareness of moment-to-moment experiences with an attitude of openness, curiosity, and acceptance (Gunaratana, 2002;

Kabat-Zinn, 1994; Bishop et al., 2004). Mindfulness can also be understood as trait changes that may be cultivated through meditation training or mindfulness-based practices (Baer, 2003; Carmody & Baer, 2008). Both terms have also been combined in the use of *mindfulness meditation* to refer to open, receptive forms of meditation aimed at the expansion of awareness (Dunn, Hartigan & Mikulus, 1999).

As evident, there remains an interchangeable use of terminology and an overall lack of consensus on an operational definition of what constitutes meditation. Furthermore, studies exploring psychological processes and effects of meditation have failed to make sufficient distinctions between various techniques of meditation or acknowledge the different stages of meditation among participants (Awasthi, 2013; Davidson & Kaszniak, 2015). While there have been detailed descriptions and phenomenological accounts of the meditative process in traditional Eastern literature (Buddhaghosa, 1976), there remains a lack of theoretical and philosophical groundwork within Western scholarship. Awasthi (2013) stated that the lack of understanding in definition in meditation contributes to difficulties in constructing valid research models. Many researchers have suggested that before proceeding further with empirical investigations, the philosophical foundations of meditation must be better understood as well as the contexts and purpose for which meditation originated (Awasthi, 2013; Hayes & Shenk, 2004). Awasthi (2013) suggested the return to in-depth, first-person phenomenological accounts to better understand the meditative process, stages of

development and the different experiences of novice and experienced meditators before developing testable hypotheses.

While there are many forms of meditation practices, the focus of this inquiry is on Vipassana meditation, one of the most ancient techniques of meditation. The term *Vipassana* means to “see things as they are” and is a method of self-transformation through self-observation (Hart, 1987). The reason for choosing this meditation technique for in-depth inquiry is the method’s cultivation of embodied *self-reflexivity*, which is the conscious turning to the self through the body as a means of self-knowledge and transformation (Pagis, 2009). Heightened awareness of the body has been considered a key mechanism behind the beneficial effects of mindfulness meditation (Hölzel et al., 2011). Vipassana meditation centers on cultivating non-evaluative awareness of physical sensations, reducing discursive tendencies, and enhancing direct, experiential contact with moment-to-moment internal experiences (Hart, 1987).

The ability to sense the physical condition of the body and feel internal states within the scientific literature has been referred to as *interoception* (Craig, 2003). Meditation training has been found to increase interoceptive awareness of bodily signals, cues and responses, while also enhancing interoceptive accuracy or the accurate perception and interpretation of bodily changes (Daubenmeir, Sze, Kerr, Kemeny, & Mehling 2013; Fox et al., 2012). Interoceptive awareness is considered crucial for self-regulation, homeostasis, and maintaining basic survival needs (Herbert & Pollatos, 2012). Individuals differ in their ability to detect internal changes with some showing marked

interoceptive deficits. Disturbances in interoceptive processes and difficulties recognizing and responding to physiological sensations have been considered central among various forms of psychopathology. Interoceptive deficits have been found among individuals with depression, eating disorders, addiction, body dysmorphic disorder, somatoform disorders, and depersonalization disorder, as well as among survivors of trauma (Dunn, Dalgleish, Ogilvie, & Lawrence, 2007; Park, Dunn, & Barnard, 2012; Schaefer, Egloff, & Witthöft, 2012; Van der Kolk, 2006). Increasing interoceptive awareness and attention to internal states has been found to reduce disordered eating, symptom distress and addictions, and support the recovery from trauma.

Furthermore, the degree to which a person is sensitive to interoceptive signals has been linked to improved emotional awareness and emotion regulation (Fustos, Gramann, Herbert, & Pollatos, 2012). Individuals with higher interoceptive awareness exhibited greater ability to process emotional information and showed a tendency to refer to internal bodily states to modulate emotional experiences (Pollatos & Shandry, 2008). As the aim of mindfulness meditation is to expand awareness of thoughts, feelings, and sensations, whether pleasant or unpleasant, there is an increased tolerance and tendency to approach the full range of emotions and physical sensations associated with each emotion (Kabat-Zinn, 1994; Khong, 2011). Emotions such as anger, sadness, fear and shame become equally important to investigate and experience as feelings of joy, excitement, and calm. Greenberg and Meiren (2014) found that meditators showed increased emotional engagement, increased contact with emotions and more rapid

recovery from emotional experiences than non-meditators. Zeng, Oie, and Liu (2014) stated that raising awareness of physical sensations through the practice of Vipassana meditation allows for awareness of subtle changes associated with emotions and greater ability to self-regulate in the face of strong emotions. While numerous studies have shown improvements in emotional awareness, processing, and regulation as a result of meditation and mindfulness practices, the mechanisms through which emotional transformation occurs remains an area of inquiry.

### **Statement of Purpose**

The purpose of this study was to understand the embodied experiences of Vipassana meditators including somatic, interoceptive, and emotional processes. Since the practice of meditation is a highly individualized and internal experience, an in-depth qualitative approach will be utilized. This study aims to deepen the phenomenological understanding of meditation and the meditative process through the study of long-term practitioners of Vipassana meditation, a form of insight meditation. By acknowledging the philosophical foundations of the meditation technique, while also inquiring into the embodied and emotional experiences that practitioners have had during intensive meditation courses, this study aims to provide further insight into the unfolding meditative process by keeping with the context in which meditation is practiced. Furthermore, in exploring a holistic view towards mind-body processes through first person accounts, and open inquiry, the intention is to capture the range and patterns of meditative experiences. While this is an exploratory study, understanding the underlying



mechanisms at work may provide important insights into processes of change, the treatment of clinical disorders, and the enhancement of psychological well-being.

### **Definition of Terms**

*Alexithymia* – a personality trait characterized by difficulties identifying, describing, and expressing emotions (Taylor, Bagby, & Parker, 1991).

*Awareness* - conscious, intentional, attention, and sensitivity to bodily experience cultivated through the practice of meditation (Hart, 1987).

*Concentration Meditation* - meditation practices that involve focusing attention on a single object such as a sound, an image, or the breath to sharpen concentration (Dunn, Hartigan & Mikulus, 1999).

*Discursive Self-reflexivity* - turning towards the self through language where self-knowledge is gained by talking to the self, reflecting on the self or talking to others about the self (Davies and Harré, 1990).

*Embodied Self-reflexivity* - involves turning towards the self through the body, experiencing physical sensations, emotions, and inner states while also observing such states (Pagis, 2009).

*Emotion Schemas* – emotional memories or memory structures that become activated by situational cues that elicit emotion based on past experiences (Greenberg, 2011; Paivio & Pascual-Leone, 2010).

*Emotion Regulation* - the ability to modulate, control and influence emotions including the experience and expression of emotion (Gross, 1998).

*Emotional Processing* - progressive awareness, regulation, and integration of emotions (Greenberg & Pascual-Leone, 2006).

*Equanimity* - an attitude of open acceptance towards all bodily experiences, whether pleasant or unpleasant cultivated through the practice of meditation (Hart, 1987).

*Insight Meditation* – a form of meditation in which insight is cultivated through penetrative analysis giving rise to transcendent insight, or wisdom into the nature of reality and suffering. Such insights involve the realization of nondual perspectives and the disintegration of the self-other divide (Gyatso, 2001; Young, 1994).

*Interoception* - the ability to sense the physiological condition of the body and feel one's own internal states (Craig, 2003).

*Interoceptive Accuracy* - the ability to accurately perceive and interpret changes in bodily sensations (Ceunen, Van Diest, & Vlaeyen, 2013).

*Interoceptive Awareness* - the conscious perception of bodily sensations and the tendency to attend to and perceive internal changes (Ceunen, Van Diest, & Vlaeyen, 2013).

*Meditation* - self-regulation practice that focuses on training attention and awareness towards internal processes fostering mental and emotional well-being and capacities such as calm, clarity, and concentration (Walsh & Shapiro, 2006).

*Mindfulness* - lucid, impartial watchfulness, or nonjudgmental awareness to moment-to-moment experiences with an attitude of openness, curiosity and acceptance (Gunaratana, 2002; Kabat-Zinn, 1994).

*Mindfulness Meditation* – meditation practices that involve expansion of awareness to the stream of thoughts, feelings, sensations, and perceptions that arise within one’s attentional field (Dunn, Hartigan & Mikulus, 1999).

*Vipassana Meditation* – a form of insight meditation that emphasizes self-transformation through self-observation by “seeing things as they are.” (Hart, 1987).

## CHAPTER II

### LITERATURE REVIEW

This literature review covers historical and contemporary perspectives on meditation, including meditation practices and the effects of meditation. It also covers the scientific literature on mindfulness, and the use of mindfulness-based practices to treat clinical concerns. In exploring potential mechanisms through which meditation exerts its beneficial effects, this review addresses mind-body awareness through the concept of interoception. The associations between interoception and emotion are presented along with the emerging literature on meditation as a means to enhance interoceptive awareness and emotional awareness. The chapter concludes with a summary and rationale for the current study, along with the research questions.

#### **Meditation**

*“Meditation is not a means to an end. It is both the means and the end.”*

- Jiddu Krishnamurti

Meditation has become an area of significant interest and attention in our current age and is becoming accepted as a widespread phenomenon. Historically, meditation has been practiced for centuries in varying forms across many cultures, typically with spiritual aims such as spiritual growth, personal transformation, transcendental experience, or enlightenment being the goal (Shapiro & Walsh, 2003). Over the last 40 years, various meditation practices have gained in popularity among Western culture due to their therapeutic value (Ospina et al., 2007). Secular forms of meditation have been

adopted as complementary interventions for addressing the biological, psychological, social, and spiritual aspects of health and illness (Keng et al., 2011). Within the last decade there has been a surge of interest among clinicians and researchers in the empirical investigation of meditation and mindfulness. While significant gains have been made by the scientific community in conceptualizing and understanding meditation, mindfulness, and the effects of meditation practices, there remains significant debates over the core definitions of meditation and mindfulness (Awasthi, 2013; Davidson & Kasznika, 2015). Due to the complex nature of meditation and the coexistence of a variety of perspectives on what constitutes meditation, there remains a lack of consensus within the literature and hence no universally accepted definition. Therefore, in order to define meditation and related constructs, I draw upon various sources ranging from spiritual and philosophical texts, and contemplative traditions to psychological literature, as well as emerging neuroscience studies capturing the neurobiology of meditation. I recognize that even in my own search for definitions, I bring my own ideas, preconceived notions, and biases, which draw me to certain sources over others, influencing the outlined theories.

### **Historical Definitions of Meditation**

The history of meditation has been intimately connected to religion and spirituality, with early references to meditation arising in the Hindu Vedas, ancient Indian scriptures, dating back to 1500-500 BCE (Prabhupada, 1972). Around 600-500 BCE, various forms of meditation emerged through Hinduism, Jainism, Taoism, and Buddhism

as well as Jewish, Christian, and Islamic traditions (Shear, 2006). The term meditation was derived from the Sanskrit term *dhyāna*, meaning contemplation, unwavering attention, and effortless awareness (Miller, 1996).

Meditation, in its essence, is considered to be a way of being. Meditation is not considered to be a technique or collection of techniques (Kabat-Zinn, 2015b; Krishnamurti, 1954; Osho, 1988). Meditation, at its heart is to just be, to not do anything but to simply be as you are, to remain connected to one's center while remaining conscious and aware of all that is occurring within oneself and outside oneself (Krishnamurti, 1954; Osho, 1988; Maharshi, 1985). Meditation, therefore, is not about attaining or reaching a particular state, but about allowing oneself to be exactly where one is in whatever form this may be while also allowing the world to be exactly what it is at any moment in time. As Kabat-Zinn (2015b) describe,

...it is not a doing. There is no going, anywhere, nothing to practice, no beginning, middle, or end, no attainment, and nothing to attain. Rather, it is the direct, realization and embodiment in this very moment of who you already are, outside of time and space and concepts of any kind, a resting in the very nature of your being, in what is sometimes called the natural state, original mind, pure awareness, no mind, or simply emptiness (p. 396).

The paradox that lies with meditation is that in order to develop the capacity to rest in such knowing and attend to experiences that arise inwardly and outwardly, meditation practices rely on focused effort, attending, and active doing (Kabat-Zinn,

2015a). Hundreds of methods, techniques, and practices have been developed across cultures and traditions to cultivate, refine and deepen one's capacity to attend to and remain in present-moment awareness. Therefore, through a practice lens, meditation can be seen as progressive, used to increase vividness of perception and greater calmness and acceptance of experience itself (Carmody & Baer, 2008). For this reason, the term meditation has been used to refer to a mental or spiritual state that may be attained by meditation practices, and has also been used to refer to practices that lead to such a state (Davidson & Kasniaka, 2015). The interchangeable use of the term meditation has caused difficulties for scientists and researchers to accurately define meditation. Kabat-Zinn (2015b) addressed the contradictory ways that meditation has been addressed and stated that although the two approaches are paradoxical, they are also complimentary. Therefore, meditation cannot be viewed as true by either definition in itself but becomes true through the combination of both.

### **Contemporary Definitions of Meditation**

Modern definitions of meditation within the psychological and scientific literature have viewed meditation as “a family of self-regulation practices that focus on training attention and awareness in order to bring mental processes under greater voluntary control and thereby foster general mental well-being and development and/or specific capacities such as calm, clarity, and concentration” (Walsh & Shapiro, 2006, p. 228). Perez-de-Albeniz and Holmes (2000) emphasized certain components of meditation such as relaxation, concentration, an altered state of awareness, suspension of logical thought

processes, and maintenance of self-observing attitude. Cahn and Polich (2006) stated that “meditation is used to describe practices that self-regulate the body and mind, thereby affecting mental events by engaging a specific attentional set” (p. 180). Other descriptions have focused on outcomes of meditation such as heightened alertness and the attainment of subjective experiences of restfulness, silence, and bliss (Jevning et al., 1992). Some have focused on aims of meditation such as fostering psychological and spiritual well-being and maturity through the training of attention and awareness (Shapiro & Walsh, 2003). Others have stated that the goal of meditation is not to transcend personal experience, but to observe internal states without overly identifying with them or without reacting to them in an automatic, habitual manner (Bishop et al., 2004). Likewise, meditation has been stated to be a form of “thoughtless awareness,” in which the activity of the mind is minimized while maintaining heightened alertness (Manocha, 2000).

### **Meditation Practices**

Although there are varying definitions of meditation, the common thread between divergent views is the regulation of attention. Meditation practices have often been classified into three types based on the how attention is directed: (1) focused attention meditation (FAM), a type of concentrative practice; (2) open monitoring meditation (OMM), a type of receptive practice; and (3) loving-kindness meditation (LKM), practices that cultivate loving-kindness, compassion, and forgiveness. Many meditative



techniques fall on a continuum somewhere between these focus attention and open monitoring, while incorporating ethical enhancement practices (Shapiro & Walsh, 1984).

**Focused attention meditation.** Meditation practices that center on cultivating concentration involve focusing attention on a single object such as the breath, a sound, an image, candle flame, or other such object. Examples include forms of yogic meditation and Zazen meditation that focus on the breath, as well as Transcendental meditation, which focuses on a mantra or repeated sound (Dunn, et al., 1999; Ospina et al., 2007). Concentration practices involve narrowing of attention and may also incorporate aspects of mindfulness in allowing thoughts, emotions, and sensations to arise without getting distracted by them, gradually developing the capacity to be a witness or observer as attention is repeatedly brought back to the object. Whenever attention wanders away, the meditator gently returns attention to the object with the intention to detect more quickly when the mind wanders and learn to maintain more stable attention on the object. Early phases of meditation training focus on the development of concentration as preparation for more advanced forms of meditation (Gunaratana, 2002).

**Open monitoring meditation.** Meditation practices that center on cultivating mindfulness involve greater expansion of awareness allowing any thoughts, feelings, or sensations to arise within one's attentional field while maintaining an attentive, nonjudgmental and detached observer stance to moment-to-moment experiences (Dunn, et al., 1999). Examples include Zen meditation, Vipassana meditation, and modern adaptations to mindfulness meditation such as Mindfulness-Based Stress Reduction

(MBSR) (Kabat-Zinn, 2003; Ospina et al., 2007). Such practices require a state of open perceptivity and involve the observation of transient internal and external stimuli, witnessing thoughts, feelings, and sensations as they appear and disappear. The main intention is to sustain attention while there is a shifting flow of experience. Early accounts of meditation have suggested that concentrative attention be mastered before the cultivation of receptive attention (Kapleau, 1965). While meditation is commonly viewed as a practice that involves a motionless, sitting posture, meditation can also be practiced through the use of movement. Examples include Qi Gong, Tai Chi, and yoga, and generally involve the coordination of breath with various physical postures, bodily movements, and meditation (Ospina et al., 2007).

**Loving-kindness meditation.** Meditation practices that involve cultivating compassion for the self and others involve developing a selfless attitude of benevolence towards the self and all beings that can then be expressed through thought, word, and action (Gunaratana, 2002). Loving-kindness meditation utilizes the power of connection and involves directing warm and tender feelings towards the self and others in an open-hearted way. Individuals are first asked to focus on their heart region and generate positive feelings towards the self through thoughts, images, or phrases. Once these warm feelings are established, lovingkindness is extended to an ever-widening circle of others including loved ones, those with whom one feels neutral towards, and then those who evoke difficult or unfriendly feelings (Salzberg, 1995).

While there are dozens of techniques aimed at focusing the mind and cultivating awareness, for the purposes of this study I focus on Vipassana meditation, a form of insight meditation. The reason for choosing Vipassana meditation lies in the technique's emphasis on a form of self-awareness referred to as embodied self-reflexivity (Pagis, 2009).

### **Self-Reflexivity**

Self-reflexivity has been defined as the conscious turning towards the self, with the self being the observed object while also being the observing subject (Rosenberg, 1979). Self-reflexivity refers to the capacity to move between subjective and objective perspectives while managing the tension that may arise in experiencing oneself as subject and object (Auerbach & Blatt, 1996). Pagis (2009) suggested that there are two forms of self-reflexivity, discursive self-reflexivity and embodied self-reflexivity.

**Discursive self-reflexivity.** Turning towards the self through language is referred to as discursive self-reflexivity and involves the attainment of self-knowledge by talking to the self, reflecting on the self or talking to others about the self (Davies & Harré 1990). Through discursive means, reflexive processes involve a symbolic or abstract self-image referred to as the self-concept or conceptualized self (Rosenberg, 1979). Self-awareness through discursive means uses cognitive representations of the self as explained through Duval and Wicklund's (1973) theory of objective self-awareness, and Buss's (1980) self-consciousness theory.

**Embodied self-reflexivity.** Turning towards the self through the body is referred to as embodied self-reflexivity and involves experiencing physical sensations, emotions, and inner states while also observing such states (Pagis, 2009). Aron (2000) explained this to be a dialectic process of both reflecting on the self as an object, while also experiencing oneself as the subject. Therefore, rather than being based primarily on cognitive observation, there are experiential and affective components as well. While, a cultural emphasis on discursive modes of reflection has led to language being the primary mode of reflexivity, embodied self-reflexivity has become an emerging focus of inquiry. Pagis (2009) suggested that embodied self-reflexivity is another method for self-knowledge, transformation and growth as subjective and objective awareness come together connecting mind and body, or the observational mode and experiential mode. Vipassana meditation is one method of cultivating embodied awareness and aims to reduce the internal dialogue for an embodied form of self-understanding.

*“There is a voice that doesn’t use words, listen” - Rumi*

### **Vipassana Meditation**

Vipassana meditation was originally believed to be discovered by Gautama Buddha over 2,500 years ago and is considered one of the most ancient techniques of meditation. The technique was originally passed down to a lineage of teachers who shared the practice with meditators across the globe, and is now a widespread form of meditation. The term Vipassana means to “see things as they are” and is a method of self-transformation through self-observation (Hart, 1987). Vipassana meditation originated within Theravada Buddhism and was popularized by S.N. Goenka as well as

contemporary American Buddhist teachers through the Vipassana movement, also called the insight meditation movement (Braun, 2013). While today, Vipassana meditation is practiced in non-sectarian manner, the traditions of Vipassana practice are based on the philosophical texts called the Abhidhamma (Bodhi, 1993) as well as the *Satipaṭṭhāna Sutta*, a discourse by the Buddha on establishing mindfulness, extinguishing suffering and realizing truth (Thera, 1998). In the *Satipaṭṭhāna Sutta*, the Buddha identifies four objects as focal points for awareness: the body, sensations, the mind, and the contents of the mind. While some Vipassana practices are focused on the body and sensations, others are focused on the mind and the contents of the mind. For this study, I focus on Vipassana meditation led by S.N. Goenka due to this tradition focusing primarily on developing heightened awareness of bodily sensations as a source of self-observation (Hart, 1987).

**The practice of Vipassana meditation.** Vipassana meditation courses typically involve 100 hours of intensive meditation practice over a 10-day period. Meditation instructions are provided through audio recordings during daytime meditation sittings. The instructions are tailored to the different stages of meditation that meditators may move through during the course of 10 days and follow a gradual progression. Meditation instructions for the first 3 days center on developing sustained attention, and cultivating awareness through objective observation of one's breath. Awareness is increased through the first few days by narrowing the focus of attention to subtle sensations of the breath. Once the practitioner has developed greater concentration and the mind becomes calmer

and more focused, the practitioner then switches to paying close attention to physical sensations within the entire body. The practitioner gradually moves part by part, from head to toe, spanning the body with focused awareness (Hart, 1987). Gradually, attention is expanded and mindfulness is used to investigate moment-to-moment experiences throughout. Thoughts, feelings, and sensations are learned to be viewed from a nonjudgmental perspective allowing the contents of one's mind and bodily sensations to be witnessed objectively. As awareness and equanimity are increased, meditators are instructed to move deeper into the body, rather than meditating on sensations on the surface of the body. Practitioners learn experientially that the sensations within the body, as well as emotional and cognitive states arise and subside, providing direct insight into their impermanent nature (Pagis, 2009).

Meditators are instructed to refrain from speaking, reading, writing or communicating in any form with others for the course of 10 days. Removing discursive tendencies including decreasing the inner conversation of the mind allows for the emergence of the body as the focal point and center of experience (Pagis, 2009). Meditators are also encouraged to maintain a certain level of moral conduct in order to promote deeper meditation practice. The main precepts for the duration of the course include abstaining from killing, stealing, inappropriate speech, sexual activity and using any substances or intoxicants. Maintaining silence throughout the course is highly prioritized in order to reduce discursive tendencies and enhance internal focus and concentrated awareness on the body. Meditators are encouraged to refrain from all

communication with other meditators including gestures, sign language or written notes. Meditators are permitted to talk to the teachers regarding the technique and any difficulties that may be arising during the practice. Each day, meditators are permitted 15-30 minutes to speak with the teachers to ensure that they are understanding the technique and practicing according to the instructions. For two hours every evening, a video recording of S.N. Goenka, the lead teacher who dispersed the teachings, is displayed that recaps the essential aspects of the practice for each day. Meditation theory and the historical roots of the practice based on verbal and written transmissions of the technique and philosophy are discussed. S.N. Goenka provides some interpretation of meditation experiences through discussion of key concepts. Goenka also discusses the potential difficulties that practitioners typically face each day, and normalizes challenges to increase understanding, motivation and self-efficacy. Meditators are encouraged to remain equanimous to arising thoughts and reactions, and encouraged to be their own authority and guide by deepening their understanding of the practice through direct experience.

**The philosophy of Vipassana meditation.** Vipassana meditation carries a philosophy is opposite to Cartesian notions of a hierarchy of the mind over the body. Vipassana meditation centers on the body being the primary influence over the mind, and the means through which healing and self-transformation occur (Pagis, 2009). Rather than a cognitive search for the cause of emotion, Vipassana meditation remains focused on the physical experience of an emotion, becoming aware of nuanced physical

sensations while developing equanimity to such experiences (Hart, 1987). Practitioners are instructed to concentrate their minds on feeling the bodies, deliberately focusing on the synchronicity between mind and body. Meditators are instructed not to visualize their bodies but to experientially feel what is occurring on every inch of the body from head to toe, noticing changes in sensations, whether that be feeling heat, perspiration, itching, pain, tingling etc., remaining nonjudgmental in one's observation of sensations, whether pleasant or unpleasant (Pagis, 2009).

The two main features of the technique involve the cultivation of: 1) *awareness*, which can be understood as conscious, intentional and full attention or sensitivity to bodily experience; and 2) *equanimity*, which can be defined as an attitude of acceptance towards all bodily experiences (Hart, 1987). Equanimity not only emphasizes the acceptance of negative feelings or physical sensations to reduce avoidance, but also encourages equal acceptance of positive feelings or physical sensations to reduce clinging and the expectations to remain with positive states. Naturally, this takes significant effort, time, and practice as practitioners learn to reduce discursive tendencies and remain with the full range of sensations for extended periods of time without reacting, a way of being that may seem counter to their everyday way of being.

Practitioners may not completely be without thoughts, however, over time meditators gradually learn to observe their physical experiences while also observing passing thoughts, taking a witnessing stance to both. Practitioners may begin noticing the occurrence of thoughts, emotions, physical sensations, external sounds, and other stimuli



as they arise from moment-to-moment, sharpening their awareness (Gunaratana, 2002). Meditators may naturally be distracted by stimuli or may find themselves rolling in thoughts or overwhelmed by emotion and not realize that they have lost awareness of their inner states. Practitioners are instructed to repeatedly direct attention back to the breath as a means to refocus and re-center. Over time, practitioners train themselves to 1) regulate attention and have more control over what they attend to, 2) reduce thinking about physical sensations while increasing their ability to experience them directly, and 3) observe passing thoughts, emotions and sensations with detachment and clarity (Williams, 2010). By taking a witnessing stance, practitioners learn to disengage from thoughts and feeling, no longer overly identifying with them, reducing automatic or habitual patterns of reactivity. With detachment, greater space is experienced between perception and response so that situations can be handled consciously and less automatically or impulsively (Bishop et al., 2004).

One of the primary tenets of Theravada Buddhist philosophy is the concept of “not-self” (Rosch, 2007). The self that is called the “I” is believed to be made up of five elements: the body, sensations, perceptions, reactions, and consciousness, which are constantly changing and in a consistent state of flux. Therefore, the “I” is not believed to be a unified entity. From a Buddhist perspective, the attachment and identification with the “I” is believed to be a source of suffering (Gunaratana, 2002). Liberation is believed to be based on the realization of the impermanent nature of self. The aim of Vipassana meditation is to reduce the symbolic, cognitive self and to turn to the body as a means to

understand the “not-self.” Practitioners are encouraged to experientially understand that they are constructed of impermanent experiences and do not embody a permanent self, so as to reduce attachment to a self-image, and reduce subsequent suffering (Hart, 1987). Practitioners are encouraged to see reality for what it is, through direct experience of the three characteristics of existence, impermanence (*annica*), unsatisfactoriness or suffering (*dukkha*), and non-self (*anatta*) (Rosch, 2007). The causes of suffering are outlined as craving, aversion, and ignorance as the mind turns preferences and desires into craving and clinging, and turns unpleasant experiences into aversion and avoidance. The aim of meditation is to develop an attitude of equanimity towards the vicissitudes of life, whether pleasant or unpleasant, reducing reactivity and maintaining balance when faced with existential realities (Hart, 1987).

In Vipassana, meditators are therefore encouraged to engage in the “deconstruction of the self” through the recognition of the transitory nature of self-representations and the impermanent flux of human experience (Epstein, 1988). Such concepts of no-self, egolessness, and emptiness have gained attention by meditation researchers as these notions appear counter to Western principles of ego development, building of self-esteem, and self-fulfillment through mastery and the development of a continuous and stable sense of self (Baumeister, 1987). While some have suggested that these are diametrically opposite, others have suggested that the two approaches to the self can be recognized as different stages in the development of self (Michalon, 2001). A healthy sense of self is believed to be necessary before one can gain insight into the

illusory nature of self-concepts and the recognition of non-self (*anatta*) (Epstein, 1990). Such insights into the nature of reality, and the experience of the not-self are typically explored within extremely advanced levels of meditation. Although, there has been evidence that Vipassana meditation contributes to increases in self-esteem, self-worth, and self-acceptance as well as decreases in defenses of displacement, projection, and regression (Emavardhana & Tori, 1997), the primary focus on this study was on direct experiences of Vipassana meditators and embodied self-awareness as a means of self-knowledge.

### **The Effects of Meditation**

Although meditation practices may differ, meditators often report lasting changes in self-experience including an expanded experience of the self beyond the physical body and mental contents (West, 1987). Changes are distinguished by states and traits of consciousness. *State* refers to shifts in sensory, cognitive, emotional, and self-referential awareness that can occur while meditating. *Trait* refers to lasting shifts in these areas that persist beyond the meditation practice and are present as meditators move through their everyday lives (Shapiro & Walsh, 1984; West, 1987).

**State changes.** State changes as reported by meditators include a deep sense of calm, stillness, peace, a reduction of the mind's internal dialogue, moments of perceptual clarity, and the experience of awareness merging with the object of meditation (Wallace, 1999; West, 1987). Meditators have also reported on "peak experiences," in which they become blissfully absorbed in the current moment, often referred to as

Samadhi, nirvana, or oneness (Goleman,1996). Some meditators have reported on somatic experiences such as spontaneous movements, changes in perception of pain, alterations in breathing patterns, as well as changes to their sense of smell, taste, and sensitivity to light and sound. Others have reported on strong emotional experiences such as intense sadness, anger, fear, joy, and sharp changes in feeling states and mood (Kornfield, 1979).

**Trait changes.** Trait changes as a result of long-term meditation include heightened awareness, particularly of sensory stimuli, a sense of feeling grounded, comfortable and calm in everyday contexts, and changes in the relationship to thoughts, feelings and experiences of the self (Kornfield,1979). Meditators have spoken of “choiceless awareness,” being a witness to any internal and external stimuli and have reported on maintaining such awareness even while in deep sleep. Alongside, meditators have reported on changes in their perceived separation between the observer and the observed (Austin, 2000; Travis, 2001; West, 1987). As a lack of separation develops, the sense of self is no longer confined to the body or the mind, resulting in a state of *beingness* or what is also referred to as *self-realization*.

*“The present moment is the only moment available to us, it is the door to all moments”*  
- Thich Nhat Hahn

## **Mindfulness**

### **Historical Definitions of Mindfulness**

Within traditional perspectives, trait changes have been referred to as *Sati*, a Pali term that means lucid, impartial watchfulness or bare attention which also has

connotations with remembrance or memory (Bodhi, 2011; Gunaratana, 2002).

Mindfulness is the English translation of *Sati*, which has been adopted within the scientific literature. Mindfulness, within classical Buddhism, was not considered an end in itself but rather a valuable trait to cultivate due to reduced suffering as a result of lack of attachment to a permanent individual ego (Gunaratana, 2002). Emotional balance and psychological well-being were stated to ensue in changing one's internal perception of experiences rather than modifying external events (Gethin, 2001). Therefore, the traditional emphasis of meditation practices was to develop a deep understanding of one's inner mental landscape, patterns of behavior, and the essential nature of the mind in order to cultivate a greater sense of virtue and well-being (Bodhi, 1999; Rahula, 1974).

### **Contemporary Definitions of Mindfulness**

With modern Western psychology, several attempts have been made to operationalize mindfulness for clinical and research purposes in order to assess effects or outcomes of mindfulness and to explore the psychological processes that lead to positive clinical change. Kabat-Zinn (1994) provided one of the first definitions of mindfulness as “paying attention in a particular way, on purpose, in the present moment, and non-judgmentally” (p. 4). As interest has risen in mindfulness as a scientific construct, various quantitative measures have emerged in attempts to conceptualize the complex nature of mindfulness.

Researchers have debated over whether mindfulness should be viewed as an individual construct, or as a multifaceted construct that incorporates multiple states and

processes. Brown and Ryan (2003) suggested that mindfulness consists of a single factor which involves awareness and attention towards present-moment experiences. Walach, Buchheld, Buttenmüller, Kleinknecht, and Schmidt (2006) proposed that mindfulness includes presence, nonjudgmental acceptance and openness to experience, which are considered part of the holistic construct of mindfulness rather than distinguishable factors. Bishop et al. (2004), on the other hand, conceptualized mindfulness as a two-factor construct that involves 1) regulation of attention and 2) a curious, accepting orientation toward experience. Baer, Smith, Hopkins, Krietemeyer, and Toney (2006) proposed a multifaceted construct with five factors including describing, observing, acting with awareness, nonjudging, and nonreacting.

### **Practices that Cultivate Mindfulness**

Studies have shown that mindfulness can be cultivated through training and practice (Baer, 2003; Carmody & Baer, 2008). Mindfulness training can be categorized into three groups. The first consists of brief mindfulness inductions that involve short intervals of mindfully attending to present moment experience. The second involves mindfulness-based interventions aimed at reducing physical and psychological symptoms that incorporate concepts of mindfulness into clinical practice such as mindfulness-based stress reduction (MBSR; Kabat-Zinn 1984), mindfulness-based cognitive therapy (MBCT; Segal, Williams, & Teasdale, 2002), acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 1999) and dialectical behavior therapy (DBT; Linehan, 1993). The third involves intensive meditation practice, such as Vipassana meditation or

Zazen meditation, that involve advanced training and the incorporation of mindfulness practice into daily life (Hart, 1987). Within such practices, practitioners gradually learn to develop equanimity, or an attitude of acceptance to moment-to-moment experiences and develop greater capacity to remain calm, centered and steady in the face of challenges and fluctuating internal states (Bishop et al. 2004).

### **The Effects of Mindfulness**

Studies assessing long-term practitioners of mindfulness meditation have found that training enhances mindfulness skills and promotes increased self-awareness, self-regulation, and psychological well-being (Baer et al., 2006; Brown & Ryan, 2003; Falkenström, 2010). Mindfulness has also been shown to reduce psychological symptoms such as anxiety, and depression (Hofmann, Sawyer, Witt, & Oh, 2010). Alongside, mindfulness-based interventions have been used for the treatment of chronic illness (Bohlmeijer, Prenger, Taal, & Cuijpers, 2010), binge eating disorders (Kristeller & Hallett, 1999), substance use disorders (Zgierska et al., 2009), aggression (Heppner et al., 2008), obsessive compulsive disorder (Wahl, Huelle, Zurowski, & Kordon, 2013), and post-traumatic stress disorder (Wolfsdorf & Zlotnick, 2001). Mindfulness has also been found to reduce stress levels among healthy individuals (Chiesa & Serretti, 2009), while also increasing empathy (Mascaro, Rilling, Negi, & Raison, 2012), and compassion (Condon, Desbordes, Miller, & DeSteno, 2013). Mindfulness meditation has also contributed to enhanced relationships, denoted by greater safety, connection, intimacy, improved sexual wellness and reduced emotional reactivity (Pruitt & McCollum, 2010).

In order to assess outcomes of mindfulness, researchers have focused on the psychological processes that define mindfulness and decoupled mindfulness from meditation. Although there are scientific advantages to measuring trait mindfulness, there have been several criticisms by researchers well-versed in classical conceptualizations of mindfulness who have expressed concerns about conceptual misinterpretations (Chambers, Gullone, & Allen, 2009; Hayes & Shenk, 2004; Rapgay & Bystrisky, 2009). Grossman (2008) outlined a number of important issues including (1) conceptual differences in what constitutes mindfulness among experts, (2) lack of knowledge among researchers of Buddhist philosophical underpinnings and lack of direct and in-depth experience with meditation practices, (3) lack of understanding by respondents of words and phrases within inventories due to varying personal practices, (4) differences between self-rating mindfulness versus actual mindfulness of individuals, and (5) biases between long-term mindfulness meditators and those who have undergone brief mindfulness-based interventions.

According to classical literature, long-term mindfulness meditation practice is often required in order to develop a proper understanding of mindfulness (Gunaratana, 2002). Furthermore, with practice, there is awareness of the changing nature of a personal understanding of mindfulness as different stages are reaching within one's practice and the development of mindfulness is recognized as an ongoing process that encompasses various qualities that are difficult to delineate (Bodhi, 1999). Since the concept and practice of mindfulness remains to be a highly subjective and individualized experience



in which the source of inquiry and understanding rests in one's own experiential knowledge, Western psychological science that emphasizes intellectual knowledge and quantifiable outcomes becomes less compatible as a research approach. As Grossman (2008) suggested, qualitative analysis based on interviews may enhance our understanding of mindfulness and allow for its multidimensional nature to come forth. Qualitative inquiry allows for more in-depth and contextual exploration of the phenomenon of mindfulness meditation, allowing the complexities, the subtleties, and depth of individual experience to emerge.

*One of the biggest problems in the world is that people don't feel themselves properly.*

- Chögyam Trungpa Rinpoche

### **Body Awareness**

Body awareness, somatic awareness, and mind-body processes have become increasingly recognized as essential to mental health and well-being, however, conceptual definitions have varied across disciplines. Body awareness and somatic awareness has typically been explored within psychological studies of anxiety and panic disorders to explain cognitive components such as an exaggerated focus on physical symptoms that lead to rumination, catastrophic beliefs, and magnification of symptoms (Cioffi, 1991). Therefore, somatic and body awareness within this context has been viewed as maladaptive as increased awareness or self-focused attention has contributed to increases in anxiety (Mallorquí-Bagué et al., 2014). However, as mindfulness research has emerged, and awareness of the body has expanded to include nonjudgmental acceptance of physical symptoms, sensations, and greater detection of subtle bodily cues, the

construct of body or somatic awareness has been viewed as beneficial to health and considered adaptive (Watkins & Teasdale, 2004). As research in neuroanatomy has grown, the construct of interoception has emerged to explain mind-body pathways and capture awareness centered on internal states of the body.

### **Interoception**

Interoception has been broadly defined as the ability to sense the physiological condition of the body and feel one's own internal states (Craig, 2003). Interoception includes the representation of internal states within the context of ongoing activities and is associated with strategies to regulate the body's response to safety or threat as well as basic survival functions such as temperature regulation and metabolism to maintain homeostasis (Paulus, 2007; Herbert & Pollatos, 2012; Gu & FitzGerald, 2014).

Interoception as a multi-dimensional construct includes how people receive, appraise, and respond to bodily sensations. Interoception includes two forms of perception:

*proprioception* (signals from muscles, skin, joints) and *visceroception* (signals from organs such as heart beat, respiration, hunger, thirst) (Craig, 2003; Craig, 2009).

Studies have shown that there are tiny receptors located throughout the inside of the body that gather information and relay signals to the brain. The brain processes these messages resulting in a person's feelings of hunger, fullness, warmth, coolness, pleasure, pain, agitation, relaxation, or sexual arousal (Craig, 2003). Interoception has also been linked to identifying and feeling emotions and involves the recognition of emotional reactions through physical cues (Barrett, Quigley, Bliss-Moreau, & Aronson, 2004).

Interoception differs from exteroception, which is the perception of the external environment (Sherrington, 1906). Individuals differ in their ability to detect internal physical and emotional states and subtle changes within the body. Therefore, the narrower construct of interoceptive awareness (IA) highlights a person's level of sensitivity to bodily signals (Craig, 2003).

**Interoceptive awareness.** Individual difference in interoceptive awareness has been assessed primarily through perception of heart beat under resting conditions based on performance of heart beat detection through the use of fMRI (Eichler & Katkin, 1994; Knapp, Ring, & Brener, 1997; Ring & Brener, 1992; Schandry, Bestler, & Montoya, 1993). The individual degree of interoceptive awareness can be viewed as a trait-like sensitivity toward one's visceral signals. While measures of interoception have been valuable in assessing individual differences in perceived sensitivity of internal bodily changes, there have been arguments made about whether subjective interoceptive awareness is accurate. Therefore, distinctions have recently been made between interoceptive awareness and interoceptive accuracy (Ceunen, et al., 2013).

**Interoceptive accuracy.** While interoceptive awareness is the conscious perception of bodily sensations and the tendency to attend to and perceive internal changes, interoceptive accuracy refers to the ability to *accurately* perceive and interpret changes in bodily sensations. Although accurate perceptions depend on awareness, awareness alone does not necessarily lead to accurate perceptions (Ceunen, et al., 2013). Potential reasons for differences in interoceptive awareness and accuracy include the

interference of schemas regarding bodily sensations that involve beliefs and expectations of how a person's body responds under certain situations based on past experiences. Thus, interoceptive awareness may lead to thoughts regarding bodily sensations that make it more difficult to detect actual physiological changes (Bogaerts et al., 2008).

**Meditation and interoceptive awareness.** As outlined earlier, attention to internal bodily sensations is a core feature of various meditation practices. Mindfulness meditation centers on cultivating nonevaluative awareness of interoceptive sensations such as the breath, the joints, muscle tension and the heartbeat under conditions of rest (Kabat-Zinn, 1990; Kornfield, 1996; Nairn, 2000). Many meditative traditions have stated that increased attention to interoceptive sensations through repeated training results in enhanced awareness of bodily signals, cues and responses. Such claims have led to the scientific investigation of whether long-term meditation practices may enhance interoceptive awareness as well as accuracy. Mehling et al. (2013) found that self-reported interoceptive awareness increased after mindfulness training. Furthermore, meditators showed greater respiratory interoceptive accuracy compared to non-meditators with interoceptive awareness contributing to heightened interoceptive accuracy (Daubenmeir et al., 2013). In a study comparing novice and experienced Vipassana meditators ranging in experience from 1-15,000 hours, Fox et al. (2012) found that highly experienced meditators showed significantly greater interoceptive accuracy than novice meditators based on tactile sensitivity during a body-scan meditation. The rigor and number hours of meditation practice was suggested to predict interoceptive accuracy.

While numerous studies have shown improved interoceptive accuracy, some studies assessing heartbeat detection showed no significant differences in interoceptive accuracy between meditators and nonmeditators (Khalsa et al. 2008; Nielsen & Kaszniak, 2006). Reasons for null findings include methodological issues suggesting the need for broader methods to assess quality of interoceptive awareness and accuracy.

Michalak, Burg, and Heidenreich (2012) suggested that heightened awareness of the body is a key mechanism of action of mindfulness when treating depression. Segal, Williams, and Teasdale (2002) proposed that mindfulness training may help depressed individuals become aware of subtle bodily cues of depressive mood before the mood becomes a full-blown episode of depression which later can be difficult to overcome. Over time if individuals are likely to detect early signs of lethargy, anhedonia, sleep, and appetite changes they may be able take deliberate steps to care for themselves rather than over identify and fuse with their mood states. Non-evaluative attention to interoceptive sensations may help individuals disengage from dysfunctional thought patterns that perpetuate negative moods allowing for adaptive coping responses to be invoked.

While detaching from physical and emotional states may have benefits, Pagis (2009) suggested that increased awareness of embodied or somatic reactions has a transformational effect on the reactions themselves. By concentrating on embodied sensations and feeling such sensations fully without avoiding or habitually reacting through physical action or expression, meditators reported that the sensations and experiences themselves appeared to change. Farb et al. (2010) discovered that greater

access to bodily sensations during feelings of sadness was associated with lower levels of depression. Similarly, Greenberg and Meiran (2014) suggested that mindfulness may be associated with increased contact with emotions, greater emotional engagement and consequently, faster recovery from emotional distress. Therefore, mindfulness meditation may cultivate interoceptive awareness and attention to bodily sensations under resting conditions and enhance the ability to notice and attend to internal sensations during distressing experiences, while having a calming effect on physical and emotional responses through such non-evaluative attention.

### **Disturbances of Embodiment**

**Psychopathology.** Growing research has indicated that interoception plays a central role across psychopathology with studies showing marked interoceptive deficits among individuals with depression (Dunn et al. 2007; Dunn et al., 2010). Disturbances in interoceptive processes and difficulties recognizing and responding to physiological sensations have been considered central among eating disorders (Park et al., 2012), addiction (Naqvi, Rudrauf, Damasio, & Bechara 2007), schizophrenia (Kring & Neale, 1996), body dysmorphic disorder, and somatoform disorders (Schaefer et al., 2012). Increasing interoceptive awareness and attention to internal appetite signals and sensations in response to external food cues has been found to reduce disordered eating given the proclivity for individuals not to detect and respond to hunger and satiety cues (Brown, Smith & Craighead, 2010; Alberts, Mulken, Smeets, & Thewissen, 2010). Improving interoceptive awareness also reduced symptom distress in individuals with

somatoform disorders (Schaefer et al., 2012) while mindful attention to craving sensations was found to reduce addictions (Westbrook et al., 2013).

**Dissociation.** The absence of embodied self-awareness has been viewed as a form of dissociation from the lived body and has been accompanied by chronic feelings of stress, a lack of control, lack of attachment security, and recurrent physical illness (Fogel, 2011). Depersonalization disorder (DPD), a syndrome characterized by a profound disruption of body self-awareness involves feelings of disembodiment or disconnection from the body, emotional numbing and the inability to experience emotions, a lack of ownership when remembering personal information and feelings of estrangement or alienation from surroundings (American Psychiatric Association, 2013). Sedeño et al. (2014), in a preliminary study assessing interoceptive awareness in an individual with DPD found deficits in cognitive processing of bodily signals and impairments in empathy and emotional awareness. Tsakiris, Tajadura-Jiménez, and Costantini (2011) suggested that individuals with low interoceptive abilities were more likely to experience the bodily self as an object rather than as a living, sentient being in need of protection and nourishment, and that impaired interoception was associated with disconnection from the bodily self.

**Trauma.** Traumatic events such as child abuse, interpersonal violence, natural disasters, automobile accidents, sexual and physical assault, torture, war, and life-threatening medical conditions can often lead to psychological and physiological changes (Briere & Scott, 2013). Depending on how individuals respond to a traumatic event, they

may experience somatic complaints, dissociation, hyperarousal, intrusive memories, amnesia, difficulties identifying and regulating emotions, impulsivity, aggression, depression, anxiety, self-injury, loss of meaning, changes in self-perception and disruptions in intimate relationships due to lack of safety, trust, and sense of connection (Cook et al., 2005; Courtois, 2008; Herman, 1992; Streeck-Fischer & Van der Kolk, 2000).

Trauma disrupts and reorganizes homeostatic controls as individuals develop greater sensitivity to environmental threat and suffer from a persistent activation of the stress response. Van der Kolk (2006) stated that individuals who may have experienced trauma during childhood or have endured repeated, prolonged trauma tend to have poor interoceptive awareness and have difficulties sensing and interpreting bodily signals and feelings. Since internal states can become overwhelming for survivors of trauma, strategies of avoidance or dissociation become habitual ways of coping leading to a lasting change in one's relationship to the body (Van der Kolk, 2006). Traumatized people become trapped between feeling too much (being overwhelmed or flooded) or feeling too little (shutting down or feeling numb) and lose the ability to trust their sensations (Levine, 2010). Individuals with trauma histories who experience disconnection from the body are, therefore, more likely to have difficulties with self-injury, substance abuse, eating disorders, and somatization (Herman, 1992; Nijenhuis, Spinhoven, van Dyck, van der Hart, & Vanderlinden 1998; Paras et al., 2009). In becoming disconnected from their bodies, survivors may also become disconnected from



their psychological and physiological needs, leading to ongoing distress and symptom expression (Van der Kolk, 2006). Furthermore, interoceptive deficits appears to be related to an increased tendency to harm the body through self-injury and suicidal behavior as interoceptive abilities appear to be more disturbed in suicidal attempters compared to individuals with suicidal ideation (Forrest, Smith, White, & Joiner, 2015).

**Alexithymia.** Research indicates that individuals who have engaged in self-injury, substance abuse, and disordered eating reported difficulty identifying and expressing their emotions, a concept called *alexithymia* (Ross, Heath, & Toste, 2009; Taylor et al., 1991). Alexithymia is considered a personality trait characterized by difficulties identifying, describing, and expressing emotions and is associated with a broad range of physical and psychological disorders (Taylor et al., 1991). Studies assessing individuals who have experienced trauma have shown decreased activity in the Broca's area of the brain, which is responsible for translating personal experience into communicable language (Shin et al., 1997). Alongside, high levels of emotional arousal prevent proper labeling, processing, and categorization of experience, and may lead to memories and emotions being imprinted and re-experienced somatically as opposed to verbally (Van der Kolk, 2014). Intense emotions may be experienced with fragments of memory leading to an inability to label feelings and communicate what is occurring internally as a result of lack of integration and fragmentation of experience.

While alexithymia consists of lack of emotional awareness and difficulties translating bodily signals to conscious awareness, lack of somatic awareness or blunt

interoception has been referred to as alexisomia (Ikemi & Ikemi, 1986). Both emotional awareness and somatic interoceptive awareness are considered essential for psychosomatic health. The cooperative relationship between the two improves homeostatic processes and maintains the integrity of the body (Kanbara & Fukunaga, 2016). On the contrary, higher levels of alexithymia are associated with low interoceptive awareness (Herbert, Herbert, & Pollatos 2011). Theories of embodied cognition have also proposed that there is a reciprocal relationship between bodily activity and the way in which emotional information is processed (Niedenthal, 2007).

### **Interoception and Emotion**

Across cultures, bodily expressions are often used to describe emotional experiences such as “broken hearts” and “gut feelings” (Heelas, 1996). The degree to which a person is sensitive to interoceptive signals has been linked to emotional awareness, emotion regulation, improved memory, and intuitive decision-making (Dunn et al. 2010a; Fustos et al., 2012). Studies have also shown that individuals who perceived bodily signals with higher accuracy experienced more intense emotions (Critchley, Wiens, Rotshtein, Öhman, & Dolan, 2004; Pollatos, Kirsch, & Schandry, 2005; Wiens, Mezzacappa, & Katkin, 2000). Individuals with higher interoceptive awareness exhibited greater ability to process emotional information and demonstrated increased memory of emotional content (Pollatos & Schandry, 2008). Such findings indicate that when aware of emotional states, individuals tend to refer to the internal bodily state, and that awareness and attention to internal bodily states modulates emotional experiences.

In considering brain areas associated with interoception and emotion, there appear to be overlaps. Neuroanatomic evidence assessing individuals on interoceptive abilities has shown increased neural activity in specific parts of the brain including the anterior insular cortex, lateral somatosensory cortex and dorsal anterior cingulate cortex (Craig, 2003; Critchley, et al., 2004; Pollatos, Schandry, Auer, & Kaufmann, 2007). These structures have also shown to be associated with emotional awareness, emotional processing, emotional reactivity, and emotional regulation (Beauregard, Levesque, & Bourgouin, 2001; Critchley et al., 2004; Phan, Wager, Taylor, & Liberzon, 2002). Therefore, there is a possibility that long-term meditation training may indeed be affecting specific parts of the brain responsible for self-regulation of emotions. There is a possibility that meditation practices may promote greater consolidation of memories, emotions, and physiological reactions and improve integration of mind-body processes essential for health and well-being.

### **Meditation and Embodiment**

The potential likewise exists for meditation training to enhance embodiment and reduce disconnection for individuals who may have experienced trauma. Van der Kolk (2014) proposed that emotional pain and memories of trauma are stored in the bodies of survivors and that these may remain embedded for years after the traumatic event. Body-oriented treatments such as art therapy (Schouten, de Niet, Knipscheer, Kleber, & Hutschemaekers, 2015), dance/movement therapy (Devereaux, 2008; Gray, 2001; Pierce, 2014), yoga (Emerson, Sharma, Chaudhry, & Turner, 2009), and somatic therapy (Payne,

Levine, & Crane-Godreau, 2015) have shown to be effective in reducing symptoms of chronic and traumatic stress. Since Vipassana meditation is centered on attending to physical sensations within the body, there is a possibility that by attending to physiological symptoms of traumatic stress through an attitude of nonjudgmental awareness and equanimity, the cognitive, emotional, and physiological components of distressing or traumatic experiences may become integrated leading to greater self-regulation and homeostasis.

*“Real liberation comes not from glossing over or repressing painful states of feeling, but only from experiencing them to the full”*

- Carl Jung

## **Emotion**

### **Early Theories of Emotion**

Emotions are believed to exert a powerful force on human behavior. Emotions have been defined as a complex state of feelings that produce physical, psychological and behavioral changes (James, 1884). Various theories of emotion have been proposed that can be differentiated as physiological theories and cognitive theories of emotion. Darwin (1872) was the first to propose a theory of emotion, suggesting that emotions evolved because they were adaptive and promoted survival and reproduction. Emotions allow humans to process complex situations rapidly and automatically to produce action tendencies that improve chances of survival and allow important basic needs to be met (Greenberg, 2002).

William James (1884) was one of the first to propose a physiological theory of emotion based on somatic feedback, suggesting that emotional experiences were

primarily influenced by the perception of bodily reactions. Later known as the James-Lange theory, this theory stated that in order to experience an emotion, a physiological reaction (e.g., fast breathing, racing heart, sweaty hands) must first be experienced, and that the interpretation of bodily responses leads to an emotional reaction (James, 1884; Lange, 1922). In other words, a person is not trembling because they are frightened, but that they feel frightened because they are trembling. The Cannon-Bard theory of emotion suggests that physical and psychological experiences of emotion happen simultaneously and that one does not cause the other (Cannon, 1927). The Schachter-Singer theory (1962) drew on both the James-Lange theory and the Cannon-Bard theory, suggesting that the physiological arousal occurs first, and that the cognitive interpretation of physical responses leads to the labeling as an emotion. For example, a racing heart and sweating palms can be interpreted as anxiety or can be interpreted as excitement depending on the situation.

Appraisal theories of emotion propose that thought precedes emotion and leads to the physiological response, as suggested by the thought of danger producing the emotional experience of fear and the physical reactions associated with the fight-or-flight response (Lazarus, 1991). Prinz (2004) expanded upon James' theory and suggested that the bodily response involves no conscious cognitive processes and that the perception of a stimulus triggers bodily changes that are associated with mental states. These mental states are described as the emotion such as fear representing danger, sadness representing the loss of something valued, and anger representing being demeaned or violated.

Damasio (1999) proposed a somatic feedback theory that also centered on the perception of physiological changes leading to the experience of emotion. However, Damasio included cognitive evaluations of bodily changes that he labeled feelings which then become associated with particular situations based on past experiences. Damasio (1999) described an unconscious “map” created by the central nervous system that provides information to the body through physical sensations about whether something in the environment is desirable or undesirable. The body reacts to objects by producing different physical sensations including pain, perspiration, heat, itchiness, changes in heart rate, and muscle tension. When the self relates to objects whether real or imaginary, a second-order map is created of the physical sensations experienced and become embedded as a nonverbal system of experience, meaning or interpretation beyond the cognitive or linguistic. Such second-order sensations contribute to feelings, emotions, and different psychological states, which may be experienced without conscious awareness or self-control.

### **Contemporary Theories on Emotion**

Contemporary emotion theory view emotions as adaptive in that they provide information to the organism through rapid and automatic appraisals of complex situations. Emotions produce physiological changes that promote survival and lead to actions that enhance well-being and allow important needs to be met (Greenberg, 2011). Current theories of emotion have emerged from psychotherapy models and research on emotional processes that are evident during emotion-focused therapy (EFT; Pascual-

Leone & Greenberg, 2007; Paivio, 2013). While EFT is a theory of psychotherapy, the underlying theory of emotion is well-articulated and draws from early theories of emotion while incorporating theories of change. Through this model, emotions also serve as signals to inform an organism when there may be unmet needs or when there may be inconsistencies between an organism's internal drives and external reality (Paivio & Pascual-Leone, 2010). Contemporary theories propose that emotions involve coordination of experiential, behavioral, and physiological responses termed coherence to help an organism respond appropriately to environmental challenges (Ekman, 1992; Mauss, Levenson, McCarter, Wilhelm, & Gross, 2005). Some theorists have proposed that the self has a predisposition to be internally coherent and suggest that negative emotional responses or maladaptive emotions require resolution for the self to achieve coherence (Greenberg & Malcolm, 2002; Paivio & Greenberg, 1995). Aspects of experience that may be out of awareness or unformulated require integration in order to create a coherent sense of self (Greenberg, 2011). Therefore, healthy and adaptive functioning includes awareness of experience and synthesis of various aspects of experience.

**Emotion schemes.** Emotional experiences are often encoded into memory with a network of cognitive, affective, motivational, somatic, and behavioral elements. This complex synthesis of information based on past experiences becomes the foundation from which emotional responses are produced towards future occurrences. Emotional memory structures become activated by situational cues, often without awareness and

influence behavior. These emotional memories are referred to as *emotional schemes* (Greenberg, 2011; Paivio & Pascual-Leone, 2010). Emotional schemes include situations that elicit emotion and the emotional impact the situation had on an individual and become embedded on a preverbal level (e.g. bodily sensations, images, smells). Emotional schemes can promote rapid, adaptive action in allowing an individual to flee in the face of danger, but may also lead to maladaptive responses based on past conditioning or repeated experiences. Sensory input such as an image, smell, sound may activate prior memories and emotional schemes leading to automatic responses making it difficult for an individual to choose a different response (Greenberg, 2011). Activating the whole scheme and engaging in conscious emotional processing is believed to have therapeutic value in facilitating emotional change and orienting towards approach behaviors as opposed to withdrawal in the case of a fear scheme.

**Types of emotion.** Different emotions serve distinct functions and can be organized into basic types. Greenberg (2002) proposed three categories of emotions: primary, secondary, and instrumental. Primary emotions can be separated into primary adaptive and primary maladaptive emotions. Primary adaptive emotions are initial and natural responses to an event or situation such as anger at violation, sadness at loss or fear at threat. Primary emotions are associated with action tendencies that promote well-being, for example anger at violation promotes self-defense and assertiveness; sadness at loss promotes withdrawal or the seeking of connection (Greenberg, 2002; Paivio & Pascual-Leone, 2010). Rapid, automatic responding based on primary emotions is



considered adaptive in that these emotions promote survival and self-protective action. Primary maladaptive emotions, on the other hand, are reactions or feelings that are unhealthy such that they do not prepare an individual for adaptive action, even though they may remain fundamental to a client's experience, such as debilitating fear, shame, destructive anger, or unresolved grief (Greenberg, 2002). These often are recurrent emotions based on learned histories within early relationships such as shame in feeling unlovable or unworthy, or sadness at feeling deprived, or fear due to feeling unsafe, and may be evoked in current situations or relationships. The degree to which maladaptive emotions become disorganizing and resistant to change depends on how early and how intensely they were experienced, and how frequently they occurred (Greenberg, 2002). For example, intense frequent feelings of neglect, rejection, or domination in the past can be activated by current situations with similar themes or storylines as emotional schemes are activated. These feelings then become maladaptive responses to present situations as they become overlearned. As Damasio (1999) suggested, such early or repeated experiences may contribute to physiological changes and the development of second-order sensations that change the way in which individuals may interact with their surroundings and may lead to emotions that may unconsciously drive reactions and behaviors.

While primary emotions are initial and natural responses to events, secondary emotions are reactions to primary feelings, such as feeling guilty for being angry or ashamed of being sad. These emotions occur as a result of what a person feels about his

or her emotions based on the evaluation given around what may be acceptable or unacceptable to feel (Greenberg, 2002). Secondary emotions can also be responses to primary emotions or defenses against primary emotions rather than being the result of the eliciting event or situation. Such secondary processing, also referred to as *meta-emotions*, can lead to the avoidance of primary emotions or the desire to change the course of a primary emotion (Bartsch, Vorderer, Mangold, & Viehoff, 2008). Meta-emotions also contribute to the tendency to approach or avoid emotion-inducing situations based on an individual's comfort level with intense emotions (Maio & Esses, 2001). Meta-emotions may, therefore, serve as a defense mechanism and may mask core emotional experiences and the information associated with them. For example, Jones and Bodtker (2001) stated that if anger is seen as an inappropriate emotion to experience, a person may feel ashamed for feeling angry and therefore may encounter a mixture of anger and shame. This then leads to the inability to access a core need or action tendency associated with primary emotions to promote adaptive behavior (Greenberg, 2002).

**Emotional processing.** Emotional processing involves progressive awareness, regulation and integration of emotions (Greenberg & Pascual-Leone, 2006). Pennebaker, Mayne, and Francis (1997) stated that emotional processing involves decreased inhibition of emotion, enhanced self-understanding and greater positive self-reflection. Pascual-Leone and Greenberg (2007) posited that global distress was a result of unprocessed emotion and a lack of differentiation between emotional states. Greenberg and Paivio (1997) described a step-by-step method of emotional processing that involved resolution

of distressing emotional states. The model started with non-differentiated global distress and poorly integrated secondary emotion and moved to the differentiation of such distress into primary maladaptive emotion (e.g. fear, shame, rejecting anger). Gradually, primary maladaptive emotions were discerned into primary adaptive emotion (sadness, grief, assertive anger, self-compassion) that involve self-acceptance and healthy action tendencies. Greenberg (2008) stated that it is only when primary emotion is felt that it can be integrated into cognitive and meaning-making systems and lead to changes in behavior.

Within psychotherapy, depth of emotional experience has been considered central to therapeutic change. Pascual-Leone and Greenberg (2007) provided empirical research on the effects of processing emotional distress stating that the “only way out is through” (p. 875). Pascual-Leone and Greenberg found that the ability to evoke, experience, and restructure unhealthy emotions led to positive therapeutic outcomes. Since a habitual tendency is to avoid negative emotions and move towards positive emotions, meditation aims to help individuals tolerate and accept negative emotions while reducing unhealthy grasping of exclusively positive emotions.

*“This is perhaps the most difficult of the balancing acts we come to learn: to trust the pain as well as the light, to allow the grief to penetrate as it will while keeping open to the perfection of the universe.”*

- Jack Kornfield

## **Meditation and Emotion**

As outlined earlier, the aim of mindfulness meditation is to expand awareness and attention of thoughts, feelings, and sensations as they arise with an attitude of

nonjudgment, openness, and curiosity (Kabat-Zinn, 1994). Through this viewpoint, there is the cultivation of deep respect for emotions in order to understand the qualities of each emotion and underlying meaning (Khong, 2011). Therefore, any emotion or state of mind is considered an object of awareness such that anger or sadness or shame are equally as valid and useful to investigate as joy, excitement, or calm. The natural tendency to approach pleasant emotions and avoid unpleasant emotions is reduced as any and all internal states are observed equally (Kabat-Zinn, 2015a). Khong (2011) stated that as discursive tendencies are reduced, cognitive appraisals of emotions diminish, and the ability to be present with a feeling including the physical sensations associated with such feelings enhances with mindfulness. Alongside, rather than thinking about how one feels, and engaging in internal dialogue about an unfolding story, there is greater emotional contact and the transformation of course, global and undifferentiated emotions to subtler emotional states (Frija & Sundararajan, 2007). As emotions are felt more deeply and subtler emotions emerge through mindfulness, there is a greater tendency to expand responses as a result of reappraisal, meaning-making, reduction of habitual responding, and the exercise of restraint so as to respond consciously to situations rather than through an immediate, reactive emotional state (Chambers et al., 2009; Frija & Sundararajan, 2007).

**Meditation and emotional recovery.** Kabat-Zinn (1990) suggested that nonjudgmental awareness during emotional experiences reduces arousal and allows for greater recovery from negative emotional states. Studies exploring mindfulness and

emotion regulation have stated that mindfulness reduces reactivity to stressful or distressing emotional experiences, as shown through lower negative affect (Arch & Craske, 2006), and reduced emotional interference during cognitive tasks (Ortner, Kilner, & Zelazo, 2007). Teasdale et al. (2000) suggested that by turning towards emotional experience rather than away, there may be greater recovery from distress as the natural trajectory of emotions are allowed to unfold and in turn responses are let go of more rapidly.

**Meditation and emotion regulation.** More recent studies have explored levels of emotion regulation while practicing meditation when exposed to emotional stimuli. Taylor et al. (2011) found that novice and experienced meditators showed a decrease in the evaluation of intense emotion elicited by stimuli suggesting that practitioners were able to accept and experience the elicited emotion without engaging in unfolding thoughts regarding the content. Likewise, Perlman, Salomons, Davidson, and Lutz (2010) showed that long-term practitioners of meditation reported less distress when faced with painful stimuli while meditating compared to controls, suggesting that meditators remained aware of the pain intensity, but reduced cognitive elaboration of the sensory experience. Reductions in self-referential processing were believed to due to greater interoceptive and somatic awareness. Farb, Anderson, and Segal (2012) stated that by shifting attention to sensory experience through a non-evaluative stance, individuals are able to disengage from negative thought patterns, repetitive thinking, or ruminations that may lead to disrupted mood.

Menezes, Pereira, and Bizarro (2012) proposed that meditation itself should be considered an emotion regulation strategy distinct from top-down cognitive strategies such as reappraisal, distraction, and suppression (Gross, 1998). Chiesa, Serretti, and Jakobsen (2013) suggested that mindfulness practice appears to be associated with top-down emotion regulation strategies in short-term practitioners, however, among long-term practitioners is associated with a bottom-up process as emotionally charged stimuli is experienced without any attempts to cognitively reappraise, suppress or distract from such stimuli. Meditation appears to reduce reactivity and has lasting effects as a result of changing the relationship to thoughts, internal experiences, and interpretations rather than trying to alter such experiences themselves (Shapiro, Carlson, Astin, & Freedman, 2006; Teasdale, 1999).

**Meditation and emotion differentiation.** Another mechanism through which mindfulness appears to enhance emotion regulation is through *emotion differentiation* which refers to the ability to distinguish emotions as discrete entities such as feeling sadness, fear, anger, or shame. Somatic feedback theorists have proposed that bodily responses may be unique for each emotion and that emotions can be differentiated by distinctive patterns of somatic activity. Therefore, there may be a certain set of bodily changes for sadness, a different set for anger, another set for fear and so on (Levenson, Ekman, & Friesen, 1990).

Preliminary studies have shown that higher levels of trait mindfulness were associated with greater ability to differentiate both positive and negative emotions (Hill &

Updegraff, 2012). Barrett, Gross, Christensen, & Benvenuto (2001) showed that individuals with highly differentiated emotion experiences were better able to self-regulate compared to individuals with poorly differentiated emotion. Therefore, greater awareness of interoceptive sensations is suggested to improve the accurate identification of emotional states and enhance emotion regulation (Barrett et al., 2001; Fustos, et al., 2012). Vipassana meditation places significant emphasis on dissecting physical sensations across the body, moving from gross sensations whether that may be pain, or heat, or tingling etc. towards more refined bodily sensations that may exist underneath such gross sensations as every inch of the body is observed (Hart, 1987). There is a possibility that with such deliberate training of attention, there is a greater ability to differentiate emotional states through the differentiation of physical states. Since emotions can be difficult to identify and monitor, focusing on bodily sensations may be a strategy to enhance emotional awareness and contact (Zeng, et al., 2014).

Such research potentially aligns with Greenberg and Paivio's (1997) model of emotional change in that the positive effects of meditation may be a result of making contact with primary emotions, following the differentiation of secondary and maladaptive primary emotions. Greenberg and Meiren (2014) found that meditators showed increased emotional engagement, increased contact with emotions and more rapid recovery from emotional experiences than nonmeditators. Greenberg and Meiren proposed that rather than "feeling less" as a result of detachment from emotional states and negative thought patterns, meditation allows for greater emotional contact. In a

phenomenological study examining the lived experiences of Vipassana meditators, Kornfield (1979) stated that meditators commonly reported undergoing intense emotions and fluctuations in mood. Typical experiences were waves of sadness, violent crying, feelings of anger, rage, deep rooted fear, insecurity, and various forms of emotional release. Experiencing such intense emotions was considered a universal part of the practice and a common pattern for meditators. Meditators reported on the emergence of unresolved internal conflicts during their courses and stated that by observing and experiencing the associated feelings states, such conflicts were resolved spontaneously (Kornfield, 1979). While there are no studies to date that have examined the precise types of emotions experienced during meditation that allow for such rapid recovery, I propose that meditation allows greater access to primary adaptive emotions, while promoting detachment from maladaptive primary emotions and secondary emotions.

**Meditation and emotional processing.** Saunders, Barawi, and McHugh (2013) stated that mindfulness training increases depth of processing and counteracts experiential avoidance, allowing for the ability to face self-threatening information. Meditators are thought to utilize a different form of emotional processing than non-meditators as they appear less affected by negative emotional stimuli with no alterations in the processing style of positive stimuli (Sobolewski, Holt, Kublik & Wrobel, 2011). Hayes and Feldman (2004) suggested that mindfulness practice enhances emotion regulation abilities by decreasing both over-engagement (e.g., rumination) and under-engagement (e.g., avoidance) with internal experiences. By engaging in sustained,



nonjudgmental observation and non-reactive awareness, the opportunity is provided for internal states to be fully experienced and thereby integrated into cognitive and meaning-making systems potentially explaining greater recovery from emotional states.

Emotion theorists have expressed the importance of coherence between subjective, behavioral, and physiological responses for self-organization (Maus et al., 2005). Sze, Gyurak, Yuan, and Levenson (2010) found that experienced Vipassana meditators showed greater coherence between subjective emotional experiences and physiological responses compared to both dancers and controls. While dance training promotes awareness of somatic cues such as muscle tone, posture, and alignment, Vipassana meditators showed higher body awareness to visceral sensations associated with cardiac activity and respiration. In conjunction, Vipassana meditators appear to have greater gray matter concentration in the right anterior insula, a region associated with interoceptive awareness (Hölzel et al., 2008). These findings suggest that individuals who are trained to increase attention and awareness of visceral sensations may have access to more accurate information regarding their physiological reactions, allowing for greater alignment between emotional experience and actual physiological responding.

Furthermore, Zeng et al., (2014) stated that raising awareness of physical sensations through the practice of Vipassana meditation allows for awareness of subtle changes associated with emotions, such as changes in breathing when experiencing anger or fear. Zeng et al. (2014) suggested that using awareness to detect such changes and maintaining equanimity in the face of strong emotions enhances self-control and self-

regulation since motivational and psychological processes associated with emotions are brought to awareness. Pagis (2009) proposed that awareness itself transforms bodily sensations as reflected by one Vipassana meditator's experience:

I saw the physical aspect of that fear immediately, that was the thing that changed the most.....I saw right away the clinching in the stomach, and my shoulders going up and my heartbeat, my heart started racing, my breath getting shallow, and I mean, that was nothing new, just noticing that was something new, and everything I heard in the course, that every reaction has a physical component, and that if you learn to be detached from the physical component your state of mind can also be detached, and it was immediately clear and also incredibly liberating, that if I stop and watch my heart racing I could stop that process, slow it down. (p. 273).

In this meditator's experience, the physical sensations or embodied experience was understood on a discursive level as fear, and that rather than thinking about the fear, the physical elements of fear were observed and through such monitoring were transformed. Rather than engaging in a physical action of moving away from the feared object as a way to reduce fear, the sensations of fear were reported to become more bearable. Such non-action was reported to have an impact on the reflexive feedback loop, changing the level of habitual reactivity to external stimuli while also changing the significance and evaluation of physical sensations.

Pagis (2009) suggested that while the somatic self may be experienced in the present, patterns of reactivity are a result of past experiences, memories, and interactions. Sensations experienced in the present are considered to activate sensations from the past as current feelings may be reminders of past feelings. Van der Kolk (2014) proposed that traumatic experiences or unprocessed memories of the past are often stored in both the body and mind in the form of physical sensations, emotions, images, smells or sounds associated with the event. Exposure to environmental stimuli may trigger emotional and cognitive reactions that may be difficult to endure and manage. Pagis (2009) described the experience of a meditator who had a strong bodily experience of pain that the meditator associated with memories of sexual abuse. As this meditator was able to re-experience the event through embodied means, allowing the physical sensations to arise that had been stored in the body, she was able to release the embedded trauma and free herself of its influence. Numerous practitioners spoke of memories, pain, and trauma being stored in the body and shared the unique ways in which embodied memories surfaced for them during their meditation course, such as piercing pain, burning, vibration, etc. They reported on the intensity of physical sensations which they stated observing with minimal reactivity as suggested by the meditation instructions, and spoke of the dissipation, movement, or the evaporation of the pain in doing so (Pagis, 2009).

Meditators stated that during the embodied experience they did not search for the cause of the pain in order to remain with the physical element, however, reported that they later interpreted the pain as connected to unresolved past experiences. These

accounts support nondiscursive methods as a form of healing from traumatic histories since exposure-based therapies and verbal reliving of traumatic memories can be difficult for some and retraumatizing (Levine, 2010). The focus of Vipassana meditation on consciously and deliberately attending to physical sensations may in fact serve as an anchor when integrating emotional information that may overwhelm the nervous system. While attending to discrete physical elements of memories and emotions, fragmented parts of experience may be integrated gradually allowing the mind and body to stabilize through the process (Levine, 2010).

### **Rationale for Current Project**

As evident, empirical interest in mindfulness and meditation has surged in recent years as the benefits and therapeutic value of practices have increasingly been recognized. While the scientific community has made significant gains in understanding the effects of mindfulness on psychological well-being (Brown & Ryan, 2003; Falkenström, 2010; Schutte & Malouff, 2011), the mechanisms of action behind mindfulness remain unclear. Furthermore, studies are continuing to decouple mindfulness from meditation as research has focused on brief mindfulness-based interventions or mindfulness training among beginners. While such studies have value in exploring the benefits of short mindfulness inductions, traditional perspectives have suggested that the most intriguing effects of meditation occur after long-term practice (Walsh & Shapiro, 2006). Although there are an increasing number of studies that have explored mindfulness and the effects of mindfulness, studies investigating the somatic and

emotional experiences of meditators remain limited. There are also very few studies exploring the process that occurs for meditators during silent and intensive meditation retreats.

Subjective understanding of mindfulness is believed to change with sustained meditation practice as new insights into the nature of the mind, body, and self are discovered and integrated through practice (Gunaratana, 2002). Since the concept and practice of meditation remains to be a highly individualized experience in which the source of inquiry and understanding rests in one's own experiential knowledge, Western psychological science, which emphasizes nomothetics and quantifiable outcomes, becomes less compatible as a research approach. As Grossman (2008) suggested, qualitative interviews may enhance our understanding of processes behind mindfulness and allow for its multidimensional nature to come forth. Qualitative inquiry may allow a more in-depth and contextual exploration of the phenomenon of mindfulness meditation, and allow the complexities, the subtleties and depth of individual experience to emerge.

### **Research Questions**

This phenomenological study seeks to understand the lived experiences of long-term meditators, delving deeper into the meditative process. While quantitative studies of meditation have captured specific components of physical and psychological changes as a result of meditation practice, this study seeks to capture a holistic view allowing the embodied, interoceptive, and emotional experiences of meditators to come forth.

Therefore, the following research questions were explored as a way to more fully understand mind-body processes:

1. What are the embodied and interoceptive experiences of Vipassana meditators?
2. What are the emotional experiences of Vipassana meditators?
3. How are embodied, interoceptive and emotional experiences of Vipassana meditators related?
4. What changes occur within embodied and emotional experiences as a result of long-term Vipassana meditation practice?
5. What roles do awareness and equanimity play in embodied and emotional experiences of Vipassana meditators?

## CHAPTER III

### METHODS

*“The art of living consists in being sensitive to each moment, in regarding it as utterly new and unique, in having the mind open and wholly receptive.” - Alan Watts*

The methods section covers the researcher’s qualifications and biases in conducting a qualitative inquiry of the experiences of meditators. Sampling methods are outlined, including the selection of participants, and the instrumentation used for data collection. The recruitment and interview procedures are then described in detail. The philosophical approach utilized for data analysis is outlined along with the concrete steps used in conducting the qualitative analysis of interviews. The chapter concludes with the triangulation methods used for this study to enhance credibility.

#### **Researcher’s Contributions**

##### **Qualifications**

Patton (2015) noted that as researchers, we become the instrument of inquiry and stated the importance of outlining who we are as researchers, our qualifications, as well as personal biases and theoretical predispositions. My qualifications as a researcher include conducting and co-leading a number of research projects under the guidance of faculty members within the discipline of counseling psychology. I have conducted two research studies on mindfulness meditation. The first was a quantitative study titled “Mindfulness Meditation, Experiential Avoidance, Meta-Emotions and Psychological

Well-Being” which was conducted with 83 Vipassana meditators as part of a thesis equivalency research project. The second was a qualitative project that aimed to gain a more in-depth understanding of the cognitive, emotional, and psychological processes of Vipassana meditators through a phenomenological approach as a means to capture the complex nature of meditation. The project was conducted within a qualitative research methods course and served as a pilot study for developing the direction of the current study. Understanding the underlying mechanisms of meditation has been an area of deep inquiry for me fueling my continued interest in scientific research within the area. The qualitative research methods course allowed me to gain hands-on experience with qualitative design and analysis, providing a foundation and framework to conduct more extensive studies. I have also conducted two independent research projects with faculty members where I have brought an understanding of systems, and the design and analysis of models, a knowledge base rooted in a background in mechanical engineering.

My qualifications also include being a clinician in training through which I have come to gain a deeper understanding of psychological difficulties, mental health concerns and the process of change and recovery. More specifically, I have experience working with survivors of trauma as I have facilitating mindfulness-based groups to support clients in healing from trauma through connection with themselves and others. My clinical training has also provided me with interviewing skills that support empathic neutrality. Patton (2015) described empathic neutrality as a nonjudgmental stance that involves being in another’s world through an attitude of openness, curiosity and attention,



encouraging the other's experiences to unfold naturally without researcher intrusion.

Patton (2015) suggested that in order to achieve empathic neutrality within qualitative inquiry, mindfulness is required.

While my qualifications as a researcher and clinician serve me in conducting scientific study on meditation, I also bring a personal connection and interest to meditation as a practitioner of Vipassana meditation. I have been practicing Vipassana meditation for 10 years and have attended 10 silent 10-day meditation retreats. Over the years, I have used meditation as a means to gain a deeper understanding of my own inner world. I have used meditation to enhance personal presence and become more attuned to my own emotional states, thought patterns, physical being, and experience of self.

Through my own practice, I have witnessed profound emotional changes, and have observed the intricate relationship between my mind and body, which has been a catalyst to pursuing this project and better understanding the effects of meditation. I have also experienced increases in empathy, compassion and the ability to be more present with the full range of human emotion both in myself and others. Over the years, I have noticed marked shifts in my relationships and noticed an increased sense of interconnectedness.

### **Biases**

While my own practice and familiarity with Vipassana meditation may serve as a strength in interviewing, understanding, and interpreting the experiences of others, I also recognize the potential limitations as my own experience may lead to the intrusion of bias. As Grossman (2008) outlined, differences in depth of meditative practice may have

an impact on interpretations of data as my own understanding of meditation may differ from those being interviewed, particularly if there are differences in levels of experience. Furthermore, my own understanding of meditative process through personal experiences may lead to interpretations of the data that may not remain true to the experiences of the participants.

Another motivator for the current study and potential bias includes my own desire to know and understand how Vipassana meditation works as I myself have been a long-term practitioner and have often been curious to understand the scientific underpinnings. This shaped the questions asked, particularly related to the participants insights into the process of change. Furthermore, much of the present research has focused on the cognitive aspects of meditation and mindfulness, which in my view does not fully capture the essence of meditation as I believe the primary mechanisms of change rest in the experience of physical sensations and emotions within the body. The focus on embodied and emotional experiences of meditators contains my own bias, which includes the justification to study Vipassana meditators as this technique is centered around the body.

When conducting phenomenological research, Moustakas (1994) suggested that researchers continue to review expectations throughout the research process so that “things can be seen as they appear, free of prejudgments and preconceptions” (p. 90). While it is impossible to be completely free of bias, this approach aligns with the philosophy of Vipassana that entails seeing things are they are (Hart, 1987). Therefore, in order to minimize bias, I continued with my meditation practice throughout the research

process to ensure that I am seeing the data as it is, being aware of my own preconceptions and reactions. Alongside, I documented my reflections, assumptions, and biases in order to critically evaluate my own stance so as to allow the unique voices of meditators to come forth since the process of writing reflections is a recommended practice in qualitative work (Patton, 2015). Furthermore, in working with another analyst who is not a Vipassana meditator, I hoped to further minimize bias in taking into consideration her interpretations of the data while comparing them to my own.

### **Predictions**

Patton (2015) suggested that qualitative researchers also disclose their predictions or expectations as another method of enhancing credibility and reduce bias. Based on my own experiences with Vipassana meditation, I predicted that participants would discuss positive changes as a result of their practice, including improvements in awareness, and equanimity. I believed that participants would discuss the emergence of both positive and negative sensations within their courses as well as pleasant and unpleasant emotions. I assumed that participants would describe their difficulties remaining equanimous to overpowering emotions and would speak of loss of concentration, awareness and equanimity in face of such emotions. I also believed that participants would discuss the connection they experienced between the emotions that emerged during courses and physical sensations within their bodies, such as anger displayed through physical changes, such as heat, changes in breath, muscle tension, and negative thoughts.

While some of these predictions are based on my own experiences with Vipassana meditation, others are also based on responses received from the pilot study that was conducted. The questions for the pilot study were open-ended, exploring the lived experiences of meditators, however, all of the meditators discussed awareness of physical sensations in their body, and the emergence of intense emotions during their practice that led to the narrowed focus of the questions asked within this study. Based on the responses received in the pilot study, I assumed that participants would attribute the surfacing of emotions to suppressed or unprocessed reactions, or *sāṅkhāras*, which were associated with memories of the past. I believed that participants would highlight the ways in which these memories or reactions became stored in their bodies and were released through sensations as they remained equanimous when these sensations surfaced. I believed that participants would discuss the emotional and cognitive changes they experienced as a result of these releases, including greater emotional freedom, emotion-regulation, a sense of calm, peace, and stillness of the mind. I believe that participants would also state these changes as the primary motivators for continuing to practice and the reason for continuing to attend annual retreats.

## **Data Collection**

### **Participants**

In order to gain depth into the experiences of meditators, purposeful sampling was used for this study. A general strategy within qualitative sampling is to select information-rich cases that will illuminate the question of inquiry (Patton, 2015).

Therefore, criterion sampling was used to select participants that meet a certain set of inclusion criteria. Once this sample was obtained, I looked for as much variation as possible within the sample based on age, gender, race, ethnicity, and range of meditation experience. This sampling strategy aimed to capture and describe the central themes regarding the meditative process that emerge across a varied sample while also yielding high-quality, detailed descriptions of the unique and individual experiences of long-term meditators (Patton, 2015).

The first criterion was for all participants to be practicing Vipassana meditation and to have participated in 10-day meditation courses. Although there are many forms of mindfulness meditation, Vipassana meditation based in the S. N. Goenka tradition was selected due to the standardized approach and the degree of immersion involved to remain in alignment with traditional conceptualizations of meditation. This tradition also maintains high standards in upholding the consistency of the meditation technique across meditation centers, reducing concerns about variability in meditation training.

The second criterion was for participants to have participated in a minimum of five 10-day meditation courses to be considered an experienced meditator. The reason for selecting five courses is to remain in alignment with what the Vipassana meditation tradition deems to be a serious practitioner. A meditator who has undergone 5 courses, along with a specialized course covering the philosophical underpinnings of Vipassana meditation and has maintained a regular practice is eligible to attend a 20-day course (Vipassana Meditation, n.d.). Therefore, to remain with the tradition's criteria in

assessing a practitioner's level of commitment to the practice and the level of importance that meditation holds in their lives, a similar criterion was used for this study.

Once the conditions of criterion sampling were met, maximum variation sampling was used to allow for diversity within the sample. While there was a minimum requirement regarding level of meditation training received, there was not a set criterion on the extent of training received to allow for variation. The reason for the maximum variation component was because stages of meditation are often associated with the degree of concentration and mindfulness gained from practice, rather than through the number of hours an individual has spent meditating (Gunaratana, 2002). Therefore, in allowing variation in meditation experience, as well as variation in age, gender, racial, and ethnic diversity, the emphasis will remain with the essence of the practice and any central or shared themes across participants.

I interviewed 8 meditators for the study. Since the focus of this qualitative inquiry is in obtaining detailed accounts of individual meditators' experiences, the primary concern was quality and depth. Smith, Flowers, and Larkin (2009) suggested that given the complexity of human phenomenon, a concentrated focus on a small number of cases is most beneficial for the development of meaningful themes within and across participants, reducing the risk of generating too much information that may drive analysis beyond the purpose of inquiry. Patton (2015) also suggested that the sample be selected to meet saturation in order to maximize information and meet the point of redundancy. Saturation is achieved when there are no new themes and no further coding is feasible

(Guest, Bunce, & Johnson, 2006). Saturation can be an emergent property of a study, and is considered an ideal that was not a practically attainable goal in the proposed work.

### **Instrumentation**

**Pre-screening.** There were three components to pre-screening instrumentation. First, a recruitment script was used that describes the purpose of the study and eligibility requirements (see Appendix A). Second, potential participants received an informed consent form outlining in detail the procedures of the study, risks and benefits (see Appendix B). Third, to ensure that participants met inclusion criteria and that there was variability of meditation experience within the sample, a demographics questionnaire was used to gather information including age, gender, ethnicity, education, employment and contact details. The demographic questionnaire also assessed potential participants' level of meditation training and practice including the number of meditation courses they have taken and the extent to which they maintained a regular practice (see Appendix C).

**Interview guide.** A semi-structured interview guide was used when interviewing participants to ensure that the same topics, focal points and lines of inquiry were pursued with each participant. The guide served as an outline so that relevant topics were covered with each participant to provide reliable, and comparable qualitative data (Patton, 2015). While the guide served to maintain focus within interviews, follow-up questions were asked to help illuminate meaningful areas and to expand on individuals' perspectives and experiences (see Appendix D).

**Procedure.** Participants were recruited by posting the recruitment script to online meditation groups and forums. These online spaces serve as discussion boards for practitioners of Vipassana meditation to ask questions, share their experiences, and challenges with their practice and gain deeper understanding of Vipassana meditation. Interested participants were directed to click on the Psychdata link that took them to the informed consent form and the demographic questionnaire. A printable list of referral resources were provided to all participants prior to exiting the website should they experience any discomfort at any stage of the investigation (See Appendix E).

I also recruiting participants through local group meditation gatherings that were listed on the Vipassana meditation listserv. I recruited participants in person through these gatherings, verbally describing the purpose of the study as outlined in the recruitment script, and by collecting email addresses of interested individuals to send the link to the informed consent and demographics questionnaire. I also recruited participants through snowball sampling, by providing a copy of the recruitment script to interested individuals to forward to additional persons they knew who qualified and were interested in the study.

I selected 8 participants for the study by reviewing the number of Vipassana meditation courses taken, the number of years that participants have been practicing, and the extent of their regular practice to ensure that there was diversity in the sample. After these criteria were assessed, variation in other demographic variables such as age,



race/ethnicity, and gender were considered. Participants who are selected were contacted through phone or email to set up a time to be interviewed.

Interviews were conducted over the phone and Skype due to geographic location, level of convenience, and preference of participants. Prior to the interview, I emailed participants the interview questions to allow them time to consider how they would like to respond to questions, and reflect upon aspects of their meditation experiences that they would feel comfortable sharing. When the interview began, I revisited informed consent, including confidentiality, risks and benefits of participating in the study. I informed participants that they can choose not to answer a question and can provide as much or as little detail as they would like. Once the participant provided verbal consent in addition to their previous written consent, I proceeded with the semi-structured interview.

Interviews were recorded on a digital audio recorder. Participants were asked questions based on the interview guide and were asked to elaborate, clarify, and provide further detail where appropriate based on their comfort level. Since participants were describing internal experiences related to their meditation practice that may be difficult to describe in words, I allowed the participants the necessary time to clarify their responses, and expand on answers to ensure that they are relaying their intended message. At the end of each interview assessed whether there were any responses that participants wanted to change or further clarify. The recorded interviews were then transcribed by myself and two research assistants using pseudonyms. I created a list of participant names and the assigned pseudonyms that were password protected and stored separately. The

pseudonyms were used for all ongoing data handling, including data analysis and presentation of findings.

*“If we can really understand the problem, the answer will come out of it, because the answer is not separate from the problem.”*

— Jiddu Krishnamurti

## **Data Analysis**

### **Philosophical Approach**

For this study, I used a qualitative methodological approach known as *interpretive phenomenological analysis* (IPA). IPA aims to understand how individuals make sense of their experiences and holds the assumption that humans are interpretive beings. IPA draws upon three areas of philosophical inquiry: phenomenology, hermeneutics, and ideography (Smith, Flowers, & Larkin, 2013).

Phenomenology aims to understand the essential components of a phenomenon so to reveal meaning based on the way in which experience is perceived and interpreted (Husserl, 1962; Van Manen, 1990). Phenomenology was founded by the philosopher and mathematician Husserl (1962), who posited that all understanding comes from sensory experience and that perception and meaning emerge out of what is attended to, described, and interpreted. Therefore, there is no separate or objective reality, but rather subjective experience that incorporates objective reality. Phenomenology attempts to give structure to lived experiences through words, descriptions, concepts and theories and remains retrospective as lived experience is reflected upon and recollected (Van Manen, 1990). Thus, phenomenology remains within the confines of experiential reality, rather than through the viewpoint that an event actually appeared the way it was experienced

(Husserl, 1962). Likewise, Van Manen (1990) suggested that “a person cannot reflect on lived experience while living through the experience...if one tries to reflect on one’s anger while being angry one finds that the anger has already changed or dissipated,” (p. 9).

Phenomenologist Merleau-Ponty (1962) further articulated the retrospective notion stating that “the world is always ‘already there’ before reflection begins” (p. vii). Merleau-Ponty (1962) drew upon Husserl (1962), and extended the phenomenological perspective to incorporate the body as an instrument of comprehension suggesting that perception brings together sensory experiences to create a synthesis of meaningful experience. Merleau-Ponty (1962) aimed to reduce the dualistic separation of mind and body among Western knowledge and culture and sought to place the lived body at the center of individual experience. He argued that the mind and mental activity should not be privileged and suggested that it was the body, not only the mind, that understood and experienced reality. Through such a lens, the mind and body were considered to be intertwined and embodiment was seen as the way of being in the world. Embodiment was considered of significant importance in understanding how people make sense of experience and transform it into consciousness creating the notion of embodied consciousness (Merleau-Ponty, 1962).

Heidegger (1962) elaborated on Husserl’s theories (1962) to develop hermeneutics, the second philosophical foundation of IPA. Heidegger (1962) explored interpretative and existential understanding of meaning through close, line-by-line textual

analysis of literary works paying attention to context and purpose. As with Merleau-Ponty (1962), Heidegger (1962) rejected the Cartesian divide between mind and body, subject and object, and person and world, transmitting the concept of *being-with* of human relatedness; suggesting that there is no separation between the observer and the observed. The interpretation of meaning within IPA is considered to be an iterative process characterized by the *hermeneutic circle* (Smith et al., 2009). The hermeneutic circle refers to the process of understanding a text in that the whole is recognized through reference to individual parts and individual parts are realized by reference to the whole.

The analytic process of IPA is a dynamic process in which the researcher takes an active role in accessing a participant's experience and interpreting the participant's interpretation of their inner world (Smith & Osborn, 2009). This process is often referred to as *double-hermeneutics* because of the dual interpretative process in which the participant makes meaning and interprets their world, and the researcher attempts to make sense and construct meaning from the participant's interpretation of their world. Therefore, IPA is based on the idea that researchers cannot fully assume an objective stance, and inevitably remain a significant part of the process as they extract meaning from participant accounts. Eatough and Smith (2006) argued that it is impossible to understand a phenomenon or enter into the world of another without making an interpretation. Therefore, IPA is descriptive in that it illuminates the quality and significance of an experience allowing it to stand alone, and is also interpretive as there is no such thing as unexplained phenomenon (Pietkiewicz & Smith, 2012).

The third philosophical foundation of IPA is that it is idiographic, that is, concerned with the particular, and promotes in-depth analysis of each individual case. The focus of investigation rests in the authentic experience of each participant, generating detailed descriptions of individual perspectives while recognizing the unique contexts and distinct manners in which these unfold. IPA focuses on a small sample that is purposively selected, as is congruent with the proposed design. During analysis, each case is provided equal and individual attention before moving across cases to explore shared themes, similarities, or differences (Smith et al., 2009).

The reason I chose IPA for this study was because meditation can be viewed as inherently phenomenological due to the emphasis placed on nonjudgmental awareness and open receptivity to immediate experiences (Felder, Aten, Neudeck, Shiomi-Chen, & Robbins, 2014). IPA also supports the idea that the researcher co-creates meaning which can be viewed as a strength when researchers are meditators themselves. Since meditation involves direct, experiential and nonlinguistic processes, the researcher may become a central facilitator in helping meditators make sense, interpret and describe in words their internal processes. Alongside, these experiences can be perceived and interpreted through the context of original teachings, language, and philosophies as well as through the scientific literature on mindfulness and meditation, which can provide insights and theories that the meditators themselves may not have pieced together. IPA adheres to the importance of individual experience, which is well suited to the study of meditators since each person may perceive or interpret their experiences differently, or

may be at different stages within their practice, may exhibit different levels of awareness while also having very unique encounters or insights through their meditation practice.

### **Analysis Process**

Analysis within IPA is stated to be iterative and inductive in that codes are generated directly from the data after undergoing extensive review. IPA provides a flexible framework or set of guidelines to analyze the data while also encouraging researchers to be creative in adapting methods to meet the objectives of the study (Smith et al., 2009). For this study, I used the following six steps to guide the analytical process: (1) reading and re-reading within an individual case, (2) initial note-taking within an individual case, (3) developing emergent themes within an individual case, (4) searching for connections across emergent themes within an individual case, (5) moving to the next case and continuing with Steps 1-4 for each case, and then, (6) looking for patterns across cases (Smith et al., 2009).

**Reading and re-reading.** Before beginning any analysis, I immersed myself in the data, reading and rereading each transcription to familiarize myself with each meditators accounts, language, and descriptions. I attempted to read with an open, receptive attitude to remain sensitive and attentive to new ways of seeing participant experiences beyond what may have emerged when conducting the interviews. This step involved consciously slowing down and reducing the habitual tendency to rush into reduction and summations (Smith et al., 2009).

**Initial note-taking.** Once I became familiar with each transcription, I took notes and made comments within the margins and texts of the transcriptions. The comments fell under three categories as outlined by Smith et al. (2009): (1) descriptive comments which are focused on the content such as distinctive phrases, descriptions, and value-laden responses; (2) linguistic comments which are focused on the language, repeated words, metaphors, symbols and expressions used; and (3) conceptual comments which are focused on preliminary interpretations and ideas regarding meaning. Alongside, I kept memos of my reactions, biases, and assumptions as I moved through each transcript to remain aware of how these may be influencing the analytic process.

**Emergent theme development.** Based on the three categories of comments, I developed themes that focused in on emerging concepts. As Smith et al. (2009) suggested, I created themes that were concise and compressed, taking the form of a phrase or sentence that can still be traced back to the original sources. I attempted to maintain the richness and complexity of the meditators' accounts from which the themes have emerged by using expressive words or phrases that captured the original intent while using a slightly higher-level of abstraction that captured the psychological essence of the theme (Smith et al., 2009).

**Searching for connections among emergent themes.** Emergent themes were then grouped together based on similarities and a new name was created for the superordinate theme (Smith et al., 2009). Subordinate themes were created with descriptive labels to group together underlying themes. The major themes and subthemes

were also examined to determine how they relate to the five overarching research questions of the proposed study. Short excerpts from the interviews were used to highlight the themes and subthemes that can be traced back to the transcripts.

**Moving to the next case.** The previous steps were then repeated for each case, with each transcript interpreted individually to maintain the idiographic approach. I bracketed the interpretations of each case so that I did not impose conceptual categories into subsequent cases, ensuring that each case carried its own major themes and subthemes (Smith et al., 2009). Memos were also generated throughout each case.

**Looking for patterns across cases.** Once each case had been interpreted separately, I then moved across cases to seek patterns and shared themes. If similar major themes were evident across cases, I organized the different cases under a shared theme that connected cases together. I also re-examined superordinate themes and subordinate themes as I moved across cases, assessing what was of importance, what may be discarded, and what required altering and adding to within cases and across cases. As in other steps of the analytic process, I used memos as needed. These processes reflect the hermeneutic circle of moving between the parts and the whole, as the parts shape the whole and the whole determines the parts, capturing the iterative and inductive nature of IPA.

### **Triangulation**

An essential component of qualitative research is triangulation, as it adds to the credibility and trustworthiness of researching findings (Patton, 2015). Denzin (1978)



suggested that multiple methods be employed to study a research question to reduce bias, strengthen a study and address an inquiry from various angles. Patton (2015) suggested combining interviews, observations, and document analysis since no one method can be completely reliable, and the use of multiple methods can provide important cross examination. Adding multiple forms of triangulation not only adds credibility to findings, but also provides deeper insights into a phenomenon. Patton (2015) stated that the purpose of triangulation is not necessarily to confirm findings across different data sources but to assess for consistency while being open to illuminating information that may be provided through inconsistencies. For this study, I used two forms of triangulation: (1) analyst triangulation, and (2) review by participants (member check).

### **Analyst Triangulation**

Analyst triangulation is the use of multiple analysts as opposed to a singular investigator to examine and evaluate the data (Patton, 2015). By having multiple researchers analyze the data, potential bias may be reduced while providing different ways of seeing the data. Each evaluator independently analyzes the same qualitative data. The findings of each evaluator were then compared to develop a broader and deeper understanding of the phenomenon. It is assumed that if the findings from multiple evaluators converge, then credibility and confidence of the findings are heightened.

For this study, I had another analyst independently review the data. The second analyst was a graduate student in counseling psychology who has experience with qualitative research methods, and is also familiar with mindfulness and meditation,

however is not a practitioner of Vipassana meditation. She was provided the interview data and was asked to follow the first four data analysis steps, which include reading and re-reading, engaging in initial note-taking, developing emergent themes, and searching for connections across emergent themes, all within individual cases (Smith et al., 2009). She was asked to repeat these steps across all cases ensuring that each case is analyzed independently before looking for emergent themes across cases.

The two separate analyses were then compared to explore new information. There appeared to be many similar themes between the two analysts, however, the use of language varied to describe participant experiences. It appeared that the second analyst's themes represented broader abstractions of the data, while the first analyst's themes represented detailed abstractions. Both codebooks were reviewed to determine the best descriptors for participant experiences and these were categorized into superordinate themes and subordinate themes. Reviewing the second analyst's themes provided additional subordinate themes that had not been considered by the first analyst as each analyst approached the data from their unique background and lens. Both analyst's findings were incorporated into the final results after review and recategorization of themes into appropriate major themes and subthemes. This process required a back and forth in determining how best to categorize the data into which major themes the various subthemes fell as there were multiple potential options. Larger abstractions and adjustments in language were also made to capture all of the themes and ensure that they were being included into final analysis.

### **Review by Participants**

The second form of triangulation that I utilized for this study was a member check. Member checks can be considered a form of analytical triangulation allowing the participants that were interviewed for the study to provide feedback regarding themes, descriptions and findings (Patton, 2015). Having participants review the final analysis can enhance the validity of findings and serves to assess for accuracy, completeness, and fairness. Therefore, I emailed each participant individually asking them to review their own transcripts and my interpretation of their responses. I asked that they provide their reactions and reflections on the accuracy of the themes created. I also asked each of them whether their experiences were reflected in the data, and whether they would like to add any further details that may not have been captured originally. From the participants, five responded to this request with their feedback. Of the five, one participant confirmed that the interpretations accurately captured his experience and had no further changes to make or additional information to add. Three participants confirmed that the interpretations were accurate and provided corrections on words that had been mistyped within the transcripts, however, these did not change the interpretation or findings. One participant confirmed that the interpretations were accurate and provided additional information regarding a question that she believed she did not fully answer during the interview. Her response was incorporated into the final results.

## CHAPTER IV

### RESULTS

*“When any experience of body, heart, or mind keeps repeating in consciousness, it is a signal that this visitor is asking for a deeper and fuller attention”*

- Jack Kornfield

#### **Participant Information**

A total of eight participants were interviewed for the study; six identified as female and two identified as male. Participants ranged in age from 29 to 54 years old. Race and ethnicity varied within the sample as five participants identified as White, two participants identified as Indian, and one participant identified as Lebanese. From the sample, two participants resided outside of the US, in India and New Zealand. Participants' meditation experience ranged from 6 years of practice to 17 years of practice, with an average of 9 years. The number of 10-day meditation courses taken ranged from 6 courses to 15 courses, with an average of 10 courses. All participants indicating that their most recent 10-day course occurred in late 2015 or 2016. From the group, one participant had taken longer courses including two 20-day courses, two 30-day courses and a 45-day course.

In terms of practice, six participants identified having a regular practice with three participants stating that they practiced twice a day for an hour each sitting, two participants stating that they practiced once a day for an hour and 1 participant stating that she practiced 4 hours per week. Participants were generally well-educated with two participants holding a Bachelor's degree, four participants holding a Master's degree, and

two participants holding Doctorates. Of the participants, six stated having no religious affiliation, one participant identified as Hindu, and one participant identified as Agnostic. All participants indicated that they practiced primarily Vipassana meditation, with one participant indicating that she had practiced breathwork and guided meditations, and one participant indicating that she practiced somatic meditation. Other forms of healing modalities that participants noted included psychotherapy, yoga, alcoholics anonymous, massage therapy, sweat lodge, and physical therapy.

### **Major Themes**

In analyzing the interviews, each transcript was interpreted individually to maintain the idiographic approach of IPA (Smith et al., 2009). Major themes and subthemes were developed for each individual interview and interpretations were bracketed to ensure that each case remained an individual reflection of the meditator's experience. While this was the primary method of analysis, after all transcripts were examined, patterns and shared themes were explored across cases. Through this examination, numerous themes emerged across participants, regardless of level of meditation training. A total of 10 main themes and 53 subthemes were created to reflect the meditators' experiences. Table 1 provides an overview of the major themes and subthemes.

Table 1

*Major Themes and Subthemes*

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Theme 1	Understanding of Meditation
1.1	Presence
1.2	Surrender
1.3	Focused Awareness
1.4	Mental Training
Theme 2	Experience of Sensations
2.1	Types of Sensations
2.2	Sensations and Qualities of Mind
2.3	Impermanence of Sensations
2.4	Movement of Sensations
2.5	Layers of Sensation
2.6	Changes in Sensation
Theme 3	Experience of Emotions
3.1	Types of Emotions
3.2	Intensity of Emotion
3.3	Awareness and Differentiation of Emotion
3.4	Approach towards Emotion
3.5	Recovery from Emotion
3.6	Changes in Emotion
Theme 4	Interpretation of Emotions and Sensations
4.1	Manifestation of Present
4.2	Manifestation of Past
4.3	Manifestation of Saṅkhāras
Theme 5	Awareness
5.1	Understanding of Awareness
5.2	Changes in Awareness
5.3	Awareness of Thought Patterns
5.4	Awareness of Connection
Theme 6	Equanimity
6.1	Understanding of Equanimity
6.2	Paradox of Equanimity
6.3	Internalization and Changes in Equanimity
6.4	Connection between Equanimity and Awareness
Theme 7	Processes of Change
7.1	Untying of Saṅkhāras
7.2	Integration of Past
7.3	Witnessing
7.4	Mystery

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Theme 8	Changes and Motivations
8.1	Emotional Freedom
8.2	Balance and Stability
8.3	Responsibility and Conscious Choice
8.4	Mental Clarity and Decisiveness
8.5	Self-Attunement
8.6	Trust
8.7	Detachment
8.8	Compassion for Self and Others
8.9	Harmony
Theme 9	Challenges and Barriers
9.1	Self-doubt
9.2	Aversion
9.3	Lack of Equanimity
9.4	Lack of Awareness
9.5	Maintaining Discipline
9.6	Disconnection from Community
Theme 10	Individual Experiences
10.1	Imagery
10.2	Out-of-Body
10.3	Meaning
10.4	Serving Courses
10.5	Long Courses
10.6	Inspiration

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The themes are presented in detail below. Pseudonyms have been used in place of participant names.

### **Theme 1: Understanding of Meditation**

Participants were asked their own interpretation and understanding of meditation through their experiences with Vipassana meditation. Each participant described in their own language how they defined meditation and what meditation meant to them. Their descriptions were coded into the following subthemes: presence, surrender, focused awareness, mental training.

**1.1 Presence.** Three participants described meditation as way to focus and become present to whatever is arising within themselves. Rachel described meditation as “a personal practice that brings a focus inward for some type of benefit, I call it grounding.... specifically for me, meditation means a chance to sit and be present with myself in a very focused, present, compassionate way.” Celeste stated that for her it involves “allowing myself the time and space to observe myself, my physical structure, what’s going on throughout my body, the reactions I have, my feelings.” Similarly, Janet described it as the practice of learning how to be in the present moment and stated that she uses the practice to help her calm and quiet her mind and become mindful of her body and thoughts.

**1.2 Surrender.** One participant described meditation as the practice of surrendering and letting go. Allison shared, “Meditation for me is just those two things, slowing down and letting go of my need to control everything, just letting go and really kind of relaxing and surrendering and being present and seeing what happens.” She shared that this meant trusting in the process, trusting her body, and trusting in a part of herself that went beyond her thoughts.

**1.3 Focused awareness.** Three participants described meditation as a process of focusing the mind and concentrating on an object of meditation whether that be the breath or physical sensations within the body. Naresh stated that “if we can keep our minds focused on any one particular object for a longer period and we can remain there with awareness then we can call it as a state of meditation.” Along with focused awareness,



one participant described meditation as maintaining a state of awareness and detachment from internal experiences. Musica stated that “meditation is a process of giving the mind a job, focusing the mind, and being witness to what arises rather than being involved with what arises, so there’s a separation there.”

**1.4 Mental training.** Two participants described meditation as a training program for the mind as a means to reduce suffering. John stated that “I think of it as a brain training system that helps recondition the brain's habit patterns.... to me it's the process of gradually untying knots or relieving tensions.” Naresh stated that the objective of Vipassana meditation is to train the mind to be equanimous and maintain equanimity for longer durations of time towards internal and external experiences, whether pleasant or unpleasant. Allison also shared that for her meditation involves becoming aware of craving and aversion and cultivating equanimity. Increasing equanimity and changing the brain’s habit patterns were believed to take disciplined practice and persistent training and a way for the mind to learn a new way of relating to internal experiences.

## **Theme 2: Experience of Sensations**

In asking participants to describe any internal experiences that they’ve had during their 10-day meditation courses, almost all the participants stated becoming aware of physical sensations within their body that they were not generally aware of in their day to day lives. These responses emerged from participants before specifically asking about their somatic or physical experiences. Their descriptions and observation of sensations, and their relationship to sensations were coded into the following subthemes: types of

sensations, sensations and qualities of mind, impermanence of sensations, movement of sensation, layers of sensation, and changes in sensation.

**2.1 Types of sensations.** Participants described a wide range of physical sensations that they became aware of within their meditation courses. These physical sensations were categorized as “gross sensations” and “subtle sensations,” which they experienced in different parts of the body including on the surface of the body as well as internally. Gross sensations were described by participants as those that were obvious to feel, stronger, and often unpleasant sensations. They were described as sensations of pain, heaviness, soreness, achiness, throbbing, numbness, tightness, cramping, clenching, flushes of intense heat, coolness, popping, pulsing, prickling, tickling, dullness, itchiness, sharp pains, crawling on skin, squeezing, and pressure. Rachel shared:

Whatever physical sensations I’ve had in my life I will have on the cushion.

Sometimes I’m expecting them, sometimes I’m not, it may be pain from sitting for long hours from old injuries, aches, sharp pains, tight tendons and joints, cramps, numbness, numbness will come, and a lot really inexplicable sensations will rise sometimes with emotions, flushes of intense heat, very cool experiences, clenching of the body as fear memory comes up, warm, soft washes as running thoughts come up.

Participants also described the experience of subtle sensations throughout the body, which they stated to occur with higher frequency and were generally pleasant sensations

such as gentle vibrations, the feeling of electricity or tingling throughout the body, pulsations, and gentle throbbing. John shared:

I talked about the pain but it's not exclusively pain there's also moments when the sensations become very subtle and almost pleasurable. They feel almost like ticklish sensations or like vibrations like electricity and you feel this at various times between various parts of the body and it alternates between that and pain.

Outside of gross and subtle sensations, two participants spoke of areas of blankness, numbness or the inability to feel sensations in certain parts of the body during their meditation. The ability to feel or not feel sensations, and the types of sensations felt during meditation sittings were attributed to the state or quality of one's mind at any given point in time.

**2.2 Sensations and quality of mind.** Six participants commented on the types of sensations that they experienced as a reflection of the quality of their mind. Multiple participants stated that the ability to feel subtle sensations occurred when their minds were calm, focused, sharp and sensitive. In contrast, when their minds were turbulent, unfocused, or unsettled they stated often experiencing gross sensations or noticing pain more within their meditation. Therefore, sensations were believed to change based on the quality of one's mind. Naresh stated that when his mind is calm, stable and subtle, then he can feel inside of his body and can see and feel things that he normally cannot when he is not meditating. However, he stated that there is a process of reaching a state of mind that can perceive subtle sensations. He stated:

...first of all the mind has to be calm. Once the mind is calm enough then it can focus, when the mind can focus, then only it becomes stable, and when the mind becomes stable, then it can become subtle, and when it becomes subtle, then it becomes sensitive. So when it becomes stable, sensitive and subtle, it is sharp. That sharpness is what is required for observing sensations in Vipassana. So through subtleness [of mind] we can observe the subtleness of the sensation.”

Other participants shared their experience of pain and gross sensations and believed that this was as a reflection of lack of equanimity or mental balance. They stated that the experience of subtle sensations occurred when the mind was able to remain calm even in face of gross sensations. John stated:

I've noticed that whenever I'm not seeming equanimous, whenever I'm tense and when my mind is unbalanced and it's reacting, that's when I get a lot of the pain. In contrast, when my mind relaxes and stops reacting and gets more equanimous then the pain starts to kind of dissolve, and I start feeling more in balance, I feel that tingling sensation.

Furthermore, a few participants stated realizing that the interpretation of a sensation as pain occurred because of the mind's reactivity, stating that certain sensations were not experienced as pain when the mind was able to remain calm and equanimous. They stated that when there is clenching around a sensation or bracing against it due to reacting to the sensation then the sensation registers in the mind as pain. However, when the mind

becomes subtle, there is greater acceptance of sensations and a reduced tendency to push sensations away. Musica shared:

I just remember my very first sit where I had so much pain, physical pain and that was my experience of sensation, at the time it was achiness, and throbbing, and then it would be nothing in other places, but certain places would keep calling out to me and I thought it was wild how as the course went on I didn't notice the pain as much, and my realization was, oh it's not that the pain has gone away, it's that I've stopped reacting to it, that was my deep realization.

**2.3 Impermanence of sensation.** While all participants described the experience of different sensations arising within their bodies when focusing inward, they each shared the realization that the sensations were impermanent. They each described the process of observing the arising and passing away of sensation as they focused and maintained their attention on the sensations. They stated directly noticing that sensations were not continuous, were always changing, and in flux, arising and passing as they focused their attention in any given area. Naresh shared:

After the first course, I started feeling gross sensations and then after the second course, I started feeling subtle sensations as well, and as they describe in Vipassana, the gross sensations are the sensations that stay with you for longer time, and sometimes they are not very pleasant, and they are very obvious to feel, like vibrations, tingling and throbbing. Then I started feeling the subtle sensations which are quite high frequency and very short lived, very very short lived , and

sometimes it looks like they are very connected, but when you observe them closely, you know that is actually not continuous but very rapidly arising and passing away.

Nina stated that over the time the mind becomes aware of the impermanence of sensations and the quality of sensations, whether they are gross or subtle. She stated that each time one meditates and passes through the same area, there is the understanding that the sensation may have changed. Participants also shared how the realization of impermanence and the arising and passing of sensations becomes internalized for them to allow them to be more equanimous to the experience of both pleasant and unpleasant sensations. This knowledge of impermanence was said to reduce reactivity and increase accept of sensations that arose. Musica stated:

With the physical sensations, that knowledge of anicca (impermanence), everything is changing creates a sense of awareness, if everything is changing then there's a question of why would I get too attached to what I am feeling, or get too worked up about bodily sensations that are going on, so that awareness of anicca bolsters equanimity.

**2.4 Movement of sensation.** Along with impermanence, three participants spoke about their observation of movement as they focused their attention on sensations. They stated that as they narrowed their attention on a particular sensation, it began changing, and moving to different parts of the body. Allison described her process of discovering this movement within her first course and stated:

...before I went to my first course, I would sit for about 20 minutes and I would stop because my foot would start hurting. So that's where I would stop, and so at the course I thought well this is strange that we're supposed to sit through this pain. I don't understand that. But I kept sitting and what I would notice is at first it was pain in my foot and then I kept sitting with that, then the pain moved. So then it moved up to my knee. So then I was having pain in my knee and then I kept sitting with that and the pain moved up to my hip. And so, I guess I was just noticing how the pain wasn't really in one area, it was just a matter of me feeling tense and bracing against whatever I was feeling, which made it feel like pain.... I started to realize that really I'm calling it pain and now I've realized that it's just sensation and it's just movement. When I brace against movement then it registers as pain.

Nina also described movement of sensation, however, for her the movement occurred from different parts of her body to her hands and feet. This appeared to be a recurrent experience for her as she noticed sensations moving specifically to this part of her body. Celeste also described movement of sensation and stated that as her body “opened up” there was space created to allow internal movement of sensation. She described noticing tension or pain or tightness in her body but that as she learned to relax and open her body the sensations moved down to other areas and the sensations then changed.

**2.5 Layers of sensation.** Three participants described their awareness of layers of sensations. They described their growing ability to differentiate sensations and move

below gross sensations as their minds became more focused, and subtle. John described his experiences in the following way:

.... if I'm not equanimous at all then my mind is not able to see very subtle things so it only pays attention to the gross... the larger, the coarser things, like pain. But as my mind calms down settles down and starts to let go more and more, then it sharpens itself up and it's like piercing through the pain and seeing things that are underneath.....once the pain diminishes then the past sensation becomes more subtle and they become more differentiated. I start feeling subtle differences between the pain. Not pain, they become just like sensations, like I feel more of a pulsing. That tends to be a very predominant thing that I feel. Like my heartbeat potentially, like blood flowing through my veins and arteries everywhere. That's a very strong one. Then even more subtle than that I feel this kind of vibration, or these prickling sensations. And those sensations take over once the pain goes away. It comes to the forefront. It's almost like the pain was blocking them because the pain is much bigger, and it spreads over a much larger area. And once the pain leaves, the mind is able to heed what was under that, which would be much more subtle things.

**2.6 Changes in sensation.** Another common thread across participants was the ways in which their experience of sensations changed across courses. Almost all the participants stated that their early courses were characterized by significant amounts of pain and gross sensations as they turned inward, were no longer distracted by outer



stimuli, and became fully aware of their bodies. They stated feeling pain in their legs, feet, backs, shoulders, and necks. Most participants stated that after the first two to three courses their experiences of sensations shifted and they began noticing more and more subtle sensations throughout their courses and the experience of gross sensations diminished. John shared:

[In] the first few courses there was definitely a lot more pain. A lot more physical pain in my legs, and in my back. In the last couple of courses I haven't had to deal with as much pain. Or let me put it a different way. The pain is still there but in the first few courses my mind would not be able to be as equanimous with the pain and the consequence of that is that the pain gets much more intense, because there is this clenching and tensing around the pain which turns into even more pain. So the pain just starts vibrating throughout the entire body because you're just tensing up around it. As I've learned how to be more equanimous and more non-reactive with that pain so it never gets as intense as it used to. It even sometimes just goes away all together. So in these last few courses I would sometimes sit for long periods, where in previous courses, that amount of sitting would've caused a lot of pain whereas nowadays it doesn't cause any pain at all, because my mind is just able to be more equanimous with it. As my mind learns equanimity, I'm noticing that the pain is reduced.

A few participants, however, spoke of the ongoing experience of gross sensations even in later courses and attributed this to experiencing the heightening of sensations

from everyday life within courses. They stated sensations often being unpredictable and stated that there is no pattern to the types of sensations that will emerge within courses. Some also stated that gross sensations continued to arise when their minds were turbulent, unfocused or distracted. However, they stated that their reactions and relationship to gross sensations appeared to change across courses and they were better able to better sit with them with less reactivity. They also stated being able to feel more and more subtle sensations throughout their courses, with subtle sensations emerging on earlier days of the course than when they first started.

### **Theme 3: Emotional Experiences**

In asking participants to describe any internal experiences that they've had during their meditation courses, multiple participants described the arising of emotions. These responses emerged from participants before specifically asking about their emotional experiences during their courses. In capturing the varying emotional experiences of participants, the following subthemes were created: types of emotions, intensity of emotion, awareness and differentiation of emotion, approach towards emotion, recovery from emotion, and changes in emotion.

**3.1 Types of emotions.** Participants described a wide range of emotion experiences encountered within their meditation. Many participants stated that the emotions they were experiencing in everyday life in response to situations and life events commonly emerged within their meditation and were often heightened. Participants also

spoke of different courses being characterized by different themes or emotional experiences. Rachel stated:

.....so for example if I have a propensity for let's say anxiety around a certain issue, it's guaranteed to come up on a course both through thoughts, dream states, but also sensations come in a very powerful way ....every course is so different, some courses are really around fear, others are around relationships, abandonment, solitude, others can be around contentment, satisfaction so they're not always bad. But it tends to feel like every course has a theme that runs through it, or a couple of themes.

Two participants described courses characterized by significant sadness and grief in response to major life events and transitions. They stated that their meditation courses became a way to process grief and loss. One participant shared:

....the big emotional experiences I've had during my courses was sadness, I feel like I cried my way through the first course and part of my second, and each subsequent course there's always been tears.....I remember the first course, I was having images of my mom who had died 3 years prior to my first course, so the first course I was having a lot of images of her come up..... I was processing the trauma of losing my mom, she committed suicide so it was a sudden death, and also processing my whole family falling apart. My family of origin really disbanding with my mom's death and realizing what a big part she was in keeping

our family together, so there was loss upon loss there, so the loss of my mom and the loss of the family that I once knew.

While some participants described emotions emerging within their meditation in response to everyday life, others described the emergence of emotions that had been suppressed or that stemmed from unprocessed childhood memories. One participant stated:

... things come up in the mind and a lot of stuff which is buried or suppressed. You know I use the word complexes but I'm not sure that word has a very clear definition, but just buried emotions, and the kinds of thoughts that aren't there normally come to the surface. They come to the surface because you're not distracted with the external world. And at times it can be pretty over-powering. A lot of emotional uprising and things that rise up can be very intense. I've had a lot of anger come up. And there's a lot of guilt from the past and anxiety about the future.

Two participants shared the experience of guilt as it related to their childhoods, with one participant associating guilt with specific memories that arose within his meditation. One participant shared the experience of an overarching feeling of guilt that was persistent for her throughout her life. She shared having recurrent feelings of inadequacy, anxiety, and jealousy alongside that she became aware of within her meditation.

Another common emotional experience among participants was that of fear, anxiety, and panic. This was a predominant theme for three participants. One participant

described experiences of intense terror, panic, and fear, which were unexpected and manifested primarily through the body as she noticed changes in her physical sensations in response. Another participant described having more overarching experiences of fear that appeared to manifest through thoughts, images, and dream states. One participant shared feeling apprehension towards meditating and turning inward for fear of what she might find. She stated:

...at the beginning of the first couple courses I would bring that fear and I think what would happen is this general sense of...like claustrophobia of "I got to get out of here, I've got to get out of myself, I've got to get away from who I am or what I might be or what I might find." Just having this sense that maybe there's something about me that's not right and if I find that, am I going to be able to deal with it?

She shared the manifestation of that fear one evening during a course where she thought that her house was burning down and that something terrible had happened while being away at the course. She stated feeling compelled to call her neighbor to make sure everything was okay. She shared being surprised by the intensity of her reaction the following day after the thoughts and feelings had passed, and attributed it to the fear of moving inwards and believed it was a desire to move away from her internal experiences. Furthermore, she described an experience while meditating where the fear manifested in the physical feeling of falling and being unsupported by the cushion. She described this to be a profound experience for her. She stated:

...I felt as if everything beneath me suddenly wasn't there. There was a lot more space between me and the floor and the pillow. I suddenly had this deep fear of falling, and had this deep fear that there was nothing supporting me and that there's nothing to catch me and that it was all up to me. In that moment, I had this sense that there isn't anything underneath me but that I am not going to fall. That was just an incredibly overwhelming experience but at the same time peaceful and really comforting. It made me realize how much I can grow in this practice.

Three participants described having experiences of anger arise within their meditation. One participant explicitly described the physical sensations that arose as she felt anger stating that she was “feeling the heat come up from my core to my face and my limbs and feeling the blood rushing through my limbs.” Another participant described anger as a predominant emotion that would regularly arise and stated “I get a lot of anger, a lot. That's something that's common, that's been with me my whole life essentially, so it's like a habit pattern that's very entrenched in my brain. So it naturally comes out a lot when I'm meditating and it often is triggered by memories and thoughts.” Another participant shared having aggressive thoughts and emotions along with the imagery of war, fighting with others and thoughts of being killed.

Another common emotional experience shared by participants was that of boredom. Participants described difficulties when facing periods of boredom, and stating feeling resistant, and experiencing self-doubt in face of such boredom. Two participants described having periods in which they began questioning the practice, and their reasons

for continuing. They noted recurrent thoughts of “who they are and what they’re doing” as they sat with feelings of boredom.

Lastly, several participants shared experiences of joy, bliss, contentment and deep feelings of happiness and gratitude particularly towards the end of courses. One participant shared the physical sensations that arose as she experienced positive feelings such as warmth, softness and expansiveness of the heart. Strong feelings of gratitude and happiness were a shared experience among multiple participants and the reason for why many continued meditating. These moments of intense gratitude, contentment and bliss were cherished and seen as the rewards of their practice.

**3.2 Intensity of emotion.** A common experience across participants that naturally arose within the interviews pertained to the intensity of emotional experience while at the course. Three participants stated that their emotions appeared to be heightened and more intense during their course compared to everyday life. This was attributed to the lack of distraction and external input, and immersion into one’s internal world as John described:

I think in daily life we try to run away from our emotions. We don't really just sit with them and accept them and allow them to flow through us. We'd rather run away from them to our distractions, to our phones, to our movies, whatever we want to do to turn our eye away. But in a course, you don't really have anywhere to go. You're stuck sitting there with your emotions, especially the negative kinds of emotions.

Participants also discussed the depth of feeling and internal work that occurred within their courses as they became more accepting of the emotions that arose. John described his ability to process more emotion as he learned to tolerate and move through the emotions that emerged without being overwhelmed or overpowered by them. He stated that he found himself “uncovering a lot more emotion,” which added to the intensity of emotion experienced. He further described his mental and emotional state during his courses in the following way:

It's like the mind starts to feel more fragile. It's almost like it's more raw. The analogy that the teacher gives is that it's like an operation of the mind. While that's just a metaphor I think there is some truth to it. It really does feel like deeper parts of the mind are being uncovered, they're being opened up, and so it feels more raw and feels more sensitive and more vulnerable.

Rachel shared how unpredictable courses can be and stated experiencing intense emotions that she was not anticipating. She shared that sometimes she may know what may emerge during a course, but at other times she cannot predict what will happen. She shared:

Every emotion I've had in my life is guaranteed to come up, and once again every course tends to have a theme. I've had courses that were relatively sweet and sensual, and I felt patient, and accepting and so equanimous, and everything seemed to fly right though, and time just passes, and I've had other courses where I've had multiple panic attacks, and I never know. Sometimes I'll go to a course



with something relevant in my life that I know is going to come up, I don't really know what's going to come up, and the point is not to dredge up particular things, we let come up what comes up, so we work with whatever is there. So multiple panic attacks was a big one, there were courses about fear about loved ones which was prevalent, horrible night terrors, a lot of really intense emotions, definitely agitation comes up and then the sweet serenity and peace of being truly equanimous in the moment and letting go.

Celeste shared having moments of feeling rage or shame and stated being better able to observe these states, including the intensity and duration due to having no distraction during courses. She stated that her emotions were more intense during courses because of her ability to tend to her emotions with an attitude of openness, peace and equanimity that she is not always able to provide for her emotional states in her everyday life. Rachel shared that her practice has allowed her to not only feel the intensity of unpleasant emotions, but to also fully experience joy. She shared:

My ability to weather intense emotions like fear, or shame or anger has greatly increased. And then on the other hand with self-awareness, self-knowledge, the ability to be really joyful, to really feel joy, because I think sometimes we don't let ourselves feel hopeful or excited, we dampen that down, so really allowing myself to be really really excited about something in a balanced way.

**3.3 Awareness and differentiation of emotion.** Three participants described increased awareness of emotions, particularly as they learned to observe the physical

manifestations of their emotions. Celeste stated that she has learned to identify and differentiate what she is feeling based on the sensations that arise within her body, which was something she stated having difficulties doing prior to her meditation courses. She shared:

...when I first started my courses if somebody asked me how I was feeling, it would be really challenging for me to state that...sometimes because I was experiencing a combination of emotions around something. And now it's easier for me to discern what I'm feeling...I can't say oh I feel bad, I'm like where am I feeling in my body, what is this sensation I'm experiencing and now I can say I'm feeling sad or I'm feeling grief or I'm feeling the difference between sorrow or being unhappy or anxious and being excited or little things like that.

She shared being able to observe the nuances of emotional states, as well as the physical nuances associated with different emotions by noticing where she feels each emotion in her body. Multiple participants shared becoming increasingly aware of the physical manifestations of emotions and stated that reducing thoughts or stories associated with their emotions allowed them to experience them directly through physical sensations.

**3.4 Approach towards emotion.** Another common theme was a shift in participants approach to their emotions as they progressed through courses. Participants shared becoming more curious, tolerant, investigative, and accepting of their emotional experiences. Multiple participants shared a reduced need to “shut down” their emotions, bypass them or get rid of them. Observing emotions was considered part of the practice

for several participants as they learned to recognize that physical sensations were sometimes manifestations of emotional states. They described learning over time to refrain from rejecting their emotions or from being “entangled into their feelings.” There appeared to be a common theme of becoming aware of the ways in which emotional pain was exacerbated by thoughts. Participants spoke of the intensity of emotionality increasing as they found themselves having periods of unawareness or “feeding” certain thoughts or feelings. Rachel shared:

I’m much more aware of the physical side of my emotions, like I can watch them or examine them, oh there’s shame coming up, I can watch it rise up, sit with it, breath and let it dissipate and move on, and I didn’t act upon it. I’m much more capable of riding out these mini emotional storms without feeding them, just letting them pass through.

**3.5 Recovery from emotion.** As participants stated becoming aware of their emotions and learned to remain focused on the physical sensations, they stated noticing faster recovery from emotional states. This was a shared experience across multiple participants as they stated moving through emotions quicker or not “getting stuck” in any given emotion. Naresh shared that this was one of the most significant changes he has noticed from his practice. He stated that unpleasant emotional states do not appear to remain with him for days as they used to and that no matter how intense his emotional state or reactions are by the following day he is able to return to his normal way of being. Rachel stated:

If I get angry it's in a much shorter time, I recover more quickly...for the most part they pass more quickly, because I'm not feeding them, so they come up, I see them for what they are, 'oh this too will change, I will watch this,' so they roll through much quicker.

John and Celeste also shared that while the intensity of emotion remained the same for them, and the same types of emotions surfaced for them, they were able to observe their emotional states, notice the intensity and duration of any given emotion, and move through the emotion faster. This appeared to be a significant experience for a number of participants as they stated noticing changes in their ability to become aware and regulate their emotions in their everyday lives as a result of their practice.

**3.6 Changes in emotion.** Participants were also asked how their emotional experiences changed, if at all, across courses. Responses to changes in emotion differed across participants based on their individual experiences. For participants who experienced more overarching emotions such as fear, anxiety and guilt, they stated noticing reductions in these emotional states. For example, in response to changes in emotional experiences, Allison stated:

I would say less fearful. Certainly. I think when I sat the Sattipatthana, halfway through that course I just remember walking back and thinking "nothing bad is going to happen."..... You know I think it had to do with thinking that if I do these courses, memories from the past can surface. Then I'll go through that difficult pain and trauma again but I remember realizing, that this isn't masochism. It's a

very gentle experience even though it requires so much discipline. It really requires so much hard work. At the same time, it really is a very gentle process and it took me a while to realize that.

Celeste shared her ability to notice and respond to emotions as they become “stuck” so as to change her emotional experience. She stated that when she is feeling anxious:

I notice how it moves in my body or it doesn't move as I progress through the course. I think its allowed me to open up my body more when I'm in an emotional state so it's like oh it's stress stuck some place so I need to kind of open up and provide space for it to move...[when I'm feeling anxious] I'm not letting this emotion move down to my core so I've just got to open myself up to experience it deeper and then I change it so I don't feel stuck in my emotions either.

She further stated that in allowing her anxiety to move down into her chest and core and in remaining with the emotion, it often led to the emotion passing away more quickly and led to reduced tension in her shoulders as there was greater internal movement.

In contrast, other participants stated that they continued to experience similar levels of intensity of emotion as when they started courses. However, they stated that there was change in their relationship to their emotions as they cultivated equanimity and curiosity towards their emotions. They stated being able to experience the full range of their emotions whether pleasant or unpleasant with less reactivity. John shared that he has learned to approach his emotions in a similar way to physical pain. He shared:

I think of this in a similar way to what I just described with the pain. If I'm equanimous with the pain, the pain diminishes and then eventually goes away.

I've experienced the same thing with emotion. If I'm having a very intense emotion the more I react to it by continuing to think about and to think the thought that generates the emotion, the more I keep rolling in those thoughts, the more intense the emotion gets. But the more equanimous that I am, and if I just let the... let the emotion be whatever it's happening to be at this moment and experience as it is. It kind of slowly fades and then it just goes away on its own. So what I'm saying is that process has become more seamless. It happens more naturally for me. So I don't get stuck the way that I would have previously.

Others shared having greater emotional stability and being on a more even keel as they noticed reductions in the intensity of highs and lows. They stated that after having sat multiple courses, their emotions appeared less extreme, and less volatile, and they felt a greater sense of balance. In contrast, two participants shared that more recently they had refrained from practicing, and had noticed greater intensity of emotion in their day-to-day lives attributing this shift to their inability to practice.

#### **Theme 4: Interpretation of Emotion and Sensation**

Along with exploring the types of emotions and sensations participants experienced within their courses, participants were also asked how they interpreted or understood these emotions and sensations. All participants shared their interpretations, which have been coded as follows: manifestation of present, manifestation of past, and

manifestation of saṅkhāras. However, four participants stated that while they had an intuitive sense as to the reason for what was emerging within their meditation, interpretation was not something that they actively sought. In fact, they stated that they tended to refrain from trying to interpret their sensations or emotions due to such evaluative thoughts taking away from the act of meditating. John and Allison shared their concerns about engaging in thoughts around interpretation and possible connections between their sensations and emotions as they were concerned that this could lead to inaccurate beliefs that interfered with the meditative path. They stated that they found such thoughts to sometimes be a hindrance to the process of fully allowing and feeling the sensations and emotions.

**4.1 Manifestation of present.** One common interpretation by participants of the emergence of sensations was a result of feeling the physical effects of sitting for long periods of time. Participants shared having pain and soreness in their legs, feet and lower back as they meditated for 10 hours a day, primarily during the first few days. They also shared that their senses became heightened during the courses and that because of this increased sensitivity they were able to observe subtle biological processes such as the effects of digestion, biochemical reactions occurring in the body, or the effects that different foods had on their body. Therefore, certain sensations were attributed to either the physical act of meditating and sitting, or to the observation of natural biological processes that were occurring throughout the day.

**4.2 Manifestation of past.** Another common interpretation of the emergence of sensations and emotions was the belief that such manifestations were associated with unresolved issues from the past. This was particularly evident for sensations that were unexplainable by the natural act of sitting or natural biological processes. As participants described recurrent sensations of pain, throbbing, tightness, clenching, popping, etc., there was the belief that these sensations were a form of release from past experiences. This was clearly described by one participant who shared a recurrent sensation that often arose during her evening meditations. She described an uncontrollable sensation that would rapidly surface that felt like popcorn going off inside of her. She described it to be very unpleasant and intense, and stated having involuntary movements in which she would internally startle or move away from the sensation. In interpreting the sensation, she stated:

I always wondered about the popcorn or the jumpy feeling, I wondered if that was like unresolved anger, in some ways it felt like breaking out from the inside instead of from the outside. My mind interprets it like acne, or breaking out as like a quality of heat, an overabundance of heat, and heat makes me think of anger as far as emotions go, and so since it was so powerful on the inside, it was like something was erupting and boiling, but it was so quick, it was like these little volcanoes in me. I thought it was unresolved anger. And also fear, a part of me wondered if it was fear.....what I'm realizing more now is that I carry a lot of fear, I was afraid a lot of my dad's temper for instance growing up, so part of why



those jumpy feelings were uncomfortable was because they were unpredictable, and I didn't know when they were going to stop, it's almost like, right this second I wonder if that was fear.

She later described her belief that these sensations and emotions were associated with early trauma reactions as memories arose or unconscious states became conscious. She shared her belief that trauma gets stored in the body and that meditating allowed her to return to previous states to resolve parts of her past. For example, she described experiencing verbal and physical abuse as a child and stated:

So what happens I think in the nervous system is I often would go into what's called dorsal collapse, which is sort of like freeze, because I couldn't fight or flee, I couldn't run and I couldn't fight. So I think what's happening in Vipassana is that I might be going back into some of these states, some of this implicit memory, that stuff that I'm not all that conscious of comes up via sensations, so the body is the vehicle for that implicit memory. So I think that the implicit memory comes up via a sensation, and the sensation often will have an emotion with it, and then sometimes there's a full neural network, which would mean that there's an image there, and also a behavior, which in a way that jumpiness was a behavior, like an unconscious behavior.

Similarly, Janet described the emergence of childhood memories and emotions and shared experiencing a perceptual and emotional shift as the memories and feelings arose. She stated:

I had heart surgery when I was a child and had this dark storyline that I wasn't supposed to live and that I was stuck in this life that I wasn't supposed to be alive for and I don't remember how it started but there was something when I was in a course where it switched, where I thought, the only reason I'm able to be here doing this is because these doctors saved my life and so there was a big, just a really powerful gratitude experience.

**4.3 Manifestation of saṅkhāras.** A third interpretation was that sensations and emotions arise in different parts of the body as an indication of saṅkhāras coming out to be released. This interpretation was discussed by five participants. Saṅkhāra is a Pali term that was defined by participants as “impressions,” “deep rooted programming,” or past actions that leave an imprint within the mind and body. It was also defined as habitual reactionary patterns that develop based on a person's responses to their environment and were believed to be embedded in the body. They were said to form the basis of personality influencing one's way of being in the world. These reactions were believed to be outside of awareness or part of the unconscious and were seen to drive most decisions and behaviors. Musica shared her understanding of saṅkhāras in the following way:

My understanding of a saṅkhāra is that it's a deep habit pattern of the mind. The way Goenkaji describes it is there are different layers, you can have a scratch on the surface, that kind of saṅkhāra that easily comes up and goes away, I think he would describe it karmically almost, and then you have the deeper strike that takes a little bit more doing, and then you have the deepest that is like a chisel line

in a hard granite rock, and those deeper saṅkhāras are the ones that come up last, they come up on your death bed even.... I've taken it as face value that a saṅkhāra is this deep habit pattern of the mind, but as I think about it more, I think it's not just a deep habit pattern from this life, but could be from previous lives as well, ways of thinking or being that have been in the energy of my soul for lifetimes.

Participants stated that saṅkhāras emerge through the form of sensations or emotions as outer input is reduced and one's focus is turned inward. In discussing the reason that these sensations and emotions emerged, Rachel stated:

...they're coming in from our old reactions, our stock pile that makes us who we are, our personality, our tendencies, our memory bank, and they come on the surface because they are what we hold in ourselves and our bodies, and what we are deeply familiar with and what we identify with, and who we are, so they come to the surface because we're having an opportunity to face them and reduce our suffering related to them.

Another participant stated that when she became calm and quiet and shifted her focus away from thoughts and brought awareness towards her breath and body, saṅkhāras would surface and more of herself would be revealed as she was receptive and open. Her understanding of saṅkhāras was stored energy within the body based on experiences in the past. She shared:

...when I was a young adult I remember being molested. I would call that a saṅkhāra where it's something that was buried somewhere in my body or my

subconscious, and when I was ready and comfortable enough, it came to the surface. So when I went to my first course I thought about that a lot when he [the teacher] would talk about saṅkhāras. So I thought well yeah I get that concept, it's whatever's happened in my past experiences, feelings that I've had that I decided I don't like that. I'm going to just ignore it or stuff it. I think it stays in me somewhere. So that's how I think about a saṅkhāra..... When I settle down and when I quiet myself down and when I stop focusing on my thoughts and being attached to my thoughts and I bring my awareness to my breath then those saṅkhāra can surface and more of who I am can be revealed.

Similarly, the participant who described the sensation of jumpiness as if popcorn was going off inside of her shared her belief that the jumpiness was a saṅkhāra and believed it to be a deep habit pattern or form of reactivity that was coming up and releasing. She defined it as a layer that was being healed and shared a similar belief that this layer was ready to come to the surface.

### **Theme 5: Awareness**

Awareness is considered a critical aspect of Vipassana meditation and was a topic that was explicitly asked about to understand each participants' interpretation of the concept and the ways in which awareness was cultivated through the practice. To capture the responses of participants the following subthemes were created: understanding of awareness, changes in awareness, awareness of thought patterns, and awareness of connection.

**5.1 Understanding of awareness.** Participants were asked their own interpretations of what awareness meant to them in their practice. They each described awareness somewhat differently. Naresh and John described awareness as a tool or application of the mind that can be turned on and off. Naresh used an example to describe this and stated:

...suppose I'm breathing, and I may be breathing either with awareness or without awareness, if I am breathing without awareness that means the breath is going anywhere in and out, and I'm not observing it, I'm not feeling it, I don't even know when it is going in, when it is coming out, but as soon as I bring my awareness to my breath, I know exactly when it is coming in, when it is going out, from where it is coming, which side of the nostril I can also feel if my mind is subtle enough whether it is warm or not.

Rachel, Nina, and John described awareness as the act of observing whatever is arising within their internal experience, and the ability to detect and feel what is occurring from moment to moment within the body or mind. For example, Musica stated that:

...awareness is being witness to, noticing without reacting. Awareness is noticing that the emotion is coming up without getting completely wrapped up in the emotion, so sadness is here, anger is here, euphoria is here, so these are all emotions but I am not those emotions, and just watching them, that's the awareness is that I'm witnessing, I'm witnessing those parts of myself.

Rachel went further and described awareness as a tool for greater access to unconscious material and stated that awareness is:

...to be observant of reality as it is, without trying to color it with layers of judgment or stories, bare, pure observational attention.... bringing awareness to our physical and emotional state is that point of, that bridge, or bringing our awareness into these previously unconscious states, helps us bridge the areas that were unapproachable to us, so I think of awareness as a light or a bridge, or a key to unlock the door to enter a world that has not been accessible to us.

Allison and Celeste described awareness as the process of moving attention from outward stimuli to internal stimuli and the ability to shift attention from outward to inward experiences. Awareness was also seen to be improved and cultivated over time through the practice. Allison stated that:

...it's kind of like exercising a muscle, it's using my mind as a tool instead of my mind using me. If I focus my awareness on a particular part of my body then that awareness becomes strengthened like a muscle and so the stronger that muscle is then the more I can be present to what's going on in my body which is this movement, a constant movement.

**5.2 Changes in awareness.** Every participant stated noticing improvements in their awareness as they continued to practice and progressed through courses. Participants stated that awareness became more refined, stronger, and more focused as they practiced. Celeste stated that her awareness has “softened” as she has relaxed into awareness as

opposed to “attacking” awareness or forcing it. She stated that learning to be available to awareness has made it easier for her to access her awareness. John and Nina stated that they have noticed changes in awareness through their ability to feel sensations. John stated, “I notice that as I do more courses I am able to sense my sensations. I have a clearer awareness of my sensations. I can go deeper into the sensations. It becomes easier to feel them.” Similarly, Musica shared shifts in her awareness and stated:

I’m a yogi, and I do a lot with my physical body, I’m very aware of my physical body and it’s a whole different experience to be in Vipassana and start to go deeper, not in the sense like I feel my arm straightening, but it’s more like I feel the subtle pulse of my blood flowing through my veins, very subtle, it’s a more intimate relationship with my somatic experience.

Rachel and Celeste stated realizing that *anapana* (breath meditation) was the foundation for cultivating greater awareness and the avenue for making their awareness finite and sharper. They described realizing how essential the breath meditation or concentration practice was in refining their awareness to reach greater depths in the practice of Vipassana meditation, increasing their ability to go deeper into sensations in the body.

**5.3 Awareness of thought patterns.** As awareness was refined, four participants discussed becoming aware of recurrent thought patterns. Nina shared having recurrent thoughts of interactions that may have occurred prior to a course that her mind continued to return to during the first few days of the course. She shared noticing the ways in which her mind replayed interactions while meditating, searching for answers and reasons for

her reactions that prevented her from being able to focus on her sensations. She stated that as her meditation deepened through the subsequent days these thought patterns would subside allowing her to have more compassion and understanding towards situations, and a greater ability to become aware of sensations and emotions.

Janet shared that through her courses she became aware for the very first time of her inner critic and the ways in which she was persistently hard on herself. She stated that she began identifying patterns of thought across courses including being critical of the practice itself, her own lack of discipline and the belief that there was something deeply wrong with her. She stated noticing these thoughts primarily at the beginning of courses, similar to Nina, and realized that this was not a reflection of truth or who she was. She stated that over time she learned to observe and detach from these thoughts and began to recognize the “storylines” that her mind created including patterns of thought and judgment that were repetitive. She stated gaining greater separation of mind, and a greater ability to witness passing thoughts without over-identifying with her thoughts.

**5.4 Awareness of connection.** Through refined awareness, several participants spoke of growing awareness to the ways in which the mind and body were connected. Participants described greater awareness of their thoughts, emotions and sensations and the ways in which they appear to be associated. For example, Celeste stated that she is now able to see the link between her thoughts, how her thoughts generate emotions, and how her emotions generate physiological experiences that lead to her behaviors. Through



the cultivation of awareness there appeared to be a greater ability to observe thoughts and emotions that used to pass by one's mind without conscious recognition.

Furthermore, some participants shared a fundamental belief that there was a connection between their sensations and emotions. Rachel stated that even though she may not always know the exact connection between a particular physical presentation or emotion, she shared being able to identify and pinpoint subtle sensations as they related to the experience of anger, or sadness or joy before becoming conscious of thoughts related to these emotions. She stated that during her meditation sits:

I've had situations where I was terrified, and I might have had a thought at some point about it, but at some point just the feeling of terror, and this launch of the body of clenching down, and freezing cold, and stomach clenching down, and the heart center clamps down, and the hands grip and sometimes a headache with it, and these really intense feelings of terror, wrapped around the body and that's why it's so miserable, the back tenses down, stabbing pains in our side, it's really unpleasant. That's just a really clear example of the sensation side of an emotion.

Similarly, another participant shared her belief that her physical sensations were associated with the release of early trauma. She shared having a lot of pain in her hips, pelvis and groin during her meditation courses and stated experiencing significant fear during her courses believing that these experiences were connected.

Three participants stated that they had a loose belief or sense that there is a connection between their thoughts, emotions, and sensations, however, they each stated

the inability to make a full determination due to there not being enough repeatability or patterns around the emergence of certain sensations and emotions. In sharing this, Naresh stated that there could be a possibility that a connection exists and stated that he may not have reached the stage in his meditation or level of awareness to be able to detect or make such determinations.

*“When we finally look at horror and joy, birth and death, gain and loss, things, with an equal heart and open mind, there arises a most beautiful and profound equanimity”*

– Jack Kornfield

## **Theme 6: Equanimity**

Along with awareness, equanimity is also considered a critical aspect of Vipassana meditation and was a topic that participants naturally talked about throughout their interviews, before being explicitly asked questions related to equanimity. To capture the responses of participants the following subthemes were created: understanding of equanimity, paradox of equanimity, internalization, and changes in equanimity, and connection between equanimity and awareness.

**6.1 Understanding of equanimity.** Participants were asked what equanimity meant to them in their practice. Although participants differed in their use of language, they each described equanimity in similar ways. Equanimity was generally defined as non-reactivity, being balanced in face of internal experiences whether pleasant or unpleasant, and an attitude of non-judgment or radical acceptance. Cultivating equanimity was considered one of the primary objectives of Vipassana in changing the habitual tendency of the mind to react and move away from unpleasant experiences that

participants labeled as aversion, or the tendency to multiply pleasant experiences that was labeled as craving. John described equanimity in the following way:

Equanimity is the ability to have any experience without reacting to the experience. And being able to experience it almost dispassionately, non-judgmentally, almost indifferently. The word indifferently, I use it sometimes, but it gives the connotation of passiveness. Equanimity doesn't mean to be passive. It's very active, very engaged, yet not reactive. It's being balanced and not passing any judgement on the experience.....it's like radical acceptance of the experience that's happening.

Equanimity appeared to carry a cognitive and emotional component in learning to change the way in which the mind and body responded to internal experiences. For example, Allison described this vividly as she stated previously having strong reactions of fear when experiencing pain or discomfort due to fear of illness or disease. She described developing greater trust in herself and the inner workings of her mind and body as she stated:

I would say that equanimity is changing my mind about the messages that my body is giving me. Instead of being alarmed by sensations, I can just interpret it as sensations. Like this is what's going on in my body, rather than "Oh my God! This hurts! I might be hurting myself! What if my foot goes numb and it stays like that and I'm crippled!" ....equanimity is kind of allowing ourselves to be present without reacting to what's going on.

Naresh described equanimity not only as objective, nonjudgmental observation, but described it as a prolonged ability to remain objective without reacting. He believed it to be a state of mind that is cultivated and maintained over time and not affected by craving or aversion whether to internal sensations or external stimuli. John described equanimity as “breaking the link between awareness and then reaction” and described an internal circuit within the brain that naturally moves away from pain or discomfort as judgment is cast on the sensation. He stated that equanimity involves changing the circuit so that pain can be felt and fully experienced without habitually responding through moving away from the pain. Celeste described this in relation to both physical and emotional experiences and stated that equanimity allows her to sit, observe, and encounter the entirety of an internal experience without truncating it by reacting, which then allows her to make more informed choices.

**6.2 Paradox of equanimity.** Three participants discussed the inherent paradox in cultivating equanimity and shared their process of learning how to be equanimous even in face of their lack of equanimity, particularly when facing gross or unpleasant sensations. For example, John discussed his difficulties remaining equanimous when feeling pain due to inherently knowing that this is a reflection of an unstable and turbulent mind. In realizing that his mind is paying more attention to the unpleasant, negative or gross sensations he expressed having an internal conflict and stated:

It's kind of tricky.....if I'm feeling pain, that makes me feel bad because it's like

"Oh! But I thought I was supposed to be more equanimous? Why am I now

unable to be equanimous,” and that triggers this reflexive kind of reaction...which is the exact opposite of equanimity so it's almost paradoxical. To be equanimous, you have to not *want* to be equanimous....It's very tricky like our habit pattern is conditioned in our mind to go after the thing that we want, and to really do things intentionally. But this practice is very much unintentional. You almost have to just let it happen, you have to step out of your own way, in a sense.

Naresh described a similar realization, however, he used the language of effort versus effortlessness. He stated that in his early courses he had to put a lot of deliberate effort into meditating and being equanimous but that there came a point in time when he no longer had to exert effort and that equanimity arose naturally. He stated that once he discovered how to access a calm, stable, and subtle mind, it became effortless to practice with equanimity. This appeared to develop after consistent daily practice over the course of a few years. He stated that once he internalized the understanding of equanimity, he no longer had to work at becoming objective and equanimous, that the work for him goes into making the mind stable, sensitive, and subtle, and in doing so equanimity naturally follows.

Given these accounts, equanimity appears to be cyclical in nature, in that a nonreactive mind can be seen as calm, stable and can reach stages of subtlety and sensitivity, however, reactivity appeared to move participants in the opposite direction. Both John and Allison shared coming to the realization that equanimity naturally grew

through the process of letting go and surrendering as opposed to doing, or deliberately trying. John stated this by sharing:

I have to *let* the equanimity grow. I can't really *make* it happen. So if I'm feeling pain, I can't interpret that as a regression. Even though it really does reflect a lot about equanimity, I can't get upset about that because I'm trying to be equanimous....there's no *trying* to be equanimous. There's just *letting* it happen....The more you resist, the more you try to cling or try to force equanimity, the further away from equanimity you go and the more the pain strengthens.

**6.3 Internalization and changes in equanimity.** Four participants discussed experiencing a shift in their understanding and internalization of equanimity. John, Naresh, and Rachel shared specific courses during which they came to grasp the concept of equanimity as they learned it experientially. John stated that there came a point in time when he deeply came to understand the concept of impermanence as he directly observed the arising and passing of subtle vibrations throughout the body, realizing that the body and internal experiences was not a continuous stream. He stated that he previously understood the concept of impermanence on an intellectual level but did not fully grasp the idea until he came to experience it directly through an embodied sense, which led to greater insight into the concept. He stated that this deeper understanding supported his ability to be more equanimous to sensations and emotions as he learned to detach from

what was arising and see his internal experiences more objectively, knowing that they would arise and pass away.

Two participants shared misunderstandings around equanimity and cognitive shifts in understanding over time. They stated that equanimity could often be misinterpreted in believing that it involves having no thoughts, or no emotions, or reactions. Janet stated realizing that equanimity did not mean being without reaction, but being nonreactive towards an internal reaction. She stated realizing that it is normal and natural to have reactions, whether it is an emotion or physical reaction to an external situation or stimuli, but that equanimity for her meant to be aware, accepting, and compassionate toward her reaction. She also described the dangers of misunderstandings in equanimity, as meditators may mistakenly believe that having no reaction was the goal of the practice. She shared her concerns of this being inhumane and the effect this had on individuals. She shared that for her equanimity was about being compassionate with her inherent humanness and natural human emotions.

All participants stated that they noticed increases in their ability to be equanimous as they progressed in their practice. Musica described her equanimity growing as she learned to be less judgmental of herself and her internal experiences, particularly those that appeared unpleasant. Celeste stated that her equanimity increased as she stopped forcing equanimity, deepened her understanding of equanimity, and learned to be equanimous to the fact that equanimity can be difficult for her. Allison shared that as she stopped interpreting and creating a story about what was occurring within, and stopped

categorizing her experiences as good or bad her equanimity increased. She also shared being more accepting of her humanness including welcoming tears and no longer judging herself for crying when the sensation and urge arose, allowing her emotions to emerge organically and naturally. John shared a similar belief in seeing the emergence of strong emotions as natural and part of the process and stated using these moments to further cultivate his equanimity and further grow in his practice. He stated:

Sometimes emotions are very tough to deal with it sometimes makes you a mess. It's overwhelming. But to the extent that I can, I try to just keep trying, to keep doing the practice and not really get overwhelmed. Eventually the more that I can do that the quicker it changes and there's some new experience that I have to deal with. There's always something. There's always some challenge or something that I have to try to cultivate equanimity for. Whether it's this emotion or that emotion. Whatever it happens to be, or something in my body, there's always something that I'm trying to cultivate more equanimity for and that's what the practice means to me.

Naresh also shared a similar belief and stated that it is not the observation of sensation that is important, but the use of sensation to cultivate equanimity. He shared that as his understanding of this increased his equanimity increased to the point where now equanimity is something that has become effortless for him. He stated the he does not have to cultivate equanimity deliberately but is able to access equanimity by calming his mind and making it stable, sensitive, and subtle. He shared that with practice this has



translated into his everyday life, where he is able to remain equanimous without realizing he is doing so. He stated that it has become more embedded, and effortless for him as he finds himself less reactive to external stimuli and able to maintain greater calmness of mind.

**6.4 Connection between equanimity and awareness.** Participants shared that both awareness and equanimity were critical aspects of the technique and that both were required in equal measure to be successful in the practice. Participants appeared to vary in which aspect came more easily to them and which they were continuing to cultivate. For example, Musica shared that her awareness was high in identifying what is occurring within but that equanimity was something she continues to work on as she often finds herself reacting to what is occurring, labeling her internal experiences as positive or negative. Nina, on the other hand shared that her equanimity appeared high and stated that she does not find herself reacting to her experiences when they arise, but that awareness is something that she is continuing to improve as she finds her mind wandering and easily distracted. Although participants shared these individual differences, a common insight across participants was how deeply connected and interwoven awareness and equanimity were. Multiple participants shared that awareness is required before equanimity can be practiced since without awareness there is little to be equanimous towards. For example, Nina stated:

...in my meditation I need to do both, I need to be aware of the sensations and sometimes that is the difficult part for me because once the mind becomes chatty,

the mind might be just moving from one part of the body to another part and my mind is thinking that I'm aware but my mind is really not aware....If the mind is not aware then the mind cannot be equanimous because mind hasn't observed. Once the mind has observed without reaction then equanimity is there, so both parts need to be there.

Others stated the opposite, that equanimity is required in order to be more aware. For example, Rachel stated with reduced reactions and greater equanimity there is a greater capacity to be aware as internal space or "bandwidth" is available. She stated that one's capacity for attention is limited and that if "our attention is pulled towards reaction, stories, judgment, then we don't have as much attention to be aware, to just be aware, we're pulled away from that." She stated that the capacity to be aware of sensations and emotional states increases as equanimity or the way in which one responds with awareness towards these states improves. In contrast, if awareness is present and equanimity is low or there is the deliberate intention to remove or pull out memories or pain, then both awareness and equanimity were believed to be affected as they were considered to be intricately tied to one another.

Musica shared an insight while conducting the interview, realizing her lack of both awareness and equanimity. She stating that in her more recent course she experienced an overwhelming sense of boredom, and was having judgments about herself for being bored and no longer wanting to meditate. She stated that originally, she believed that her awareness was high in recognizing that she was experiencing boredom,

but that her equanimity was not high in accepting and embracing her boredom. However, in conducting the interview she realized that her awareness was not as high as she thought it was due to not becoming aware of her lack of equanimity and that this was not something she became aware of during the course itself.

### **Theme 7: Processes of Change**

Participants were asked what their understanding was of how meditation brings about changes and produced the benefits that participants described within their interviews. They were asked what they believed the mechanisms were behind such changes and what their understanding was of how meditation worked. Participants shared their insights throughout the interviews as they described the meditative process. Their insights were captured within the following subthemes: untying saṅkhāras, integration of past, witnessing, and mystery.

**7.1 Untying saṅkhāras.** Six participants discussed the emergence and untying of saṅkhāras as the underlying reasons for lasting changes. They stated that the courses were a time to bring attention inward, observe reactive responses, and allow deeper parts of the self to surface. The critical piece, however, in untying saṅkhāras and deep-rooted patterns rested in the ability to have a different response when emotions, reactions, and memories surfaced. For example, Rachel stated:

...most of the things are coming from our deeper workings, they are our attachments and patterns within our system to feel a certain way, and we stock pile these memories and emotions and reactions, and until we process them

differently they are going to stay with us and hurt us. And they have to come up and we have to face them differently then we have before for them to go away. It's sort of like generating power and bravery for the moment, like this has to come up, I have to face this, this is my chance to respond differently to untie this knot, to reduce my saṅkhāra related to this thing so it won't hurt me in the same way that it's hurt me before.

Maintaining equanimity as saṅkhāras or reactions surface was considered a critical part of the process of untying these reactive “knots” and no longer perpetuating the saṅkhāras. Equanimity was considered to bring a different relationship to the experience and the crucial part of what unties saṅkhāras. In responding differently, there appeared to be more of an opportunity for deeper reactions and saṅkhāras to surface and a gradual diminishment or untying of saṅkhāras as conscious, objective awareness was placed on the reaction. Rachel stated:

...when we sit on the cushion we're doing something different than we normally do, every saṅkhāra needs to be set, we have to feed it to continue the chain of events, so the moment we don't feed it we're breaking the pattern and we start to go in the other direction, rather than feeding it forward we start to break off a chunk, break off a chunk, and things start to emerge from the depth, so every micro moment we have a chance to decide, am I going to re-tie this knot or am I not going to re-tie it and let it dissipate and let it go, and then there's another micro-moment knot, do I tie this one or do I respond differently so as we learn to

be objective and observe with equanimity we're working on deeper and deeper reactive knots that we're untying.

Nina described a similar process and defined saṅkhāras as deep-rooted programming. She stated that impressions are made within the mind through the five sense doors and that when the same impressions are made continuously they become saṅkhāras. These saṅkhāras or programs were believed to be embedded based on how one was raised, the experiences of childhood and repeated experiences throughout life. They were stated to influence perception and the way in which one sees and reacts to the world. In described how meditation works to reverse this or free a person from deep-rooted saṅkhāras, she stated:

...my belief is that when we observe the sensations without reacting, just observe whatever is happening it might let other sensations from within the framework of my body that have been there from the previous life experiences come out... by observing [sensations] without reaction the old programming is able to come on the surface, and then the mind is able to observe and let go, and another programming is able to come up on the surface and mind is able to observe as it passes. So I think that is how emotionally one becomes free of previous programming they might have had from childhood.... by meditating, you are allowing all the deep-rooted programming to come on the surface and let go, and so the mind becomes clearer and clearer because this deep-rooted programming actually encroaches on the free mind, it's like it colors the free mind and when the

grip is loosened and its gone, the free mind is able to see the reality as it is without those tinted glasses.

Both Nina and Rachel shared that releasing saṅkhāras shifted ones entire being in the world. There was also a particular emphasis on sensation as a means to untie saṅkhāras and be free of “impurities of the mind” through the physical realm. This appeared to be the primary emphasis of the Vipassana technique as multiple participants shared that thoughts and emotions were not the focus of their attention, but the physical sensations within their body. Naresh stated:

...these are the sensations arising in a particular part of the body because we are [focusing] there, and they indicate that something is coming out, something that represents our karma sanskar, you know like, a seed or a karma that we have done in the past which needs to manifest, and if it doesn't come out through sensations then it will manifest as a thought or an emotion or something. If it is coming out as a sensation then that particular seed has been eradicated and it is not going to manifest.

In contrast, Naresh and Allison both shared that while they initially focused primarily on sensations, it was not until recently that they began interpreting their emotional reactions as saṅkhāras and learned to observe them objectively and equanimously as they did with sensations to allow emotional release.

**7.2 Integration of the past.** Three participants stated that 10-days of immersion into themselves allowed them to come to terms, accept, and integrate their pasts, which

they believed to be a source of change. Participants shared having memories and emotional reactions surface from childhood and difficult periods of their adult lives. They stated that in no longer having distractions to run away or avoid their experiences, it allowed them to sit with and integrate these experiences. Two participants shared coming to terms with childhood trauma including physical, emotional, and sexual abuse and stated that intensive meditation allowed them to process and uncover more of their reactions that appeared to be stored within the body. One participant shared that she often absorbed the energy of her mother and father's rage and as a child was not able to process or release this energy. She stated that in meditating she believed she was returning to these states and allowing the release of unconscious memories through sensations and emotions. She stated that the release did not always come with explicit memories or meaning, however went on to state, "I often wondered if some of the things that were coming up, and some of the sadness that was coming up wasn't just mine, but perhaps my mom's, some intergenerational feelings happening." She discussed using triggers from the external world to investigate her internal reactions and explore the root of her suffering. She stated that her perspective on triggers changed as she came to interpret triggers as a sign of what remained unconscious and part of her implicit memory that was unacknowledged or not yet integrated.

**7.3 Witnessing.** Another common interpretation of how meditation works is through a sense of detachment or change in the relationship with one's mind, body, and emotions. This was described somewhat differently across participants. Janet shared that

through her practice she became aware of self-critical thoughts and that through the act of separating and witnessing her thoughts she reduced her tendency to judge herself for having such thoughts and reduced the desire to get rid of these thoughts. She also stated experiencing a perceptual shift that led her to recognize and own internal reactions as opposed to attributing her feelings to the outside world. For example, she shared that when she is feeling fearful of a person, rather than believing that the person is scary and untrustworthy, she became aware of her internal reactions and acknowledged her own sense of fear. She stated recognizing the ways in which her reactions spiraled downward and stated learning to separate from her reactions to prevent further emotional distress. She believed that repeated experiences of witnessing her thoughts led to a “rewiring of her brain.” Furthermore, she shared that she has learned to be more compassionate and gentle with herself, even while experiencing negative thoughts. Rather than being critical of herself for having critical thoughts, she shared that she has gained greater acceptance and less judgment towards herself for continuing to have such thoughts, which she believed, helped reduce unhealthy patterns and led to change.

Celeste and Allison described witnessing differently. They experienced witnessing as accessing a part of themselves that they could not necessarily identify but believed went beyond their thoughts or their ego. Celeste stated that while it was difficult for her to identify how meditation works, she stated that she believed that there was a change in her mind’s relationship with her body. She further went on and stated:



....and then there's this other part...and sometimes that feels like what someone would describe as the ego, there's the I and then there's this other part that is not quite me and not quite external that's evolved, I feel like it's always present but it's harder to access.

She found it difficult to describe this part of herself in language, however, intuitively believed there was an aspect of herself that could be interpreted as a state of consciousness that was always present that went beyond cognitive comprehension.

Allison shared a similar belief in that there was something beyond her conscious understanding, that if she was able to let go and trust her body then she is able to gain a sense of freedom. She stated:

Meditation works by me letting go and surrendering to something else and trusting my body and trusting whatever it is about me that is beyond my thoughts. When I trust that and I stop trying to run the show and be in charge then I guess something happens and it's calming and it's freeing and it's peaceful.

**7.4 Mystery.** While many participants shared their perspectives on what they believed was contributing to the changes or the underlying mechanisms through which meditation worked, there was also a shared sense of not fully knowing or not being able to consciously grasp what was contributing to changes. For example, Naresh stated having a strong fear of death and noticed that around his 3rd to 5th course something shifted for him and since then no longer held such fears. He stated that he could not pinpoint what exactly led to such changes but believed that his Vipassana practice

contributed as he stated seeing a diminishment in multiple fears including his fears of old age, retirement, financial insecurity and an overall tendency to worry. Nina also shared a similar experience in noticing changes in an overall tendency towards feelings of inadequacy, guilt, and anxiety and stated feeling a sense of emotional freedom that she had not previously experienced. She stated noticing significant changes once she started maintaining a daily practice. Other participants shared that they tend not to interpret what is occurring and stating that it is too complex to try to understand the mechanisms. They stated that their primary objective was to practice the technique and refrain from analyzing or interpreting as this leads them to engage in thoughts and takes them away from the essence of the practice. There was a shared belief that the underlying mechanisms were beyond cognitive understanding or interpretation and remained a mystery to them.

### **Theme 8: Changes and Motivations**

Participants were asked what motivated them to continue meditating. Participants shared the many changes that they have experienced and noticed within themselves as a result of their practice that drove them to continue meditating. While specific changes that have occurred within meditation courses such as changes in awareness, equanimity, emotional and somatic sensations have been outlined above, changes that have occurred within participants' lives and ways of being in the world were captured through the following subthemes:

**8.1 Emotional freedom.** Five participants spoke of emotional freedom as a primary motivator and a significant change through their practice. Rachel shared valuing “those moments of liberation from suffering that I experience, tasting those little pieces of sweetness as my mind and body lifts itself out of that suffering.” Musica stated that meditation has become an essential part of her life in clearing herself of the energy and emotions that come from everyday living. She stated that her practice supported her professionally as a counselor in being a “vessel of healing and reflection for others.” Similarly, Nina shared that her daily practice prevented the accumulation of emotional distress and allowed her to let go on a regular basis reducing the amount that was needing to be cleared at the end of the year when sitting a 10-day course. She stated noticing this difference as she began her daily practice as she compared recent courses to those prior to sitting daily. Nina also shared the emotional freedom she has obtained from more overarching feelings of guilt, anxiety, inadequacy, fears of failure, and jealousy and stated that her practice not only brought her to become aware of these emotional states, but brought her significant resolution. Allison also shared noticing a greater sense of calm, peace, relaxation, and trust as she returned to courses and deepened in her practice. Naresh shared greater freedom from existential concerns such as the fear of death, old age, illness, and financial insecurity as he practiced and stated that these used to be significant concerns for him that appeared to disappear over time.

**8.2 Balance and stability.** Janet and Celeste shared that meditation brought them a sense of balance and the ability to manage everyday fluctuations. Celeste stated that her

practice allowed her to put her life into perspective as she became involved with work, daily demands, and relationships. She stated that the knowledge that everything is going to change has allowed her to become less attached and has brought a greater sense of space and distance from situations. Likewise, Rachel shared that meditation allowed her to remain grounded in face of the suffering in the world and increased her capacity to hold space for others. She stated that her ability to receive intense emotional information and remain present and grounded improved as a result of her practice. She stated that this balance and stability allowed her to be a positive agent in the world. John shared that meditation has become a natural part of his life, that he does not deliberately plan to meditate but finds meditation to be an essential aspect of self-care and everyday health. He stated noticing the consequences of not meditate including greater emotional reactivity and psychosomatic symptoms, and shared that maintaining his physical and emotional health motivated him to continue practicing.

**8.3 Responsibility and conscious choices.** Another change that participants shared was being more responsible for their reactions or emotional states and making more conscious choices in face of these reactions. Musica shared being more aware of habitual or recurrent internal states, and stated taking more ownership and being less prone to externalizing difficulties. She stated:

I notice when, what you might call negative things arise in me, like I have a few standards like jealousy or envy, I notice when those come up, and I can see them

for what they are so that I don't act.... it's not completely gone, these things still arise in me, but I don't act upon them like I might have used to.

Naresh and Nina shared similar changes in being able to make more choices including being objective and equanimous at the time of their choosing in response to external situations. They stated recognizing the ways in which their response shifted outcomes of situations and reduced their own suffering. Celeste stated being more responsible through greater awareness of feelings, particularly when making choices by determining whether she is choosing what is congruent to her. She stated becoming more responsible for the consequences of her actions and stated that this has become easier as she has learned to make choices that were truest to her in any given moment.

**8.4 Mental clarity and decisiveness.** Three participants shared experiencing greater mental clarity and stated being more focused and less inclined to experience mental confusion. This was believed to translate into greater decisiveness, quicker decision-making, and less dwelling on the "what ifs." Naresh stated, "I can see that I waste a lot less time wandering around in my mind in confusion. Decision-making has improved significantly, mental clarity, and focus." Nina also stated that she has noticed improvements in her communication as mental clarity has improved and a greater sense of efficiency as she goes about her everyday life.

**8.5 Self-attunement.** Six participants stated that their practice has led to greater self-attunement and awareness of themselves within their everyday environments. Both Celeste and Nina stated that they did not realize that they experienced social anxiety, and

stated becoming more aware of their discomfort in social situations after becoming more attuned to themselves through their practice. Celeste shared being able to see herself from the perspective of others, see past her own will and more accurately appraise herself by accepting her shortcomings. Likewise, Allison and Janet both shared that meditation has allowed them to become more of their true selves and become more attuned to the truth of who they are as opposed to escaping from aspects of themselves that were difficult to accept. Rachel also shared that who she truly is has surfaced as layers of shame, judgment, guilt, and fear no longer pull her down. She stated that as these layers have peeled away, she has been able to learn infinite new possibilities about herself.

Musica shared that her practice has allowed her to gain more understanding of the ways in which her body reacts to her environment based on her learned history. She stated becoming more aware of being activated in her environment as her mind and body mistakenly believed that she was not safe. She stated having a greater awareness of when this occurs and a reduced need to flee, avoid, or react in such situations when she is being triggered. She stated that she is able to slow down, investigate what is happening, stating that, “I just have a sense of ‘oh this is hitting on something in me that my nervous system hasn’t resolved,’ that doesn’t mean I’m a bad person, it just is, and I have work to do.”

Rachel stated that meditation for her has been the most effective tool that she has found in increasing self-knowledge. She stated that her practice has allowed her to steadily increase her happiness, sense of peace, and self-understanding and stated that other therapeutic modalities have not worked as well for her as compared to meditation.

Nina also shared that her practice has led to important insights for her. She stated arriving at important answers to difficulties and problems in life through her practice, and stated realizing that in changing herself she could change the circumstances of her external world through the realization that they are interconnected.

**8.6 Trust.** Three participants shared feeling a greater sense of trust and a reduced need to control aspects of their lives. Celeste stated that in letting go of control, and being more trusting of herself and her emotions she discovered a greater sense of self-control. She stated:

I also trust my feelings more. I think before I would trust what was external what was coming in through my eyes or ears more than what my emotional state was, what I was feeling physically and now I trust my emotional state more than what I see and hear. I might make a connection but I feel like my locus is more internal than external.

Allison also shared a realization around her need for control and how this shifted for her through her practice. She stated:

What I've learned about myself is that I've done a lot of controlling. I try to be in control and I try to hold on and brace against myself. Just thinking that the real threat in my life is within me. So I've tried to dodge and brace against those threats and try to keep myself safe. What I've realized is that by making my internal experience, my sensations, my emotions, my thoughts, making those things the threat that I have just exacerbated what scares me. If I stop trying to

control it all, and I just surrender and I trust the process more, and I practice being equanimous, and stop trying to categorize everything as good or bad, I feel like I can get what I often really wanted which is to feel safer, healthier, and to feel more at peace, and more trust, and to feel supported and loved.

She shared a greater ability to surrender and trust that everything will be okay, particularly after her meditation experience in which she felt unsupported by the cushion and yet still felt safe. She stated generally feeling more relaxed, comfortable, and trusting of the world as she continued meditating and stated that this was one of her primary motivators. Naresh also shared having a lot more trust and patience since practicing, and stated that he is now able to wait years for something to happen in his life without losing equanimity and balance.

**8.7 Detachment.** A significant change that multiple participants shared was the experience of detachment. Janet shared detaching from negative thoughts patterns, particularly self-critical thoughts. She stated that her practice has helped her de-identify with certain thoughts through greater awareness while accepting that these thoughts may always be there for her. She stated recognizing thoughts as just thoughts, and stated realizing that her thoughts did not define who she was and were not always a reflection of reality. She shared that she learned to change the relationship with her mind by de-identifying with the critical part of her mind and becoming aware of parts of her mind that were more compassionate and understanding.



John and Naresh both shared that their practice has led to a reduction in attachments and a greater ability to let go and give up things in their lives. John stated feeling less attached to his body, to himself, and to external changes, and stated being more accepting of what happens both internally and externally. He shared this change being evident through his response to a recent move. He stated that in the past moving away from friends, loved ones and his social support would have caused him significant anxiety and emotional turbulence, but that internalizing the idea of impermanence through his practice allowed him to cope with major fluctuations and changes in his life through a state of awareness and flexibility.

**8.8 Compassion for self and others.** Another significant change that multiple participants shared was increases in self-compassion. Four participants shared being more patient, gentle, nurturing and compassionate with themselves, and more accepting of their own shortcomings. Janet and Allison shared that they have learned to embrace more of their humanness, particularly around their emotions, and stated developing a healthier view of themselves. Musica also shared that she has come to have greater acceptance of parts of herself that she used to see as negative or that she did not like about herself, and has gained a greater sense of compassion for her shortcomings and pitfalls. Rachel also shared greater patience and compassion for herself, while also having higher standards as she has gained more faith in what she is capable of after knowing herself more completely and deeply.

Three participants also shared having greater compassion for others as they came to understand and embrace their own suffering. Rachel shared that her “capacity to be in the world, and hold space, and ride storms, and [her] ability to love and be present for loved ones and strangers alike has increased.” Musica shared that she was more capable of having empathy for others, and able to see more clearly the ways in which others are suffering that may lead to externalizing behaviors. She stated realizing that she can relate to others more readily, even those who may be acting violently without having feelings of loathing. She stated recognizing the ways that they may be ignorant and not know how to be present with their suffering as she too has been unaware and ignorant at times to her own suffering.

**8.9 Harmony.** Two participants shared noticing a sense of synchronicity and stated that there was greater harmony between themselves and their external world. John stated that there was a spiritual or mystical component to the practice that he found difficult to describe, or explain through scientific terms. He stated that his intuition had become stronger since meditating, and that he was able to perceive and process information from his environment that he did not previously notice. He gave the example of being able to better sense what others are thinking, and what their intentions may be to know how to better relate to others and be more of a positive influence over people. He stated experiencing a greater sense of harmony and said:

There's definitely a sense in which the more I meditate, the more I feel like things kind of click into place, even in the external world. Even events that are outside of

my control but that relate to my life, they'll start to appear more harmonious with my life. And my actions become more harmonious. There's definitely something mystical going on that I hesitate to even accept because I'm a scientist, but I can't ignore it.

In contrast, he stated that when he was not meditating regularly he noticed a direct effect on his relationships and his external world. He stated that things start “falling apart” as his actions become more jarring, and there were clashes between himself and his world, leading to a lack of harmony and greater internal struggle. He stated that when he was meditating, even though there are natural fluctuations in life, there was a greater sense of purposefulness and the feeling of being on a trajectory that was meaningful that goes beyond intellectual understanding and appeared more mystical.

Naresh also shared a similar belief as he too described things in his life naturally falling away that no longer served him, and a greater sense of order and purpose. He stated that prior to meditating he found himself being pulled by the circumstance of his life, and stating feeling less in control. Since meditating, he stated that there was less conflict between himself, his mind, and his external environment and shared a similar experience of feeling greater harmony and congruence between his internal and external world. Nina shared that her meditation practice supported her spiritual growth and intentions “to be loving to every molecule in this universe.”

## **Theme 9: Challenges and Barriers**

All participants shared challenges and barriers that they faced within their practice. Challenges emerged throughout participant interviews as well as when explicitly asked. The primary challenges were categorized into the following subthemes: self-doubt, aversion, lack of equanimity, lack of awareness, maintaining discipline, and disconnection from community.

**9.1 Self-doubt.** A common challenge that participants shared was self-doubt and trust in their own abilities to continue moving through the practice. Rachel stated feeling that there was “too much to work to on in this lifetime” and expressed concerns about whether she was brave enough and able to continue working on herself though the practice. Allison stated having apprehension, fear and doubt, and expressed concerns about whether she was being “masochistic” in spending 10 days in silent retreat focusing on her pain and suffering. Celeste shared experiencing a day or two during her courses in which self-doubt emerged where she shared that “I don’t know who I am or what I am or what I’m doing.” She stated feeling afraid that she was not meditating correctly and stated having high expectations of herself including the belief that she should be better, more focused and more equanimous. She expressed concerns about whether the teachers were aware of her shortcomings and stated feeling shame and guilt over not meditating correctly. Janet shared having doubts about the teachings at times and the manner in which courses were set up and shared having reactions to the rules and expectations. She

shared being aware of her reactions to aspects of the teachings that did not align with her own beliefs or ideals.

**9.2 Aversion.** Another common challenge participants shared was aversion to internal experiences. Rachel shared having an aversion to facing her pain and shared the desire to avoid her internal experience and no longer commit to the practice. Allison shared a similar concern of not wanting to meditate due to intuitively knowing that there is an internal experience that she wants to move away from. She shared her challenges overcoming internal resistance and realized that when she engaged and focused inwardly she was left to face grief and pain that overwhelmed her. She stated that through consistent practice she was able to continue facing the grief and move through it, but that it required gradually overriding her natural tendency to resist and avoid. She discussed the ways in which she interrupted the process of arising and passing away and interfered with the process of release through reactivity, judgment, or avoidance.

**9.3 Lack of equanimity.** Multiple participants stated that equanimity was a primary challenge for them particularly when encountering strong emotions or sensations within their practice. Allison shared her tendency to react when faced with sensations that she found unpleasant and intolerable, and stated that this often led to a loss of focus and her mind racing in response. She stated that lack of equanimity often led to experiences of anxiety, and in turn increased craving and aversion to sensations. She stated having to return to her breath during these moments to allow for re-centering. John shared a similar difficulty in cultivating equanimity in face of strong emotions. He shared his difficulties

remaining equanimous to his lack of equanimity and stated misinterpreting his reactivity to pain and discomfort as a form of regression that would further exacerbate his difficulties. Similarly, Musica shared difficulties being equanimous to strong sensations that were unpredictable and emerged unexpectedly. She stated that she was able to become aware of unpleasant emotions and sensations but expressed difficulties accepting and embracing these as parts of herself.

**9.4 Lack of awareness.** While equanimity was a challenge for some participants, other participants shared difficulties with concentration and maintaining awareness. Nina and Janet both shared having an overactive mind, and stated having difficulties staying focused due to their minds wandering or being lost in thoughts. Nina stated that at times she would deceive herself, believing that she was aware when in fact she found herself moving to different parts of her body in an automatic, or mechanical manner without being truly aware of the sensations. Musica and Celeste both shared difficulties with sleepiness, restlessness, boredom, and agitation during their courses that were particularly difficult to overcome. Musica shared having significant difficulties with boredom in her recent courses, and stated having a hard time being accepting, and nonjudgmental in face of boredom. She also shared that she may have been dissociating during these courses and was unable to feel sensations on parts of her body. She stated that this might have been a protective mechanism as she faced her pain and as saṅkhāras were emerging within her practice that may have been too much for her nervous system to handle. She expressed resistance to meditating for fear of dissociating and realized during the

interview that she may not be accepting her tendency to dissociate and may need to learn to embrace this aspect of herself and the function this serves for her.

**9.5 Maintaining discipline.** A challenge that was shared by almost all the participants was maintaining the discipline to continue a regular practice outside of retreats. A few participants stated having a consistent daily practice for months at a time, but stated having difficulties keeping up with this routinely. They stated experiencing fluctuations in their practice outside of courses, moving away from the practice for some time and then returning to it as they noticed the impact on themselves when no longer meditating. Others shared that the relationship with their practice has changed over time. For example, John stated that he struggled with the concept of equanimity in being accepting of himself when not inclined to meditate. He stated having difficulties determining how much effort to put into his practice, and stated fluctuating between forcing himself to practice and then not practicing at all in reaction. He stated coming to more of a middle path and balanced approach in allowing his practice to organically and more naturally extend out of his life. Celeste shared a similar realization and stated that it has become easier for her over time to integrate the practice into her everyday life as she finds ways that it serves her. In contrast, Naresh shared that maintaining the discipline was not difficult for him and stated having an intention to practice 2-3 times a day. However, he attributed reduction in his practice to external events and responsibilities that make it challenging for him to maintain regularity.

**9.6 Disconnection from community.** Another challenge that two participants shared was the changes their practice had on their interactions with others in their lives. Rachel shared having a hard time finding her place in the world as her interests, lifestyle, and everyday choices changed as a result of her practice. She stated feeling a sense of distance from those around her at times due to having a different way of navigating the world and shared having a difficult time addressing the misunderstandings that arose among others regarding what her practice meant. Musica stated feeling a strong desire for community and the desire to be around other meditators to discuss ways to integrate the practice into everyday life. However, she stated feeling that this piece was missing in the Vipassana meditation community, as it prioritizes individual practice and had less of a relational component.

### **Theme 10: Individual Experiences**

Although there were many shared themes across participants, regardless of level of meditation training and practice, there were also individual differences that emerged within the interviews. In keeping with the idiographic foundation of IPA, these individual perspectives have been captured below through the following themes: imagery, out-of-body, meaning, serving, long courses, and inspiration.

**10.1 Imagery.** A unique meditation experience that John experienced occurred five years ago which he stated had such a profound impact on him that the memory of it has remained with him since. John shared often experiencing intense imagery during his



meditation courses and stated being between wakefulness and a dreamlike state while meditating. He shared that on one occasion:

I visualized a lion that was standing on top of a mountain and I had such a vivid [image], I can see the image now in my mind....it was a lion and it gave me the inspiration of strength because it came at a moment when I felt like giving up because the emotions that I was feeling were way too strong, and I was getting overpowered by thoughts and distractions. My mind was a total mess. The teacher kept telling me "Just keep trying, just keep trying." but I was though "I can't" and "I don't want to, it's too much." And the image of the lion helped me to find the strength to keep going.

John stated believing that the imagery that emerged within his meditation of the lion was an internal resource to help him move through the emotional upheaval and maintain strength and equanimity in the face of strong emotions. He stated visualizing the lion in the midst of a hurricane, and stated that although the wind was blowing the lion's mane, the lion remained calm and unaffected by the hurricane as evident through his eyes. John stated that he often returned to the image of this lion in later courses as he became overpowered by intense emotion as a way to embody the lion's sense of calmness and strength in face of emotional turbulence. He also shared experiencing vivid dreams at night, that were often associated with imagery that appeared within his meditation.

**10.2 Out-of-body experiences.** An experience that Celeste shared that she found unusual during a course was the feeling that she physically left her body. She stated that this occurred at night in between wakefulness and sleep. She stated:

I had an experience where I felt like I had visited a friend of mine who was a thousand miles away physically and he when I spoke to him about it afterwards he had had a similar experience on his end so it was like an odd like kind of out of body experience so little bizarre things have happened in the silence that I hadn't experienced before.

**10.3 Meaning.** While many participants shared that they did not actively search for meaning to their meditative experiences, for Musica, the search for meaning was an area of deep inquiry. She stated that often within her meditation, images, sensations, and emotions would arise; however, she was not able to gain a clear sense of where these were coming from or the meaning behind these experiences. She shared that part of her did not need to know the meaning behind what was emerging, as long as what was surfacing was being cleared. However, she also shared that another part of her believed that the meaning was necessary for healing. She stated that rather than seeking meaning, she believed that meaning would need to arise organically with the images, sensations and emotions for there to be full integration of memories. She shared that at times meaning would come later in the course on Day 9, or would sometimes come 6 months later. At other times, she stated that she found herself searching for meaning due to meaning not arising organically.

**10.4 Serving Courses.** A significant component of the meditative path for Janet was serving. This entailed volunteering to be part of the support staff for courses that included cooking daily meals, cleaning and being involved in the daily operations of the course. For Janet, serving was an area in which she discovered significant growth within her practice. She shared that being around others while being aware and attentive to her internal experience allowed her to become aware of triggers and reactions that she was not previously aware of. She shared that she came to recognize her own need for control over others, and learned to let go and cultivate more acceptance. She became aware of the ways in which she would be hard on herself, expecting herself to adhere to higher standards while having negative feelings towards others as they failed to adhere to similar standards. She stated that serving allowed her to become aware of triggers that she would not necessarily encounter when meditating due to the lack of interaction with others during the course. She shared becoming aware of emotional reactions that she thought were brought on by others, however, realized were reactions to parts of herself that she did not like. She stated that through such observation she was able to learn to be equanimous to triggers and reactions that would otherwise not surface within her courses.

**10.5 Long Courses.** Rachel was the only participant who had experience sitting long courses. She indicated that she had sat two 20-day courses, two 30-day courses and a 45-day course. She shared that her longer courses were very different from her 10-day courses, as she found a deeper reserve of peace and patience. She shared that to deepen her meditation and sustain herself through the long courses, she had to approach the

practice differently than the 10-day course. Rather than approach the course with rigor, she stated that she discovered a deeper reserve of self-compassion and patience with herself as a way to sustain the practice and prevent fatigue. She stated that her longer courses had a significant impact on her, as they served as a bridging in allowing her become more balanced, compassionate, and patient with herself within her everyday life. She shared:

For me meditation is a spiritual path, but very very practical for me, and it's an integral part of my self-care. It has become part of how I view the world and become an integral part of my world paradigm, how I interact with people, how I process information and challenges is filtered through the practice.

**10.6 Inspiration.** An important aspect for Celeste and Nina was the motivation and inspiration they received from other students that they have observed within their courses. Celeste stated being inspired by a student who appeared to be physically challenged due to a spinal disorder who appeared to sit straighter and straighter as the course progressed. She stated that being around other students helped her feel a sense of belonging and togetherness. She shared feeling a sense of safety and trust as other students appeared to struggle with strong emotions and physical difficulties, and were reassured and supported by the teachers. Nina also shared being inspired by other meditators. She stated that she gained inspiration from two young women who had been practicing for 2 hours a day since beginning their first course two to three years ago. She

stated being inspired to make a commitment to practice daily and shared that it was after talking to these meditators that she maintained her daily sittings.

## CHAPTER V

### DISCUSSION

*“If you are quiet enough, you will hear the flow of the universe. You will feel its rhythm.*

*– The Buddha*

#### **Summary of Findings**

The present study, which explored the embodied and emotional experiences of long-term practitioners of Vipassana meditation, revealed ten major themes: Understanding of Meditation, Experience of Sensations, Experience of Emotions, Interpretation of Emotions and Sensations, Awareness, Equanimity, Processes of Change, Challenges and Barriers, Changes and Motivations, Individual Experiences.

Theme 1, *Understanding of Meditation*, reflected participants’ definitions of meditation, which differed across meditators. Some described meditation as means to focus and become present, while others defined it as focused awareness on an object of meditation such as the breath or physical sensations in the body. Other definitions involved the practice of surrender and letting go, and trusting in a part of the self that was beyond thoughts. It was also viewed as mental training to increase equanimity, change unhealthy habit patterns of the mind, and reduce suffering.

Theme 2, *Experience of Sensations*, revealed participants’ awareness of sensations within the body that they were not generally aware of in their day-to-day lives. Every participant described the different sensations that they experienced, ranging from “gross sensations” such as pain, heaviness, dullness, tightness to “subtle sensations” such

as vibrations, tingling, and pulsating. Participants noted that the types of sensations experienced were a reflection of the quality of their mind at any given moment, with gross sensations occurring when the mind was turbulent and subtle sensations occurring when the mind was calm, focused, and alert. They also described their realization that sensations were impermanent, and described the process of arising and passing of sensations as they observed them objectively without reaction. Some participants also described the movement of sensations or layers of sensation as they focused their minds on the sensations and remained a witness, observing without judgment. They described their ability to differentiate sensations as well as notice changes in sensations across courses. For some, early courses were characterized by gross sensations, while later courses were characterized by more subtle sensations; however, others stated experiencing gross sensations throughout courses due to heightened awareness of sensations in general.

Theme 3, *Experience of Emotions*, highlighted the arising of different emotions for participants during courses. Many participants stated that their emotions were heightened and more intense compared to their everyday lives due to greater internal focus and less ability to distract from emotion. Participants shared the depth of feeling experienced as they came to be more equanimous and curious towards emotional states. Similar to physical sensations, participants described their increased ability to differentiate emotional states as they learned to observe the physical manifestations of their emotions and changed their approach towards their emotions. They shared

becoming more investigative, tolerant, and accepting of emotional states, whether pleasant or unpleasant. Multiple participants shared that as they learned to be more equanimous, they were able to recover faster from emotional states as opposed to being “stuck” in any given emotion. While participants shared in their ability to recover from emotions, they differed in their experience of emotions across courses, with some noticing changes in the types of emotions experienced, others described greater emotional stability, while others reflecting a great intensity of emotional experience as they became more aware.

Theme 4, *Interpretation of Emotions and Sensations*, reflected participants’ understanding of their internal experiences. Multiple participants, however, stated that interpretation was not something they actively sought, as this was counter to the technique of remaining present with sensations and emotions without cognitive evaluation. Although this was the case, all participants shared their intuitive sense as to what was occurring, and explained the manifestation of sensations and emotions as the emergence of the present, including the effects of sitting and meditating for 10 hours a day; the emergence of the past, including the surfacing of unresolved or unprocessed reactions from situations or early memories; and the manifestation of *saṅkhāras* which were believed to be stored energy, or deeply embedded reactions that were being released.

Theme 5, *Awareness*, which is considered a critical aspect of Vipassana meditation captured participants understanding of awareness within their practice, as well



as changes in awareness across courses. Awareness was generally perceived as focused attention or application of the mind. All participants shared improvements in awareness across courses, with some describing more refined awareness while others stating that their awareness “softened.” Participants shared their means of cultivating awareness and stated using the breath or sensations as a tool to improve focus and attention. They also shared becoming increasingly aware of thought patterns as well as connections between the mind and body and the ways that thoughts, emotions, and sensations were associated.

Theme 6, *Equanimity*, which is also considered a critical aspect of Vipassana, captured participants understanding of equanimity within their practice. Equanimity was generally defined as nonreactivity, nonjudgement, and acceptance of internal experiences. Participants described the inherent difficulties and paradox of cultivating equanimity as they learned how to be equanimous during periods of reactivity, judgment, and lack of equanimity. Participants also described equanimity growing out of the process of surrendering or letting go as opposed to deliberate attempts at being equanimous. Multiple participants shared a shift in their understanding of equanimity and the internalization of equanimity through experiential practice that extended beyond an intellectual understanding of the concept. All participants noted increases in their equanimity as they progressed in their practice. Alongside, some participants also shared misunderstandings of equanimity and the dangers of such misunderstandings. Equanimity was also discussed in association with awareness as participants explained how the two were related while also being distinct constructs.

Theme 7, *Processes of Change*, reflected participants' understanding of how meditation works, including insights into mechanisms of action. Multiple participants shared their views of arising and untying of saṅkhāras as the means through which change occurs. Saṅkhāras or deep-rooted reactive responses, were believed to surface within one's meditation practice, and through nonjudgmental awareness and equanimity, were believed to be released and eradicated. This was believed to shift one's view of the world, of external stimuli, and one's own response, freeing the mind and body. Participants also shared their belief that changes occurred through processing and integrating past experiences, memories, emotions, and sensations that were too difficult to access previously. It was believed that unconscious reactions and energy were stored in the body and accessed and released through physical sensations and emotions during one's meditation practice. Another interpretation was the act of witness as a means to change the relationship with mind, body, and emotions. By creating a sense of separation or detachment from thoughts and feelings, there appeared to be a reduction in unhealthy responses that perpetuated distress and suffering. While many participants shared their perspectives on what they believed was contributing to the changes, there was also a shared sense of not fully knowing or understanding what was contributing to changes. There was a shared belief that the underlying mechanisms were beyond cognitive understanding or interpretation and remained somewhat of a mystery.

Theme 8, *Challenges and Barriers*, highlighted the difficulties that participants experienced within their practice and during courses. Self-doubt was a primary

experience for a number of meditators as they lost faith at times in their own abilities to endure the pain and suffering that surfaced, as well as concerns about the technique itself. Participants spoke of difficulties with aversion towards unpleasant internal experiences and the natural desire to move away from grief and pain. They shared challenges with equanimity at times within their practice, particularly when encountering strong emotions or sensations. Others shared difficulties with maintaining awareness and concentration for extended periods. A common challenge among many of the participants was maintaining a regular practice outside of their courses. They shared fluctuations within their practice, as life events or daily living impacted their ability to sit formally to meditate. Two participants also shared the impact that their practice had on their connection with others, with one participant sharing a sense of disconnection with individuals in her life due to misunderstandings regarding what her practice meant, and another participant desiring more connection with fellow meditators.

Theme 9, *Changes and Motivations*, described the changes that participants experienced in their lives or way of being in the world due to their meditation practice and their motivations to continue practicing. The primary motivator that emerged involved the experience of emotional freedom, including a greater sense of clarity, calm, and lightness. Other motivators were increased balance and stability and the ability to remain detached and grounded through life's vicissitudes. They described improvements in mental clarity and decisiveness, and greater compassion for themselves and others. Participants also noted increases in self-responsibility including feeling more responsible

for their own emotions and reactions and making more conscious choices in face of these states. They described greater self-attunement and awareness of themselves in their everyday environments. Some described a sense of trust, and a reduced need to control aspects of their environment or lives. Two participants shared the experience of synchronicity a sense of harmony between themselves and their external world.

Theme 10, *Individual Experiences*, captured the unique experiences of participants to reflect individual differences. These included the emergence of images within one's meditation, vivid dreams, and out-of-body experiences during meditation retreats. The search for meaning also was a relevant theme that surfaced which included the internal conflict of wanting an explanation while also not needing an explanation for the process to occur. Serving courses and being part of the volunteer staff that cooks, cleans, feeds, and houses the meditators was an important component of meditation for one participant, and was her way of extending her practice beyond the cushion into interactions and life. One participant shared her experiences sitting longer courses, and described her process of accessing a deeper reserve of peace and patience. Two participants shared the inspiration they received being around other students and the experience of belongingness, safety and trust.

*“Everything comes to us that belongs to us if we create the capacity to receive it.”*

- Rabindranath Tagore

### **Integration with Existing Research**

The purpose of this study was to deepen the phenomenological understanding of meditation, and gain insight into meditative processes through the embodied and emotional experiences of practitioners. In the following section, the findings of the present study will be discussed in the context of previous literature.

### **Defining Meditation**

Meditation within the literature has been defined in many different ways due to the coexistence of a variety of perspectives and the many techniques that are termed “meditation” (Awasthi, 2013). There has been a lack of consensus on an operational definition or what constitutes meditation (Awasthi, 2013; Davidson & Kaszniak, 2015). Another critique has been that scientific research has been pursued without reference to the theoretical and cultural underpinnings of meditation (Rao, 2011). Awasthi (2013) stated that fundamental issues around definition have not been addressed sufficiently by contemporary research on meditation and emphasized the need to distinguish between techniques, and core features of meditation practices. While the purpose of this study was not on providing a full definition of meditation, the study did explore how Vipassana meditators understood the term meditation in the context of their practice.

Meditation was described within this study in four different ways. Meditation was described as a personal practice used to focus inwards and be present with oneself in a focused and compassionate way. This definition aligns with previous research that states

that meditation involves cultivating, refining and deepening the capacity to attend to present-moment experiences with increased calmness and equanimity (Carmody & Baer, 2008). Meditation was also described in this study as focused awareness on an object of meditation through a detached or witnessing stance. This aligns with research that describes concentration practices aimed at narrowing attention and repeatedly bringing back awareness to the object of meditation (Dunn, Hartigan & Mikulus, 1999). In addition, participants also described meditation as mental training to reduce suffering and increase equanimity. This aligns with research that corroborates meditation as a cognitive practice that stills the fluctuations of the mind (Baerentsen et al., 2010); however, further research is warranted in describing the mechanisms through which suffering is reduced. One participant described meditation as a practice of surrendering and letting go. While research has outlined mindfulness meditation to involve openness, curiosity and acceptance of experience (Bishop et al., 2004; Carmody & Baer, 2008; Walach, et al., 2006), to the researcher's awareness there have not been studies describing meditation as a process of surrender. This may offer an additional perspective to the definition of meditation or processes involved.

### **Experience of Sensations**

A core feature of this study was the descriptions by participants of the varying sensations experienced within their meditation. Many of the sensations described aligned with reports of Vipassana meditators from previous studies including experiences of tingling, shaking, twitching, involuntary jerks of the body, physical pain, and the feeling

of floating above the cushion (Kornfield, 1979). Recent studies by Mehling et al. (2013) found that awareness of body sensations, including the discernment of subtle sensations or bodily cues increased through mindfulness training. The participants in this study stated having increased awareness of body sensations that they were not generally aware of in their day-to-day lives. Participants also distinguished these sensations as “gross,” “subtle,” and neutral or blank sensations. Mehling et al. (2013) found that awareness of uncomfortable, comfortable, or neutral body sensations was connected to increased ability to observe with mindfulness, experience interoceptive stimuli and improve mind-body listening.

Participants in this study stated that the types of sensations experienced were a reflection of the quality of their mind at any given moment; that their ability to feel subtle sensations occurred when their minds were calm, focused, and sensitive. In contrast, the experience of gross sensations occurred when their minds were turbulent, unfocused, or unsettled. While current scientific research has not explored such distinctions, a study comparing novice and experienced Vipassana meditators found that highly experienced meditators showed significantly greater interoceptive accuracy than novice meditators during a body-scan meditation (Fox et al., 2012). However, further research is warranted to explore the potential connection between the types of sensations experienced and the state of one’s mind as this appeared to be a significant insight that multiple participants shared. Since meditation has been shown to improve the mind body connection, research further exploring this interrelation would be beneficial.

Research has shown that accurate perceptions of bodily sensations depend on awareness; however, awareness does not appear to predict interoceptive accuracy (Ceunen et al., 2013). Reasons for such differences include beliefs, reactions and schemas regarding bodily sensations (Bogaerts et al., 2008). This research may align with participants' descriptions of pain and gross sensations arising when there was lack of equanimity or mental balance. There is a possibility that reactions may cloud the experience of sensations as participants described the experience of subtle sensations arising when the mind was calm. As stated, further research is warranted in exploring how mental processes, reactions, and cognitive evaluations may impact the experience of sensations.

Participants also described the realization of sensations being impermanent as they focused their attention on their sensations that aligns with previous qualitative research on Vipassana meditators (Pagis, 2009). Increased awareness and experience of sensations without avoidance or reaction was shown to have a transformational effect on the sensations themselves. Pagis (2009) described the reports of meditators sharing their sense of relaxation around unpleasant sensations as they learned to detach, remain present, and observe. As they did so they stated that the sensations began changing. Participants in this study described similar experiences, with some meditators observing movement of sensations within their body as they focused their attention on specific sensations. The reports of meditators in Pagis' (2009) study also described vibration,



movement, and disappearance of pain after 7 days of learning to objectively focus attention and remain with the pain without reaction.

Participants in this study went further to describe not only movement of sensations, but also layers of sensations. They described their growing ability to differentiate sensations and move below gross sensations as their minds became more focused, and subtle. Such accounts highlight the need for further research on exploring qualities of mind and their association with sensations experienced within the body, as these findings appear to be new within the research. While there are limited studies, accounts of meditators by Kornfield (1993) revealed common experiences among practitioners of becoming aware of the pleasures and pains of the body, including “physical manifestations of emotional, psychological and spiritual holdings and contractions” (p. 43). He stated that sitting still and turning attention inward allowed the accumulated “knots” in the body to reveal themselves through pain in areas like the shoulders, back, jaw, and neck. He too stated that with mindfulness, pain begins to reveal itself in layers, which is in accordance with the experience of the participants in this study. He described pain, when viewed objectively, as being an amalgamation of subtler sensations including pressure, tightness, throbbing, burning and prickling as revealed by the participants. Further research is needed in exploring this phenomenon as previous accounts have been self-reports and have not been empirically tested.

In addition, based on the researcher’s knowledge, there does not appear to be longitudinal research tracking the changes in sensations described by meditators across

courses. In the present study, participants described the ways in which their experience of sensations shifted across courses, particularly as they experienced increases in awareness and equanimity. While some participants stated that early courses were characterized by more gross sensations and later courses involving more subtle sensations, others stated ongoing experiences of gross sensations and shared that these continued across courses, however, stated that their relationship to gross sensations changed. Further research is warranted in this area to explore changes experienced from course to course or across time, while exploring the differences in reports by meditators and what may be contributing to these differing accounts.

### **Experience of Emotions**

A significant aspect of participants' meditation experiences involved the emergence of varying emotions. Participants described the heightened intensity of emotions during their courses including experiences of sadness, grief, fear, anger, guilt, boredom, joy, contentment, and gratitude. Such experiences align with studies of other Vipassana meditators who reported having strong emotions during their courses and significant changes in mood. Prior reports of meditators involve experiences of heavy sadness, crying, anger, hate, fear, tension, boredom, restlessness, feelings of aloneness, insecurity, anguish, despair, lightness, serenity, joy, bliss, rapture, and laughter (Kornfield, 1979; Kornfield, 1993). Studies have shown that individuals who perceived bodily sensations with higher accuracy experienced more intense emotions (Critchley et al., 2004; Pollatos et al., 2005; Wiens et al., 2000). Participants in the present study stated

being less afraid and more accepting of their emotions, which they stated, allowed them to move deeper into their emotional states. Pollatos and Schandry (2008) found that individuals with higher interoceptive awareness showed a greater ability to process emotional information, which may explain the present findings. Khong (2011) also stated that as discursive tendencies are reduced and cognitive appraisals of emotions diminish, the ability to be present with emotions and the physical sensations associated with them enhances with mindfulness. Saunders et al. (2013) also found that mindfulness training increases depth of processing and counteracts experiential avoidance. Therefore, there appears to be reduced experiential avoidance as well as increased emotional awareness, engagement, and distress tolerance based on participants reports.

Participants also described increased awareness and discernment of their emotions through their physical sensations. They described greater awareness of the nuances of sensation, and stated being able to differentiate emotions based on particular sensations they noticed in the body. Levenson et al. (1990) have suggested that bodily responses may be unique for each emotion, which may explain the various physical sensations experienced by the participants. Although the participants were not able to identify clearly which emotions were associated with the different sensations, studies have shown that higher levels of trait mindfulness were associated with greater ability to differentiate positive and negative emotions (Hill & Updegraff, 2012). Pagis (2009) described meditators' reports connecting physical sensations of clenching in the stomach, shortness of breath, racing heartbeat and raising shoulders to the experience of fear. To date, there

have not been any other studies examining the precise link between physical sensations and emotions through meditation, however, emotion theorists have long hypothesized that the perception of physiological changes in the body lead to the experience of emotion (Damasio, 1999; James, 1884). Zeng et al., (2014) proposed that raising awareness of sensations through the practice of Vipassana meditation allows for awareness of subtle changes associated with emotions, such as changes in breathing when experiencing anger or fear. Greater awareness of interoceptive sensations was suggested to also improve accurate identification of emotional states and enhance emotion regulation (Barrett et al., 2001; Fustos, et al., 2012). Since alexithymia is associated with low interoceptive awareness, this inability to translate bodily signals to conscious awareness appears to be associated with low emotional awareness, as emotions are inherently visceral, body-based experiences (Herbert, Herbert, & Pollatos 2011).

A common experience that multiple participants described was faster recovery from emotional states after attending multiple courses. This appeared to be a significant benefit of the practice that numerous participants highlighted. They described the ability to observe and remain present to emotional states while also learning to deidentify and remain objective. This aligns with previous research that found that meditators showed increased emotional contact and more rapid recovery from emotional states compared to nonmeditators (Greenberg & Meiren, 2014). Taylor et al. (2011) also stated that novice and experienced meditators are less likely to evaluate intense emotion negatively, suggesting that practitioners were able to accept and experience the elicited emotion

without engaging in unfolding thoughts regarding the content. Likewise, Perlman et al., (2010) found that long-term practitioners of meditation reported less distress when faced with painful stimuli compared to controls, suggesting that meditators remained aware of the pain intensity but reduced cognitive elaboration of the sensory experience. In attending to sensory experience through a non-evaluative stance, individuals may be disengaging from thought patterns, repetitive thinking, or ruminations that may exacerbate disrupted mood and lead to greater recovery from unpleasant emotional states (Farb et al., 2012).

Taylor (2009) described the physiological mechanism behind emotions and suggested that emotions such as anger or fear have an automatic response that lasts just ninety seconds from the moment the emotion is elicited until it runs its course. When emotions last longer, there is a possibility that the emotion may not be fully felt in its entirety. This may be due to two different reasons (1) physical constriction, experiential avoidance, and mental evaluations that prevent the experience of primary emotions, and (2) thoughts and a story line that lead to elaboration of content and potential secondary emotions, preventing the experience of primary emotions. Fosha (2000) described the transformational effect that experiencing *core affect* can have. Core affect was described as emotional responses that release adaptive action tendencies, in the absence of defenses such as anxiety and shame. Greenberg (2002) further differentiated emotions into primary adaptive emotions, primary maladaptive emotions, secondary and instrumental emotions.

Primary emotions are associated with action tendencies that promote well-being such as core anger, sadness, fear, and joy, and are stated to promote survival and self-protective action as they provide information to the self and others. Primary maladaptive emotions are recurrent emotions based on learned history, lack of emotional attunement by early caregivers, and repetitive feelings due to experiences of neglect, rejection, abandonment, abuse as well as repetitive experiences such as oppression and disempowerment that may lead to overgeneralized feelings of fear and shame. The participants' descriptions in the present study of faster recovery from emotional states and increased emotional engagement may involve the full experience of primary emotions and the potential reduction of primary maladaptive emotions as participants described reductions in generalized fear, guilt and anger. There also appears to be a reduction of secondary emotions, or reactions to primary feelings, through the cultivation of equanimity and nonjudgmental awareness, allowing for increased ability to access primary emotions. Since meditation also involves a degree of relaxation, sense of safety, and lack of interaction with others there is a possibility that defenses may be reduced in order to allow for the experience of primary emotions.

Psychotherapy researchers have studied the transformational effects of accessing and expressing primary emotions in the context of a therapeutic relationship, particularly in the visceral experience of deep affect (Fosha, 2000; Greenberg, 2002). However, there has been limited exploration of the types of emotions experienced within meditation. Further research is warranted in studying the types of emotions experienced, the context,

or stage of meditation through which these occur, and the impact of remaining present to the visceral aspects of each emotion including how these may impact the experience of primary emotions. Researchers have suggested that change occurs within psychotherapy through the presence of an empathic, nonjudgmental, and validating relationship that supports emotional experience, acceptance, and expression (Greenberg, 2002; Paivio & Pascual-Leone, 2010). Although meditation is practiced individually, the intention to cultivate nonjudgmental awareness, equanimity, and self-compassion appears to mirror the relational tasks of a therapist. As meditators are able to cultivate these qualities within themselves, there is a possibility that change occurs through this shift in relationship to the self, allowing for core affect and somatic expression. Further research exploring these parallels would be beneficial.

There has also been growing research showing the effect of meditation on emotion regulation. Chiesa et al. (2013) found differences in emotion-regulation strategies among short-term and long-term practitioners. Short-term practitioners appeared to utilize more top-down emotion regulation strategies such as cognitive reappraisal, suppressing expressive behavior, distracting or selectively not attending to emotional stimuli, however, long-term practitioners appeared to utilize a bottom-up process when emotionally charged stimuli is experienced. Bottom-up emotion regulation strategies involve directly modulating brain regions associated with emotion, without utilization of higher brain regions like the prefrontal cortex. Some researchers have argued that mindfulness should be described as a top-down emotion regulation strategy

that promotes positive cognitive reappraisal (Garland, Gaylord, & Park, 2009). Other researchers have argued that mindfulness should be viewed as a bottom-up emotion regulation strategy (Chambers et al., 2009; Menezes et al., 2012). Based on participants' reports, Vipassana meditation appears to be a bottom-up emotion regulation strategy as the technique involves remaining present to emotional experiences without cognitive evaluations or reappraisals. Based on the researcher's knowledge, there does not appear to be longitudinal research tracking the changes in emotion regulation strategies among meditators across courses. While researchers have studied the differences in emotion regulation between long term practitioners and novice meditators (Chiesa et al., 2013), further research is warranted in examining changes over time among individual meditators. Participants in this study described changes in overarching emotions such as fear, anger, and guilt after attending multiple courses, which may be the experience of maladaptive emotions or emotional schemes, based on past conditioning or repeated experiences (Greenberg, 2011; Paivio & Pascual-Leone, 2010). Others described changes in their relationship with emotions over time leading to greater emotional awareness, stability, and balance which aligns with previous research (Shapiro et al., 2006; Teasdale, 1999). However, further research is warranted in exploring changes in emotion regulation strategies as a result of Vipassana meditation and the impact that increasing tolerance for primary emotions has on emotion regulation.

Levine (2010) suggested that emotion regulation arises through increased embodiment as the nervous system learns to balance excitatory systems and inhibitory



systems. Emotional dysregulation has been suggested to include the experience of hyperarousal (emotional flooding), hypoarousal (emotional numbness), or fluctuations between the two. Through awareness and equanimity there is the possibility that emotional states may be experienced while remaining in the window of tolerance, preventing the experience of severe dysregulation. As the ability to remain present is practiced and learned through 10-day practice of intensive meditation, there is a possibility that these skills may be transferred into everyday life, allowing for increased awareness and presence towards emotional states as they occur before reaching a threshold that leads to dysregulation. There is a possibility that attending yearly meditation retreats and practicing this ability to remain present to emotional experiences may increase the window of tolerance, and support self-regulation that persists over time, leading to the trait changes or shifts in emotion regulation strategies as suggested by previous research (Chambers et al., 2009; Menezes et al., 2012).

### **Awareness**

A major component of Vipassana practice involves cultivating awareness. Participants described their understanding of awareness as focused attention, and the act of noticing, witnessing, and detecting inner experiences, while moving away from external stimuli. Research has suggested a tripartite model of attention that divides selective attention into three subfunctions: alerting, orienting, and executive control (Posner & Petersen, 1990). Alerting involves effectively detecting internal stimuli and remaining alert to whatever arises with a state of readiness. Orienting involves the ability

to select and focus on specific stimuli out of a range of potential stimuli, and involves disengaging or shifting attention from one stimulus, moving to a new object of focus, and reengaging attention to the new stimulus (Posner, Walker, Friederich, & Rafal, 1984). Executive control refers to the ability to regulate inner resources and inhibit cognitive processes in order to focus attention (Posner & Petersen, 1990).

Meditation training has been shown to improve attention regulation and cognitive flexibility (Kozasa et al., 2012; Lutz, Slagter, Dunne & Davidson, 2008; Moore & Malinowski, 2009). Furthermore, specific meditation practices have been shown to improve different aspects of attention. Tsai and Chou (2016) found that practitioners of open monitoring meditation had greater attentional orienting ability and executive control compared to nonmeditators. The study also found that practitioners of open monitoring meditation had greater attentional orienting ability than practitioners of focused attention meditation, and the latter had greater executive control than nonmeditators. Since Vipassana meditation involves both focused attention and open monitoring through breath meditation and through body scan, there may be increases in all three subfunctions of attention. All participants in the study described increases in their awareness with some participants describing their awareness as becoming more refined and focused, while others described their awareness as “softening.” This suggests potential increases in alerting as compared to orienting ability. Two participants specifically described the breath meditation as particularly helpful in cultivating greater awareness and making their awareness finite and sharper.

A longitudinal study on Vipassana meditators found that the capacity for executive control and attentional stability increased through intensive practice as reflected through improvements in response inhibition and increases in concentration (Zanesco, King, MacLean & Saron, 2013). Both cross-sectional and longitudinal studies have also shown the Vipassana meditation is associated with increased cortical thickness in prefrontal, anterior cingulate, insular and somatosensory cortices, which are responsible for sensory processing, interoceptive awareness and maintenance of attention (Farb et al, 2012; Lazar et al., 2005; Hölzel et al., 2011) suggesting changes in neuroplasticity and increases in connectivity between regions of the brain. This may explain participants' descriptions of their growing awareness of the ways in which their mind and body were connecting, including the ability to sense the associations between their thoughts, emotions, and physical sensations. While participants stated that they could not make a definitive determination of the precise ways in which these connections were present, there appeared to be consensus on some felt sense of such interconnectivity as participants deepened in their practice and became more attuned to internal processes.

### **Equanimity**

An equally important component of Vipassana practice involves cultivating equanimity. The concept of equanimity within contemplative science has only gained attention in recent years as researchers have been reevaluating what constitutes mindfulness and have been considering equanimity as a separate outcome measure rather than being grouped into mindfulness (Desbordes et al., 2015). Within the Buddhist

tradition, equanimity (*upeksha* in Sanskrit, *upekkha* in Pali), refers to the “state of mind which cannot be swayed by biases and preferences.” It is also defined as “neutral feeling, a mental feeling which leans neither towards gladness nor dejection” (Bodhi, 1999, p 34, 116). In other words, rather than experiencing internal stimuli as pleasant or unpleasant, the object is viewed in a neutral manner without intensifying or dampening the experience.

Contemplative researchers have rephrased this into modern terms, defining equanimity as “an even-minded mental state or dispositional tendency toward all experiences or objects, regardless of their affective valence (pleasant, unpleasant, or neutral) or source” (Desbordes et al., 2015, p. 357). Equanimity is also stated to involve “a level of impartiality (i.e., being not partial or biased), such that one can experience unpleasant thoughts or emotions without repressing, denying, judging, or having aversion for them. Similarly, in a state of equanimity, one can have pleasant or rewarding experiences without becoming over-excited (e.g., to the point of mania or hypomania), or trying to prolong these experiences, or becoming addicted to them” (Desbordes et al., 2015, p. 358). This is believed to go against our habitual tendencies to seek pleasant experiences or sensations, and stay away from unpleasant sensations. Within Buddhist texts, this is reflected through the concept of craving and aversion, which are believed to lead to distress, dissatisfaction, and suffering (Bodhi, 1993).

Within this study, participants generally defined equanimity as non-reactivity, being balanced in face of internal experiences whether pleasant or unpleasant. This aligns

with the definition created by Desbordes et al. (2015) as participants described their experience of habitually reacting and moving away from unpleasant experiences labeled as aversion, and wanting to multiply pleasant experiences labeled as craving. One participant further stated that equanimity involves being dispassionate or indifferent, while clarifying that this did not involve being passive, but being engaged and active without being reactive. Desbordes et al. (2015) also made such distinctions between equanimity and indifference, and shared the common misunderstanding that equanimity involves detachment or absence of emotions all together. They stated that “having equanimity does not mean suppressing emotions or giving up the affective coloring of our life experiences,’ but rather involves a “sense of care and attentiveness rather than indifference” (Desbordes et al., 2015, p. 359). These definitions align with Buddhist texts that distinguish between equanimity and indifference, and view indifference as apathy, or lethargy which are seen as “unwholesome” mental states (Bodhi, 1993).

Two participants within this study also shared misunderstandings they have come across regarding equanimity, stating that equanimity can often be misinterpreted as having no thoughts, or no emotions, or reactions. One participant shared that equanimity did not mean being without reaction, but being nonreactive towards an internal reaction whether it is an emotion or physical reaction to an external situation or stimuli, and that equanimity meant to be aware, accepting, and compassionate toward this reaction. This understanding aligns with contemporary research on emotion that promotes acceptance of primary adaptive emotions that are seen as natural responses to an event or situation.

Emotion theorists have suggested that primary maladaptive emotions and secondary emotions prevent emotional processing and adaptive action (Greenberg, 2002; Greenberg & Pascual-Leone, 2006). There is a possibility that maladaptive emotions and secondary emotions may be seen as “unwholesome” mental states within Buddhist philosophy that take a person away from natural moment-to-moment thoughts and emotions that arise. Equanimity may be the mechanism through which maladaptive emotions and secondary emotions are reduced in order to allow primary adaptive emotions to be experienced. Desbordes et al. (2015) stated that suffering arises “not from the content of experience but from the emotional disposition with which it is experienced. Equanimity enables a skillful emotional response to the full range of feeling tones” (p. 359).

Equanimity is something that can be practiced in any given situation by remaining balanced and attentive without avoiding or being too far drawn in. Equanimity can also be cultivated into a trait through either concentration (*samatha*) or insight (*vipassana*) practices (Desbordes et al., 2015). Participants in this study described their difficulties in developing equanimity and discussed the paradox in cultivating equanimity in learning to be equanimous during periods of reactivity, judgment, and their own lack of equanimity, particularly when facing unpleasant sensations. One participant described the cultivation of equanimity through increased practice as he discussed putting deliberate effort into becoming equanimous within his meditation and then over time realizing how effortless it became as it was internalized. Neurofeedback studies have measured effortless awareness and found that “undistracted awareness” and “effortless doing” corresponds with

deactivation of the posterior cingulate cortex while “distracted awareness” and “controlling” correspond with activation of the posterior cingulate cortex (Garrison et al., 2013). There is a possibility that trait changes may occur through cultivation of equanimity that may be measurable through changes in the brain, however, further research is warranted in exploring the concept of equanimity compared to awareness.

Desbordes et al. (2015) proposed a definition of equanimity as an “even-minded state [that] is both (1) a mental attitude of openness, even-mindedness, and acceptance that one purposefully cultivates (e.g., during formal meditation practice and/or throughout daily activities) and (2) an enduring state or trait that is the end result of this form of training” (p.358). Within the present study, all participants stated that their equanimity increased through their practice suggesting that Vipassana meditation may be a reliable means to cultivate equanimity. Participants also discussed changes in their understanding and internalization of equanimity, particularly in recognizing shifts from an intellectual understanding of equanimity to a deeper knowing suggesting the development of trait equanimity. Vipassana meditation appears to be unique in the use of sensations as a tool to cultivate equanimity. There is a possibility that in using physical sensations to increase equanimity, there is a greater ability to be equanimous to difficult thoughts and emotions, and that utilizing sensations may be a bridge to developing equanimity across other domains. Desbordes et al. (2015) suggested that equanimity involves changes in one’s relationship to perceived experience, has some similar effects with emotion regulation strategies, and affects the duration of emotional and

physiological recovery from distressing stimuli. This would be an area of future research and investigation to better understand equanimity and the impact that increases in equanimity may have, including increases in self-regulation, emotional awareness, and reduced reactivity as well as the impact these changes may have on relationships.

Researchers have attempted to measure awareness and equanimity, and to revise mindfulness scales to capture these nuances more accurately (Zeng, Li, Zhang, & Liu, 2015). Within the present study, participants believed that while awareness and equanimity were related, they were separate concepts. They went further to state that in order to be mindful, both awareness and equanimity were to be cultivated in equal measure. Some participants described having greater awareness and less equanimity while others described having greater equanimity and difficulties with awareness. It would be worthwhile to explore the impact that such imbalances may have on an individual such as whether increases in awareness without equanimity may be associated with increased emotional lability or whether increases in equanimity without awareness be associated with emotional under-engagement.

Feldman, Hayes, Kumar, Greeson, and Laurenceau (2007) found that higher mindfulness scores were associated with lower levels of experiential avoidance, thought suppression, worry, and rumination and those individuals with lower mindfulness may be more likely to engage in cognitive elaborations that increase feelings of distress. Keenan, Hipwell, Hinze and Babinski (2009) found that equanimity in excess that involved disinhibiting and inhibiting emotional expression was associated with increased



depression. However, further research is warranted in exploring the direct ways in which awareness and equanimity are related and interventions that may support the balancing of the two to promote well-being and improved functioning. Some participants believed that awareness was required in order to be equanimous, while others believed that increased equanimity supported greater awareness. This may be an area of further research in understanding this relationship, as there is a possibility that awareness and equanimity are interconnected and depend on each other to further develop.

### **Processes of Change and Mechanisms of Action**

Meditation, as outlined, has been shown to produce significant physical, psychological, and neurological benefits and has informed treatment of various clinical disorders (Hofmann, et al., 2010; Keng, Smoski, & Robins, 2011). Although there is a wide body of research exploring the effects of meditation, there is limited research exploring the mechanisms through which meditation exerts these effects. Previous studies have explored the role of attention (Brown & Ryan, 2003), and a nonjudgmental attitude that allows a change in relationship to internal experiences, referred to as decentering (Fresco, et al. 2007). Recent research has begun exploring underlying processes with researchers attempting to consolidate the array of findings across studies to provide a comprehensive framework. Brown, Ryan, and Creswell (2007) proposed five underlying components (1) *insight*, which captures metacognitive processes of decentering, the observer stance, perceptual flexibility, and the recognition that thoughts and feelings may not be a reflection of reality, (2) *exposure*, which captures the experiential aspect of

intentionally engaging with unpleasant and challenging internal experiences to reduce avoidance, enhance tolerance, acceptance, emotional recovery and affect regulation, (3) *nonattachment*, which involves being less attached to outcomes, greater ability to be with what is, and well-being that is not contingent on external circumstances (4) *enhanced mind-body functioning*, which describes adaptive responses to stressors and its impact on health and well-being, and (5) *integrated functioning*, which captures the ability to make conscious choices through awareness, self-regulation, autonomy and improved relational capacities by being less self-focused and more flexible in one's way of being in the world. Hölzel et al. (2011) proposed another theoretical framework outlining the mechanisms of action underlying mindfulness that has received significant attention. They proposed four components that interact closely to enhance self-regulation, which may be present at different times within one's meditation practice that produce the therapeutic effects. These four components include (1) attention regulation (2) body awareness (3) emotion regulation, including (a) reappraisal and (b) exposure, extinction, reconsolidation, and (4) change in perspective on the self.

While the older model proposed by Brown et al. (2007) has garnered some consistent support, the newer model by Hölzel et al. (2011) is more integrative as it consolidates self-report findings, behavioral findings, and neuroscientific findings through functional and structural neuroimaging of meditators. The data in the present study also mapped more clearly onto Hölzel et al.'s (2011) model and therefore was chosen to guide the interpretation of change mechanisms.

The participants in this study were explicitly asked what their understanding was of how meditation works based on their own experiences and reflections on the process. While some stated that interpretation was not something they readily sought, many of them shared their perspectives on what they believed contributed to the changes or benefits of meditating. Many of their interpretations fell under the categories outlined by Hotzel et al. (2011). Throughout the interviews, participants described increases in attention regulation as reflected through the concept of samadhi or focused attention, unwavering concentration and absorption. This was believed to be cultivated through the practice of anapana or breathe meditation. Some participants described the process of meditating becoming effortless and less deliberate which has been reflected through previous self-report studies of experienced meditators having enhanced attentional capacities (Jha, Krompinger, & Baime, 2007; Valentine & Sweet, 1999), with increases in executive control and greater ability to disregard distractions referred to as conflict monitoring (Posner & Petersen, 1990). Hölzel et al. (2011) posited that attention regulation is the building block that is developed early on in practice that may allow for the other suggested mechanisms or processes to work.

The next component described by Hölzel et al. (2011) was body awareness that was reflected in this study through participants' ability to be attuned to subtle body sensations. Participants described their ability to self-regulate through awareness of sensations, particularly in response to emotional stimuli. Previous research has explored the connection between the perception of physiological changes and the experience of

emotions (Damasio, 1999; James, 1984). More recent research has suggested that awareness of internal states relates to the conscious experiences of feelings (Bechara, & Naqvi, 2004). Creswell, Way, Eisenberger and Lieberman (2007) provided the first neural evidence showing affect labeling to be associated with improved emotional regulation, decrease in negative affect and mood disturbance. They found that mindfulness improved the ability to see affective states as “objects,” which allowed the ability to detach from these states and improve emotion regulation. Multiple participants in this study described this process of seeing their emotions more objectively, and described the cultivation of equanimity as a means to create this separation. When asked explicitly about how they perceived meditation to work in creating beneficial effects, the participants of this study focused primarily on the idea of witnessing or taking the observer stance, and described the untying of *saṅkhāras* as the underlying reason for lasting change.

To the researcher’s knowledge, there are no scientific findings exploring the concept of *saṅkhāras*. *Saṅkhāras* within the Vipassana literature has been defined as a reaction of the mind. However, the result of such reaction is also known as a *saṅkhāra*. A *saṅkhāra* is stated to be conditioned by processes that produce it and conditions the processes that follow (Hart, 1987). This conditioning is believed to influence perception as perception draws on past experiences to evaluate and categorize current circumstances. New situations are therefore seen through the lens of past *saṅkhāras* making it difficult to see reality as it is. Hart (1987) suggested that each time a reaction occurs, the process

feeds itself as habitual reactions become further reinforced and further influence perception. Through the practice of Vipassana and the conscious cultivation of equanimity and nonreaction, new saṅkhāras are stated to no longer be created allowing the accumulated past reactions to surface. As these reactions emerge in the form of sensations and emotions and are met with awareness and equanimity, old saṅkhāras and reactions are believed to be distinguished, no longer influencing perception and reaction of future events (Hart, 1987). Saṅkhāras within the present study were defined by the participants as “impressions,” “deep rooted programming” or past experiences that leave an imprint within the mind and body, which aligns with the definition proposed within the Vipassana literature. It was also defined as habitual reactionary patterns that develop based on a person’s responses to their environment, particularly through craving and aversion. Although there have never been these associations made in the scientific literature to date, there is a possibility that saṅkhāras may be conceptualized as emotional schemas through an emotion-focused therapy lens, core beliefs or cognitive schemas through a cognitive-therapy lens, or potential traumatic reactions that are stored in the body that influencing perception of future events.

Recent research has begun exploring this notion that emotional pain and memories of trauma are stored in the bodies and that these may remain embedded for years after the traumatic event and influences one’s way of being in the world (Van der Kolk, 2014). Trauma is believed to stem from the response of the nervous system and is not believed to be in the event (Levine, 2010). While there are more widely known

causes of trauma such as war, rape, childhood emotional, physical, sexual abuse, neglect, betrayal, or abandonment and catastrophic injuries and illness, there are also less obvious causes of trauma that may be seen as seemingly ordinary events (Levine, 2005). These may include, but are not limited to, minor automobile accidents, medical, or dental procedures, falls, and other so-called minor injuries, natural disasters, exposure to extreme heat or cold, sudden loud noises, being left alone, sudden loss, birth stress or other events that may create a high degree of arousal or activation of sympathetic charge. Levine (2005) stated that when there is a perceived threat to the body, the body naturally generates a high degree of energy to protect and defend against the threat, sending energy to different parts of the body to facilitate fight, or flight or other self-protective responses. However, if this energy is not utilized to power muscular activity or is not discharged at the time of the event, it is believed to be stored or “frozen” in the body. If action is unable to be completed, or the muscular activity is not successful, or there is a state of excess activation without reciprocal activation of the parasympathetic nervous system to discharge the energy, the system may not be able to restore normal functioning, or return to baseline (Levine, 2010). This research stemmed from studying animals and their natural ability to recover from perceived threat and the immobility response that occurs when under inescapable threat (Levine, 1997).

Humans are believed to have similar responses to threat, however, often experience dilemmas of whether to fight, flight or freeze, or may not be able to carry out these actions based on the circumstance. If animals are unable to fight or flight, they may

go into the immobility or freeze response, however, once they are in a place of safety, will discharge the accumulated and compressed energy by shaking, trembling and passing through the immobility response before becoming mobile and functional again.

Traumatic reactions within humans are believed to “stem from the frozen residue of energy that has not been resolved and discharged; this residue remains trapped in the nervous system where it can wreak havoc on our bodies and spirits” (Levine, 1997, p. 19). The residual energy is believed to remain in the body, and often leads to symptoms of PTSD, anxiety, depression, psychosomatic and behavioral difficulties. Resolution of trauma is believed to occur when the intense energies bound in the immobility state can be accessed, freed, and ultimately transformed. Payne et al. (2015) described this phenomenon as *biological completion* and demonstrated this through a case example using somatic experiencing therapy to guide an individual to the release of this energy. The participant in the study returned to memories of a car accident, and reexperienced the sensations, and emotions, while allowing the discharge of energy through shaking, crying, and angry gestures that had not been completed at the time of the event. Upon completion, the participant experienced a renewed sense of well-being, empowerment, and spontaneous rebalance of the nervous system.

Although within the present study, participants were not explicitly asked about previous traumatic experiences, multiple participants referred to childhood experiences of emotional abuse, physical abuse, sexual abuse, neglect, abandonment, and grief and loss. One participant shared her ability to understand the concept of saṅkhāras through her

experience of sexual trauma, and shared her understanding that saṅkhāras were reactions buried somewhere in her body that she was not ready to face or fully experience. Others described the habitual patterns of their mind in reacting to discomfort or pain in predictable ways, wanting to move away from the distress. These accounts potentially capture this notion of “frozen” energy surfacing, as well as the fear of reactivation of trauma memories with the concern of feeling overwhelmed. Payne et al. (2015) discussed the importance of *titration* within somatic experiencing therapy, which involves approaching trauma slowly, “drop by drop,” in order to prevent emotional flooding and potential retraumatization. To integrate trauma, Levine (2010) suggested that there must be some degree of activation that occurs at a manageable level, where the individual remains present and aware through the activation process and through discharge of the energy. Once a person has experienced this cycle of undergoing activation, reaching threshold and experiencing the deactivation, they are able to experientially learn that they can tolerate the activation and discharge, and are more likely to be able to tolerate more activation in the next round as their nervous systems learns to regulate through the distress (Payne et al., 2015). Therefore, the resolution of trauma is believed to occur in stages or layers, as the person is able to experientially learn to face traumatic reactions gradually, and is able to get closer and closer to the core of the trauma, while discharging the energy alongside at manageable levels.

There is a strong possibility that participants in this study were describing this process through the notion of “arising and passing,” which may be their way of



describing activation and discharge. Multiple participants described the process of experiencing sensations, emotions, and memories, recognizing that they would be arising and passing, and experiencing a release through the body before the cycle continued. When explicitly asked how they believed meditation worked in producing its beneficial effects, participants described the manifestation of *saṅkhāras*, or “unresolved” issues of the past and the experience of unusual sensations that could not be explained by the act of sitting, with some also describing involuntary bodily movements and the movement of sensations within their body. One participant described unresolved anger emerging through a popping sensation, the experience of heat, and involuntary jerking. She explicitly described her process of returning to implicit memories during her meditation retreats, reexperiencing the state of freeze, and then experiencing the emergence of sensations, emotions, and sometimes images and movement. This description appears to align with Levine’s (2010) descriptions of trauma activation, discharge, and resolution and appears to mirror descriptions of energy being bound up in the immobility state and released through the experience of spontaneous movement such as gentle shaking, trembling, crying, and subtle posture changes. What appeared to allow for these to occur within participants’ meditation practice was the cultivation of awareness and equanimity which was reported to be a critical focus of Vipassana meditation.

Participants stated that in changing the “habit pattern of the mind” of moving away from the distress, and learning to remain calm, equanimous, and nonreactive, they were able to stay with the unpleasant sensations to allow for the release. Participants

described the process of untying saṅkhāras by having a different response than they typically did when emotions, reactions, and memories surfaced so as to be free of them. One participant described the process of “breaking off a chunk” for every micro-moment that she was able to experience memories, emotions, and reactions differently. This could potentially be describing the process of titration in approaching trauma “drop by drop,” and experiencing the activation and discharge by remaining present with the discomfort involved rather than moving away from it when triggered or activated (Payne et al., 2015). The description of “knots” by participants could also be their language used for describing trauma that may be stored in the body, that Levine (2010) refers to as the compressed energy associated with the immobility or freeze response.

In addition, the description of “feeding” the saṅkhāra or getting “entangled” into thoughts and feelings that participants described as harmful, may be their experience of reactivation and reexperience of trauma reactions, while losing presence, leading a person to move outside of their window of tolerance (Levine, 2010). The re-experiencing of trauma reactions without appropriate detachment may lead to retraumatization as the individual may experience overwhelming feelings that may lead to terror, panic, rage, or shut-down further disorganizing the system (Payne et al., 2015). This appeared to be something that the participants inherently understood as they described the need not to “feed” saṅkhāras and remain as present, engaged, and equanimous while experiencing them. These descriptions speak to participants experiential understanding of potential trauma release versus retraumatization as participants were able to identify when the

release occurred for them as they were able to stay present and experienced a shift in their demeanor and well-being. This was compared to other moments in which they found themselves moving out of their window of tolerance, recapitulating saṅkhāras, and experiencing dysregulation and the re-experiencing of trauma reactions.

The third component of the theoretical model proposed by Hölzel et al., (2011) on how meditation works describes emotion regulation through (a) reappraisal and (b) exposure, extinction and reconsolidation. This may be another explanation for the processes of change or mechanisms through which meditation may be producing beneficial effects. Parallels were made within Hölzel et al. (2011)'s model between the process of turning towards unpleasant emotions while meditating and exposure therapy. Exposure therapy is highly effective form of behavioral therapy that has been found to be effective in treating PTSD, and involves exposing individuals to fear inducing stimuli, having them experience the arousal without engaging in their innate response to move away, and supporting them to have a different response to the feared stimuli to extinguish the original fear response (Powers, Halpern, Ferenschak, Gillihan, & Foa, 2010). Meditation was suggested to have a similar effect by reducing cognitive avoidance, enhancing attentional regulation, and therefore allowing greater exposure to the experienced emotion to support the extinction process (Hölzel et al., 2011).

Participants in this study described reductions in cognitive activity, evaluations, and interpretations of their bodily or emotional experiences, and described their ability to be more present with what arose as a result. Since meditation is also associated with a

high level of relaxation, Hölzel et al. (2011) suggested that the extinction process is greatly supported through meditation as feared stimuli can be experienced through a state of relaxation. Another explanation proposed within this model for how meditation works is through fear conditioning, extinction, and reconsolidation. Fear conditioning involves associated learning in which a neutral conditioned stimulus becomes paired with an aversive stimulus and as a result, the conditioned stimulus induces fear responses (Blanchard & Blanchard, 1972). Through repeated exposure to the conditioned stimulus, without the unconditioned stimulus, there can be an extinction of the conditioned response where a new memory is formed or a new association (Quirk, 2002). In exploring neuroscientific research on fear consolidation and brain regions involved during meditation, Hölzel et al. (2011) suggested that there are

...striking similarities in the brain regions being influenced by mindfulness meditation and those involved in fear extinction. These findings suggest that mindfulness meditation could directly influence one's capacity to extinguish conditioned fear by enhancing the structural and functional integrity of the brain network involved in safety signaling (p. 547).

This is believed to reduce habitual, maladaptive emotions, with equanimity or nonreactivity allowing the unlearning process of previous connections (extinction and reconsolidation). Although participants in this study were not able to explicitly describe this process, they made inferences to these ideas through their discussion of changes in repetitive emotional states. Multiple participants described significant reductions in fear

and anxiety, with one participant explicitly sharing significant shifts in his fear of death and the impact this had on his overall worldview. Participants also described lasting changes that went beyond the retreats and were present through their everyday lives, potentially reflecting the extinction, reconsolidation process. A process that may support this occurring, that appears to be specific to the Vipassana technique is the instruction during the practice to not only feel sensations and notice changes in sensations across the body, but to move systematically inch by inch from head to toe in a regulated and methodical manner. Since it is natural to focus on areas of pain, discomfort, or distress, particularly for trauma survivors, somatic experiencing therapy utilizes the concept of *pendulation* to repeatedly direct a person's attention to positive, non-aversive sensations or interoceptive cues to support balance and regulation (Levine, 2010). Pendulating is believed to reduce fear reactions, reduce sympathetic activation, and increase parasympathetic activation to support discharge and integration, as there is a fluctuation back and forth between painful or unpleasant sensations to neutral or pleasant sensations. Since the deep relaxation associated with meditation can trigger the sudden emergence of difficult material (Everly & Lating, 2013), moving attention throughout the body as opposed to remaining on an area may support regulation through the extinction, reconsolidation process. Moving attention in a systematic way throughout the body may also support self-regulation counteracting the experience of dysregulation that occurs to the nervous system as a result of trauma.

Activating trauma reactions can often lead to intense feelings of fear, terror, panic, sympathetic arousal, intrusive memories and difficulties self-regulating as cognitive processes may no longer be online (Levine, 2010). Participants in this study described experiences of sometimes feeling overwhelmed by their emotions and shared difficulties remaining present, continuing to meditate, and shared experiences of being “entangled” into their thoughts or feelings, recognizing that this was not helpful to them. They shared their strategies of regaining mindfulness, presence, and their ways of returning to the practice and detaching from these overwhelming feelings. The instructions to maintain awareness and attention on bodily sensations may actually be a method to reengage cognitive processes while in a state of emotional and sympathetic arousal in order to promote regulation and maintain connection with frontal cortical areas. Observing sensations throughout the body, moving from part to part, may be a way of supporting pendulation as a way to move from unpleasant to pleasant and back and forth as a natural part of the meditation technique. These processes of pendulation have been studied through somatic experiencing therapy, as this modality supports fear extinction through gradual titration and works with the intrinsic regulatory processes of the nervous system (Payne et al., 2015). Although Vipassana meditation can be viewed as a different healing modality than Somatic Experiencing Therapy, I believe there are some significant similarities and overlaps that would be beneficial to research in gaining a better understanding of underlying processes and ways to support these processes within both modalities.

The fourth component of the theoretical model proposed by Hölzel et al., (2011) described a change in perspective of the self as a means through which meditation works. A primary tenet of Theravada Buddhist philosophy lies in the concept that there is no self, that the self is associated with thoughts, emotions, sensations, perceptions, reactions, and consciousness, which are always changing, and therefore is not a constant, unified entity (Rosch, 2007). Through meditation, practitioners are believed to increase their understanding of the impermanent nature of self, particularly as internal awareness is enhanced, and they develop a greater ability to observe passing mental processes and observe the impermanent flux of experience (Hart, 1987). From a Buddhist perspective, the attachment and identification with the “I” is believed to be a source of suffering. Liberation is believed to occur in this change in perspective to the self and is believed to be the gateway to enduring happiness as there is less identification with the contents of consciousness (Gunaratana, 2002). Hölzel et al., (2011) suggested this to be an area in need of further research and operationalization as there is not enough research documenting this change in self-related processes.

Current research has explored the observing self, meta-awareness, or meta-perspective on experience and revealed shifts in self-concept, ego defenses and personality structure through mindfulness meditation (Crescentini & Capurso, 2015; Emavardhana & Tori, 1997; Kerr, Josyula, & Littenberg, 2011). Neuroimaging studies have also been used to examine structural changes in the brain of experienced meditators that may lead to shifts in self-referential processes. Farb et al. (2007) revealed greater

activation in lateral prefrontal regions of the brain among meditators that may allow for a more detached and observer perspective towards interoceptive and sensory experiences. They suggested that increased awareness of sensations in the body might reduce the narrative self and support this change in perspective of the self through change in activation of brain regions.

The relationship to the self has been explored previously through the concept of self-reflexivity that has been differentiated into two forms. Discursive self-reflexivity involves turning to the self through language by talking to the self, reflecting on the self and talking to others about the self (Davies & Harré 1990). Embodied self-reflexivity involves turning to the self through the body by experiencing the somatic self through physical sensations, emotions, and inner states that is not cognitive (Pagis, 2009). Participants in this study explicitly described shifts in their awareness and their ability to observe and be a witness to a self that went beyond mental processes. Pagis (2009) suggested that the body carries a reflexive capacity and involves a somatic map of the self based on sensual, nonverbal systems of meaning. Damasio (1999) suggested that the central nervous system creates a map of sensations when it enters into relationship with an object and provides an inner sense of nonverbal messages that influences how an individual responds to the object. Vipassana meditation appears to access this somatic map, or the embodied self and reduces cognitive, linguistic, symbolic self-recognition.



Meditation instructions and dialogue with teachers also promote this embodied awareness and aim to reduce narratives, the cognitive search for causes of feelings, and stories related to inner experiences. Participants within the present study shared an intimate knowledge of the self that went beyond words, thought, and the ego and described an embodied self or form of consciousness that was beyond cognitive comprehension. Multiple participants also described increased detachment as a result of their practice, in recognizing thoughts as thoughts and not as definitions of the self. They shared a greater ability to remain objective in their everyday lives, to feel less identification or attachment to aspects of everyday experience that they previously held close, and shared an openness and increased comfort with changing circumstances that previously would have had a strong impact. Since these were all self-reports, further research is warranted, particularly in studying when these shifts towards the self occurred for participants, the amount of meditation practice they engaged in that may have led to such shifts, and other factors that contributed to such changes in self perspective.

Neuroimaging of brain structures throughout their meditation process may also be beneficial in understanding this phenomenon, particularly directly after attending retreats. Vago and Silbersweig (2012) proposed a neurological model in understanding changes in self-processing that include shifts in self-awareness, self-regulation, and self-transcendence. Vago and Silbersweig identify two networks associated with self-specifying processes and a distinct network that includes self-related processes that facilitates the integration of top-down and bottom-up mechanisms related to the self.

Vago and Silbergsweig also stated the need for longitudinal studies to assess changes in the self over time as a result of meditation training and long-term practice. It would be helpful to also understand the impact that reducing discursive tendencies and cultivating the embodied self through practice has on meditator's day-to-day lives, including changes in the way that they may engage with the world after retreats.

### **Changes and Motivations**

Meditation, as outlined, has shown to be associated with changes in self-experience which is often referred to as state changes in sensory, cognitive, emotional and self-referential awareness that can occur while meditating. However, for long-term practitioners, trait changes have been studied that are seen to involve lasting impacts of meditation that persist beyond the practice and ensue over time (Shapiro & Walsh, 1984; West, 1987). Since this study is based on self-report measures, and is not a longitudinal study, the proposed changes cannot be assumed to be fully accurate, or fully associated with meditation practice as there may be many additional variables and factors. However, the reported findings do appear to align with previous quantitative research studying the long-term effects of meditation.

A primary benefit that participants described was emotional changes that appeared to persist over time through awareness, emotional processing, and release of emotions. Participants described gaining a sense of resolution, healing, and internal clearing. Xu et al. (2014) studied experienced practitioners of Acem meditation, a nondirective technique that allows the spontaneous emergence and passing of thoughts,

images, sensations, memories, and emotions without focusing attention towards or away from them. They found that participants showing increased activity in areas associated with attention, retrieval of episodic memories, and emotional processing. Saunders et al. (2013) found that mindfulness training increased depth of processing, counteracted experiential avoidance, and increased the ability to face self-threatening information. The experience of emotional freedom may also be associated with the idea of discharge or biological completion outlined by somatic experiencing therapy where there is assimilation of implicit memories, and conscious integration of emotions, sensations, or subtle muscular impulses that may be associated with incomplete defensive responses (Levine, 2010). There is also a possibility of trait changes occurring as a result of long term practice as Sobolewski, Holt, Kublik, and Wróbel (2011) found that long-term meditators processed negative emotional stimuli differently than nonmeditators and were less impacted by such stimuli than nonmeditators.

Participants also described increased stability and emotional balance when managing everyday situations, which may be associated with increased emotional awareness. Creswell et al. (2007) proposed that cognitive categorization or affective labeling of experiences modulated emotional processing and supported emotional regulation in daily life. Participants also described taking more responsibility for their own emotional reactions, noted less externalizing behaviors, and increased ability to choose their responses rather than react immediately. Pruitt and McCollum (2010) described similar processes among Vipassana meditators in intimate relationships who

reported increased awareness of their emotional vulnerabilities and triggers, disidentification from associated thoughts and emotions, and the ability to choose a different response in such situations through this state of understanding. This may be due to increased self-attunement as participants in the present study described becoming more aware of their everyday patterns of reaction through learned histories, including tendencies to what to want to flee, avoid, or shut-down in situations due to increased activation or being triggered in their environment. Pruitt and McCollum (2010) revealed similar levels of awareness among Vipassana meditators in intimate relationships, as they described being more attuned to subtle ways in which they would feel triggered, and described the ability to remain curious and observant, as opposed to be drawn into the thoughts and emotions and feeling overwhelmed by them or reacting through them. They described how this “disidentified stance” allowed them to remain in connection with their partners, and separate themselves from certain emotions in order to respond differently to difficult relational situations.

Participants in the current study also described an increased sense of trust and surrender, and a reduced need to control aspects of their lives. This was mirrored by previous qualitative accounts of participants sharing similar realizations of a decreased need for control, and greater ability to be with whatever may be occurring without needing to change situations or experiences (Pruitt & McCollum, 2010). There is a possibility that with increased equanimity, greater acceptance, and the ability to be with present moment experiences whether pleasant or unpleasant, the need for control

diminishes. This may be an area of future research in measuring levels of equanimity in experienced meditators and the potential correlations with sense of trust, surrender and reduced need for control.

Participants in this study also described increases in self-compassion, and shared embracing their own humanness, being accepting of shortcomings, and having more patience with themselves. Alongside, participants shared having greater compassion for others, including greater empathy, and ability to be present in the midst of others' suffering. Neff (2003) has suggested a reciprocal relationship between mindfulness and self-compassion stating that they facilitate and enhance each other. Self-compassion is a prominent feature of Buddhist teachings that involves awareness of suffering and distress in oneself and others along with a desire to alleviate it. Buddhist teachings promote an openhearted willingness to face suffering as opposed to turning away from it, and recognizes that failings, shortcomings, and misfortunes are a natural part of life and the human condition (Goldstein & Kornfield, 2001). This aligns with psychological literature on self-compassion which has been defined as "being touched by and open to one's own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one's suffering and to heal oneself with kindness" (Neff, 2003, p. 87). Self-compassion, through this definition is believed to entail three main components that overlap and mutually interact: self-kindness versus self-judgment, feelings of common humanity versus isolation, and mindfulness versus over-identification. Meta-analyses have shown that mindfulness training increases empathy and self-compassion (Chiesa and Serretti,

2009). Studies focused specifically on intensive meditation retreats have shown significant differences in self-compassion before and after a 9-day retreat, with increases despite various meditation experience (Kosaza et al., 2015).

Practicing mindfulness also appears to activate brain regions including the prefrontal cortex, anterior cingulate cortex, and anterior insula which are part of the core network that is activated when experiencing empathy (Fan, Duncan, de Greck, & Northoff, 2011; Masten, Morelli, & Eisenberger, 2011). Mindfulness meditation has also been associated with changes in brain structure and activity in areas involved in caregiving, compassion, and the experience of love (Cahn & Polich, 2006; Lazar et al., 2005; Tirsch, 2010). While there are numerous references to enhanced compassion, loving-kindness, and empathy within the Buddhist literature, particularly in relation to Vipassana meditation, further scientific research is warranted in exploring changes in self-compassion, empathy, love, and prosocial behavior as a result of intensive meditation.

### **Challenges and Barriers**

Although meditation and mindfulness have shown significant benefits, there have been few studies exploring challenges, perceived barriers, as well as harmful or negative effects of meditation (Irving, Dobkin & Park, 2009; Sears, Kraus, Carlough & Treat, 2011). Many studies focus on positive effects, and rely on participants to share any difficulties without being explicitly asked. Negative effects have only been studied in the context of meditation-induced psychopathology such as depression, anxiety, psychosis,

depersonalization, mania, and other clinical presentations (Lazarus, 1976; Epstein & Lieff, 1981; Kuijpers, van der Heijden, Tuinier, & Verhoeven, 2007; Shapiro, 1992). Shapiro (1992) conducted a qualitative study on Vipassana meditators explicitly asking about adverse effects and found that 63% of meditators experienced at least one adverse effect, with 7.4% discontinuing their practice as a result of these effects. Although research has emerged to address meditation-related difficulties that warrant clinical intervention, there are few studies exploring the challenges of meditation practices, the effect this may have on an individual and ways to support practitioners. Another issue that has been outlined in the literature is that studies have not assessed for pre-existing psychological issues that may predispose a person to experiencing negative effects (Perez-de-Albeniz & Holmes, 2000). Further research is warranted to determine clinical populations for which meditation may be contraindicated or may produce harmful effects.

Within this study, meditators were explicitly asked about challenges within their practice. Common challenges were feelings of self-doubt, lack of trust in one's own abilities, apprehension, and fear. This was consistent with research conducted by Sears et al. (2011) and Lomas, Cartwright, Edginton and Ridge (2015) that found meditators questioning their self-efficacy and questioning whether they were meditating correctly. This theme emerged within this study as one participant shared concerns about whether the teachers were aware of her shortcomings and experienced feelings of shame in response. Other forms of self-doubt emerged through a loss of sense of self as practitioners described confusion and questioning of who they were, what they were

doing and why. Lindahl, Fisher, Cooper, Rosen and Britton (2017) described changes that meditators experience in their sense of self, including changes in how individuals perceive themselves, changes in self-other boundaries, and loss of sense of ownership and agency. The experience of loss of self that this practitioner described appears to be related to the loss of control over thoughts, emotions, and sensations that may lead to questioning of the practice and of herself. Lomas et al. (2015) also described similar experiential challenges with meditators questioning the value of meditating including similar thoughts of “what am I doing, what’s the point” (p. 852).

Another common challenge that participants discussed was fear and aversion to internal experiences, particularly in facing emotional pain. This was confirmed through previous studies exploring experiential challenges associated with meditation practice (Sears et al., 2011 & Lomas et al., 2015). Although individuals are drawn to meditation to cope with distress and overcome psychological difficulties, the expectation to face and be with difficult thoughts, feelings, sensations was seen as counterintuitive and inherently challenging (Lomas et al., 2015). Both in this study and previous studies, participants described their process of realizing the importance of engaging with difficult thoughts, feelings and sensations, however, described it to be a learning process of counteracting the habitual tendency to move away from distress. There was the experience that the pain may be too much to bear, particularly those related to childhood trauma that had been “buried” for years. Participants described the fear they felt in recognizing the intensity of



their emotions and feeling unsure of their own ability to effectively deal with these emotions (Lindahl et al., 2017; Lomas et al., 2015).

Although cultivating awareness and equanimity was considered an essential part of the practice, participants shared their difficulties within these core areas. While some described difficulties maintaining equanimity in the face of strong emotions and sensations, others described difficulties maintaining awareness and reported significant mind-wandering and distraction through thoughts. This aligns with reports of meditators from previous studies describing difficulties maintaining cognitive focus, and feeling disturbed by their lack of cognitive control, and in realizing how busy their minds were (Sears et al., 2011 & Lomas et al., 2015). Participants in this study appeared to mirror the feelings of distress in not being able to stay focused and described ways in which their own minds deceived them into believing that they were meditating, before realizing that they may have been unaware or moved into a dissociative state. This would be an area of further research in determining whether meditators may be moving outside of their window of tolerance into more dissociative states, particularly in the face of strong emotions as a way to cope. It would also be beneficial to study ways to support meditators in remaining within their window of tolerance in order to integrate feelings and sensations that may emerge, without feeling flooded or overwhelmed by them.

Additional challenges that were described by participants was difficulty maintaining a regular practice outside of retreats, and difficulty finding community within the outside world after emerging from retreats. Finding time for formal practice

with the challenges of everyday life was a common theme that other meditators have spoken about, including issues of motivation and questions about the purpose and value of continuing, particularly in not seeing instantaneous results (Sears et al., 2011). Lack of interest in others, feelings of alienation from society, difficulties feeling comfortable in the world, and hypersensitivity and rejection of urban life have also been unwanted effects of meditation (Cebolla i Martí, Demarzo, Martins, Soler, & García Campayo, 2017). Using these reports would be beneficial in normalizing feelings that meditators may experience at specific parts of their meditative journey. For example, one participant described similar experiences of misunderstandings and alienation at one point, however, described how these feelings changed as she continued meditating. Further research could help highlight these changes and explore what may lead some individuals to feel disconnection, while others may experience more interconnectedness.

*“If you begin to understand what you are without trying to change it, then what you are undergoes a transformation.”*

- Jiddu Krishnamurti

## **Implications**

### **Implications for Research**

As noted, there have been significant advances in the scientific understanding of meditation and mindfulness with numerous quantitative studies being published each year examining the physical, psychological, emotional, and spiritual benefits of meditation (Baer et al., 2006; Brown & Ryan, 2003; Chiesa & Serretti, 2009; Grossman, Niemann, Schmidt, & Walach, 2004; Keng et al., 2011; Shapiro & Walsh, 2003). More recently, the neuroscience of meditation has become a major area of scientific exploration with EEG,

PET, and fMRI studies exploring changes in brain structures, and brain activity as a result of meditation (Cahn & Polich, 2006; Farb et al., 2010; Hölzel et al., 2011). Although there have been significant gains in advancing research, particularly in studying higher-order cognitive processes among expert meditators, there remains a lack of theoretical and philosophical understanding of meditation, particularly as meditation and mindfulness have been decoupled from their early roots (Aswathi, 2003; Hayes & Shenk, 2004). While there have been detailed descriptions and phenomenological accounts of the meditative process in traditional Eastern literature (Buddhaghosa, 1976), there remains few phenomenological accounts within the scientific literature since much of the research has focused on quantitative studies investigating specific components and effects of meditation.

Awasthi (2013) suggested that the field return to in-depth, first-person phenomenological accounts to be more exploratory, to better understand the meditative process, and the different experiences of novice and experienced meditators before developing testable hypotheses and constructing further research models. There have been some compelling attempts to integrate and consolidate the vast array of research on meditation as a way to develop a theoretical and conceptual model, however, these have been limited (Brown et al., 2007; Hölzel et al., 2011). Alongside, there have been very few studies exploring the lived experiences of long-term meditators, including their experiences of meditation retreats as well as long-term practice. The research on

meditation has also not made sufficient distinctions between meditation types, and has often grouped multiple meditation techniques into one conceptual view of meditation.

In addition, the scientific literature has moved away from formal meditation, and utilized mindfulness as a way to operationalize skills typically cultivated through meditation practice. This has led to a divide in the literature of original studies measuring the effect of formal meditation and those utilizing the concept of mindfulness to measure the effect of mindfulness-based interventions. Therefore, the aim of this study was to return to a phenomenological exploration of long-term practitioners of meditation, specifically in the practice of Vipassana meditation through participation in formal, silent, 10-day meditation retreats. Of the hundreds of studies exploring the various aspects or outcomes of meditation, very few have been qualitative or have allowed the participants themselves to give voice to their experience and the meaning it carries for them. This study was designed to allow meditators to describe their experiences in their own words. Although meditators were asked open-ended questions regarding their experiences, since Vipassana meditation itself carries its own language as reflected through the audio and video instructions, meditators often reflected this shared language through their answers and interpretations. Furthermore, since Vipassana meditation also involves reductions in discursive tendencies, participants described having difficulties verbalizing embodied experiences and finding words for their internal experiences. Nonetheless, numerous avenues of research became apparent through this research study.

Several recommendations for future research and areas of investigation are discussed below.

First, although this research study was not focused on addressing the definitional issues of meditation within the literature, it provided some insights into ways in which Vipassana meditators specifically defined meditation. Due to the coexistence of a variety of perspectives and the many techniques that are termed “meditation,” researchers may benefit from separating out the different techniques and their underlying philosophies, similar to the field of psychotherapy where there are differing theoretical models that constitute the practice of psychotherapy. Just as research within psychotherapy has moved towards studying the effects of specific treatment modalities such as cognitive therapy, behavioral therapy, emotion-focused therapy, etc., research within meditation would benefit from doing the same. Attempts have been made at making such distinctions through categories of focused attention practices, open-monitoring practices, nondirective meditation practices, loving-kindness meditation practices; however, further research is required in this area as Vipassana meditation features all four at different points in time during retreats (Xu et al., 2014).

Second, Vipassana meditation is a technique that focuses primarily on raising awareness of physical sensations on the body and in reducing discursive tendencies. While there is emerging research on interoceptive accuracy of experienced meditators compared to novice meditators (Fox et al., 2012), this is an area where there are significant gaps in the research in being able to measure participants’ awareness of gross

and subtle sensations. For example, in this study, participants explicitly described their ability to experience subtle sensations when their minds were calm, focused, sensitive, and sharp. They stated that the types of sensations experienced were a reflection of the quality of their mind at any given moment with more gross sensations being experienced when their minds were turbulent, unfocused, and unsettled. This would be an area of insightful inquiry in exploring more of the mind-body connection and the effect of increased focus and attentional capacities on the experience and differentiation of bodily sensations. Participants also described observing movement and change in sensations as they focused their attention and described layers of sensations that became apparent as they learned to increase awareness and attention. These are all areas of research that are yet to be explored. While there have been similar accounts of movement and change in sensation through objective awareness within research on somatic experiencing therapy (Payne et al., 2015), there are yet to be studies exploring these aspects within research studies on meditation.

Third, a significant aspect of participants' meditation experiences involved the emergence of varying emotions during their retreats. Some participants described heightened intensity of emotions and the ability to process more emotion given the conditions and focus of the retreats. While previous studies have found that individuals with higher interoceptive awareness showed a greater ability to process emotional information (Pollatos & Schandry, 2008), further research is warranted in exploring this ability among experienced meditators. Researchers may want to study the specific

conditions within Vipassana meditation retreats that may allow for this, including the impact of 10 days of silence on language centers of the brain and access to emotional centers. It may be helpful to also explore internal sense of safety felt during retreats as a result of the silence and lack of interactions with others and the impact this may have on the felt sense of safety to move deeper into emotional states. Participants also described greater awareness of the nuances of their emotions and stated being able to differentiate emotions based on particular sensations. This is another area of important research in exploring differentiation of emotion, and meditation potentially supporting the movement towards experiencing primary adaptive emotions and away from primary maladaptive emotions or secondary emotions, particularly as a sense of safety is internalized.

Psychotherapy researchers have explored the transformational power of affect, and have outlined models of emotional change through increased awareness and contact with primary emotions within the context of a therapeutic relationship (Fosha, 2000; Greenberg, 2002; Paivio & Pascual-Leone, 2010). Researchers may want to explore processes of emotional change through meditation as a way to further enhance research within the area of emotional schemas, emotional change, and emotion regulation.

Fourth, there has been significant research in cognitive science on attention and emerging research on meditation training enhancing attention regulation (Kozasa et al., 2012; Lutz et al., 2008; Moore & Malinowski, 2009). More recent research has begun exploring the specific aspects of attention that appear to be cultivated with different meditation techniques. Since Vipassana meditation involves both focused attention and

open monitoring through breath meditation and through awareness of the body, there may be increases in multiple subfunctions of attention. Researchers may want to investigate the specific subfunctions associated with the different techniques and the ways in which these may support each other. Within Vipassana meditation, anapana (breath meditation) is believed to be the building block and is essential to increase focused attention to prepare for and enhance one's ability to engage with other aspects of the technique (Hart, 1987). Longer courses such as 20-day course and 30-day courses involve 10-days of anapana practice as opposed to the 3-days of practice within a traditional 10-day course as this is stated to support sharpening of the mind for more advanced meditation. This is an area where further research could highlight the effects of increased attentional capacities and how these may be cultivated through these techniques.

Fifth, equanimity within this study was considered a significant aspect of participants' narratives. The concept of equanimity within contemplative science has only gained attention in recent years as researchers have been reevaluating what constitutes mindfulness and have been considering equanimity as a separate outcome measure (Desbordes et al., 2015). Within the Buddhist texts, equanimity has been described in detail and believed to be a critical component of the practice (Bodhi, 1993). Equanimity within the meditation research is still in its early infancy as there are only a handful of articles exploring this concept and attempting to define it through scientific language. I propose that equanimity is a primary mechanism through which meditation produces its effects, and remains to be an area of unexplored research. Emotion-focused therapies and



psychodynamic theories discuss the transformational power of affect in producing therapeutic gains through the experience of core affect or primary emotions (Fosha, 2000; Greenberg, 2002).

I believe equanimity may be the meditating factor that allows primary emotions to be fully felt, and supports reductions in maladaptive primary emotions and secondary emotions as defined through emotion-focused therapy (Greenberg, 2002). Researchers may want to investigate Vipassana meditation as a means to cultivate equanimity using sensations as a primary tool, and the ways in which equanimity may be present across domains including thoughts and emotions. Further qualitative and quantitative measures may examine the impact that equanimity specifically has on emotional awareness, emotion regulation, and emotional recovery particularly as it is internalized over time through practice. Researchers may also want to explore the direct ways in which awareness and equanimity are related and the impact that the two have on well-being and improved functioning. Participants described the importance of cultivating both in equal measure. It would be worthwhile to explore the impact that such imbalances may have on an individual such as whether increases in awareness without equanimity may be associated with increased emotional lability or whether increases in equanimity without awareness be associated with emotional under-engagement.

Sixth, researchers may also want to investigate the concept of *saṅkhāras* as there is currently no scientific literature on this concept. Participants defined *Saṅkhāras* as “impressions,” “deep rooted programming” or past experiences that leave an imprint

within the mind and body as well as habitual reactionary patterns that develop based on a person's responses to their environment. Researchers may want to explore the concept of saṅkhāras and the potential association it may have with the scientific understanding of trauma reactions being stored in the nervous system, repeated reactions as trauma responses are activated, and the discharge of this energy in restoring normal functioning (Levine, 2010). Payne et al. (2015) referred to the overlap between mechanisms elucidated through somatic experiencing therapy and mindfulness meditation in valuing bodily experience, breathing, posture, and balanced muscle tone. However, they differed in that somatic experiencing emphasizes movement in being able to follow muscle impulses to complete fight, flight or self-protective responses that may have not been otherwise completed (Payne et al., 2015). Vipassana meditation appears to support the titration process in being able to bring attention to painful or disturbing interoceptive or proprioceptive experiences in a gradual, little by little manner that is believed to support assimilation, however, further research is warranted to explore whether participants experience spontaneous muscle movements within their meditation practice (Payne et al., 2015). Further research is also warranted in whether physical movements are essential in the biological completion process and restoring normal functioning. Somatic experiencing therapy has suggested that imagined movements can have a similar effect; however, further research is required in exploring whether meditators have had such experiences within their practices, as these questions were not explicitly asked within the present study.

Qualitative research methods may also allow for a greater understanding of the stages of meditation as there are believed to be significant transition points in one's practice where mastery of certain skills takes one's meditation to a new level (Gyatso, 2001; Wallace, 2006). These stages have been mapped out within Buddhist texts and can serve as a guide to inform the scientific investigation of meditation and support research exploring the brain changes that are evident in expert meditators as compared to novice meditators (Bodhi, 1993). Quantitative research and neuroimaging may also be utilized to understand specific changes that may occur during or after intensive meditation retreats, including differences observed after 10-day retreats as compared to 20-day, 30-day, and 45-day. Alongside, longitudinal studies could provide importation information on changes that may occur over long-term practice as many of the meditators in this study discussed having a regular meditation practice ranging from 6-17 years, outside of attending yearly retreats.

Seventh, although meditation and mindfulness have shown significant benefits, there have been few studies exploring challenges, perceived barriers, as well as harmful or negative effects of meditation (Irving et al., 2009; Sears et al., 2011). Understanding more of the challenges of meditators, particularly as they integrate their practice into their everyday lives may highlight ways that meditators may be supported by teachers or the community. Alongside, further research is warranted to determine clinical populations for which meditation may be contraindicated. Since studies have not assessed for pre-existing psychological issues that may predispose a person to experiencing negative

effects, there is limited research to determine populations for which meditation may be beneficial or potentially harmful. Furthermore, since studies have often grouped different meditation techniques together, it would be beneficial to explore the unique benefits and challenges of specific types of meditation as a way to provide recommendations to those interested in meditation, or provide precautions if a particular type may be contraindicated for certain individuals.

### **Implications for Practice**

Historically, the purpose of meditation has been for personal transformation and spiritual growth (Gunarantana, 2011). However, as meditation has made its way to the West, it has been viewed as a method for physical, psychological, emotional growth and healing (Perez-de-Albeniz & Holmes, 2000). Mindfulness-based interventions began being introduced into the treatment of various mental health and medical conditions, and introduced into clinical practice through therapies such as mindfulness-based stress reduction (MBSR; Kabat-Zinn 1984), mindfulness-based cognitive therapy (MBCT; Segal et al., 2002), acceptance and commitment therapy (ACT; Hayes et al., 1999) and dialectical behavior therapy (DBT; Linehan, 1993). While these have had important contributions to the field and have been shown to have significant impacts on the treatment of certain clinical disorders, there has been a movement away from the initial conditions and context in which meditation was originally practiced. The present study examines the experience of practitioners engaging in Vipassana meditation practice in its original form, conducted in silence over the course of 10 or more uninterrupted days,

before continuing this practice into their everyday lives. The participants in this study described the importance of the conditions through which their practice deepened which I believe holds value as we continue finding ways to incorporate meditation and mindfulness in other spaces.

Meditation may also be seen as another form of healing or means of therapeutic growth, particularly for individuals who may be interested in personal growth but may have difficulty engaging with other treatment modalities such as psychotherapy. Since meditation is a silent, individual endeavor, that does not require verbal expression, it may be better suited for individuals with certain dispositions, interpersonal and attachment styles, personalities or individuals with trauma histories as therapy may be too activating for some or may not be culturally aligned. Current research has explored the impact of meditation for specific populations. Studies have found meditation to increase well-being in men through improving attention, enhanced attentiveness to their inner world and increased emotional intelligence (Lomas et al., 2013). Meditation has also been proposed to be an intervention strategy for survivors of intimate partner violence (Kane, 2006; Lee et al., 2011), domestic violence offenders (Tollefson & Phillips, 2015), and for individuals impacted by sexual trauma (Urbanowski & Miller, 1996).

Van der Kolk (2006) stated that individuals who may have experienced trauma during childhood or have endured repeated, prolonged trauma tend to have poor interoceptive awareness and have difficulties sensing and interpreting bodily signals and feelings. Since internal states can become overwhelming for survivors of trauma,

strategies of avoidance or dissociation become habitual ways of coping leading to a lasting change in one's relationship to the body. In becoming disconnected from their bodies, survivors may also become disconnected from their psychological and physiological needs, leading to ongoing distress and symptom expression. Growing research has indicated that interoception plays a central role across psychopathology with studies showing marked interoceptive deficits among individuals with depression (Dunn et al. 2007), eating disorders (Park et al., 2012), addiction (Naqvi et al., 2007), schizophrenia (Kring & Neale, 1996), and body dysmorphic disorder and somatoform disorders (Schaefer et al., 2012). Meditation may be an effective intervention for individuals who show marked interoceptive deficits or dissociative tendencies as a way to gradually reconnect with the body and may support the integration of mind-body processes essential for health and well-being.

Studies of individuals who have experienced trauma have also shown decreased activity in the Broca's area of the brain, which is responsible for translating personal experience into communicable language (Shin et al., 1997). In addition, high levels of emotional arousal prevent proper labeling, processing, and categorization of experience, and may lead to memories and emotions being imprinted and re-experienced somatically as opposed to verbally (Van der Kolk, 2014). For this reason, trauma researchers and therapists have been increasingly moving towards therapies that involve bottom-up processing by directing client's attention to internal sensations rather than focusing primarily on cognitive or emotional experiences to support the healing process (Levine,

2010; Ogden, Minton & Pain, 2006). Vipassana meditation may be seen as a bottom-up approach that elicits implicit memory and allows reconstruction and integration of memories through dual awareness of the past and present as individuals are able to remain connected to the here and now and remain regulated while simultaneously re-experiencing distressing internal emotional states, sensations, and memories.

Within the field of psychotherapy, somatic experiencing and sensorimotor psychotherapy are approaches that have recently gained attention in addressing many forms of trauma through a bottom-up approach to memory that supports reorganizing the impact of the past on the body, rather than narrating a verbal description of what may have occurred (Levine, 2010; Ogden et al., 2006). These treatment modalities appear to bridge some of the essential components of Vipassana meditation pertaining to embodied awareness and following movement and release of sensation within the context of a therapeutic relationship. These approaches show promising avenues of ways to take meditation off the cushion and into the realm of psychotherapy by remaining with the embodied components of the technique that are essential for therapeutic growth.

While Vipassana meditation in its essence may appear to be an effective healing modality, further research is needed in being able to determine populations for which meditation may be well suited, including the specific types of meditation that may provide the therapeutic effects that a person may be seeking. Alongside, further research is needed to determine populations for which meditation may not be well suited or may produce negative effects. Negative effects have been studied in the context of meditation-

induced psychopathology such as depression, anxiety, psychosis, depersonalization, mania and other clinical presentations (Epstein & Lieff, 1981; Kuijpers et al., 2007; Lazarus, 1976; Shapiro, 1992), however, studies have not assessed for pre-existing psychological issues that may predispose a person to experiencing negative effects. This is an area of significant research need before making any recommendations for individuals who may benefit from meditation.

Nevertheless, multiple participants in the present study shared having trauma histories and stated utilizing meditation along with psychotherapy as a means for healing and personal growth. Urbanowski and Miller (1996) have suggested that combining meditation and psychotherapy can accelerate the healing process and suggested that they are synergetic, and highly complementary. Psychotherapy has been seen to support active processes of investigation, while meditation cultivates tranquilizing qualities such as concentration and equanimity that support transformation (Rubin, 1999). Kornfield (1993) has also suggested that both psychotherapy and meditation can be utilized to deepen each other and stated that one is not necessarily superior to the other. This may be an area of further exploration in assessing the unique benefits of each modality along with the advantages of incorporating both healing modalities for the treatment of trauma or other clinical concerns. Since meditation centers attract individuals seeking personal, psychological or emotional healing, meditation teachers may benefit from consulting with trained mental health professionals regarding students if there may be a concern regarding mental health.



During the application process, students are encouraged to disclose their mental health histories as a way to assess whether meditation may be contraindicated, as there appears to be certain criterion that students must meet to be permitted. However, if students are permitted who may have further psychological difficulties during the course or after completing courses, further resources would be beneficial. Since challenging or distressing physical and emotional experiences may arise that may pose difficulties for new students or those with mental health concerns, being able to refer to a mental health provider and possibly engage in some therapy during meditation courses may potentially support the process. Vipassana meditation teachers appear to be attentive to students during the courses, and have multiple ways of checking on students to assess their mental and physical well-being. The present investigator has observed Vipassana leaders attending to students who appear to be experiencing trauma or who may be processing difficult internal experiences, though the specific nature of their instruction is not known. It may be beneficial for meditation teachers to also collaborate with mental health professionals and gain a better understanding of the unique difficulties each student may have given their own histories. Since meditation teachers may not have a clinical understanding of trauma, it may be helpful to have mental health professionals in attendance to whom students can be referred if they experience further difficulties. A mental health professional in residence could potentially bridge meditation and psychotherapy to better support students.

Kornfield (1993) also warned against the use of meditation primarily for spiritual growth as students have frequently encountered deep wounds, childhood traumas and difficult material through their practice that may be better suited for healing within the context of a therapeutic relationship. Kornfield (1993) suggested that deep personal and emotional issues cannot be separated from spiritual life, and warned against students utilizing meditation to further support dissociative or avoidant tendencies, and remain disconnected from themselves and their relationships through their meditation practice. Other potential pitfalls may be engaging in rumination, obsessive thinking, intellectualizing, or engaging in fantasies while meditating. Students who may present in such ways may benefit from additional instruction on how to fully engage with the meditative process and may require further oversight and direction during meditation retreats if they notice such patterns. While Western meditation teachers have been recommending that meditation students seek psychotherapy alongside their practices, therapists have been recommending clients seek body-oriented and mindfulness-based approaches for the treatment of certain mental health concerns. As stated above, further research is warranted in understanding how the two modalities may work together and potentially support the healing process of individuals in search of therapeutic gains.

### **Strengths and Limitations**

There are several strengths and limitations to this study. Strengths of this study include diversity within the sample, with participants ranging in age, race, gender, country of origin, and level of meditation experience. The study revealed common

themes across participants, regardless of background, as participants were able to articulate their meditative experiences in their own unique language. Participants in this study were able to describe their meditative processes in rich detail, which added to the quality of the interviews and findings. Participants were also able to define Pali terms and concepts in English to allow for a scientific understanding of meditation principles. Another strength to this study was the use of analyst triangulation and member review to ensure the credibility and trustworthiness of the findings. Since the analyst was not a Vipassana meditator, this allowed for another set of eyes and perspective on the data to minimize bias, and provide additional insights into themes. The use of member checks also provided the participants the ability to review themes, make corrections, provide feedback, and be an active part of the review process. Since the researcher was also a long-term Vipassana meditation practitioner, this can be viewed as a strength through interpretative phenomenological analysis as the researcher can co-create meaning, and support the elaboration and interpretation of participants' experiences. This was evident as multiple participants commented on the specific language used and intentions behind the questions asked, noting that it was evident that they were formulated from a shared understanding of Vipassana meditation as participants stated often having difficulties explaining their process to others outside of the community.

While there were some significant strengths to this study, there were also some limitations. Limitations of this study include the sample size of eight participants. While purposeful sampling within qualitative research provides information rich cases that

illuminates areas of inquiry, the sample size did not reach saturation, suggesting that there may be additional themes or information that may have not been included in this study (Patton, 2015). Another limitation may be volunteer bias as participants who chose to participate in the study generally had positive views towards Vipassana meditation and may have been enthusiastic about sharing their experiences. While this may be the case, the researcher explicitly asked about challenges, difficulties and barriers they experienced that allowed for important information to come forth and a more holistic perspective towards the practice.

Since the research was based on individual interviews and self-reports, the experiences of the meditators may also not be representative of other meditators. Within this sample, the education level of participants was high which may have an impact on the overall findings and their understanding or interpretation of their practice. Furthermore, two of the participants reported being counselors, and another participant reported having a Ph.D. in neuroscience, which likely impacted their responses as they each used language relevant to psychology and neuroscience as they shared their understanding of how meditation works. There were discrepancies between responses by meditators who did not have exposure to psychotherapy or psychology and those who were part of the field that likely impacted the results.

Alongside, the information gathered was retrospective with participants relying on their memory of previous retreats and experiences. Therefore, there is not a reliable way to verify the accuracy of the reports. Furthermore, some participants stated that during

retreats they did not engage in cognitive evaluations or interpretations, as this was counter to the act of meditating. Many participants considered interpretations after their retreats or during the interviews themselves and shared their own language in describing their process. Since the researcher was a Vipassana meditator, along with being a clinician, this comes with inherent bias as themes and codes were developed through the researchers' lens and language. Despite these limitations, this study provided an in-depth phenomenological description of Vipassana meditation and illuminated the meditative process, common themes and areas of further scientific inquiry.

### **Personal Reactions and Revisiting Biases**

Conducting this study and interviewing experienced meditators was an extremely enjoyable, eye opening and insightful process as not only a fellow Vipassana meditator but also a researcher and clinician. Participants shared their excitement in being interviewed as multiple of them noted having very few people to talk to about their meditation experiences, especially at the depth at which the interviews yielded. I also shared in the excitement in being able to ask participants questions about their experiences, gain a glimpse into their process and also learn from the participants as they shared insights, challenges, and their evolving understanding of meditation. While this shared excitement allowed for detailed and extensive interviews, this may have also had an impact on the direction of the interviews. Since the interviews captured so much intricate information, there were numerous choice points as to whether to ask further prompts, and have interviewees further elaborate on specific areas to gather more

information. While I asked all participants the same questions, within each interview I asked clarification questions based on what was shared that may have differed between participants based on what aspects of the practice were being discussed. My own interests, biases, and ideas regarding the direction and purpose of the study may have impacted the interviews in focusing in on certain areas while being less inclined to ask follow-up questions in areas that were of less interest.

In addition, differences between myself and the participants based on level of meditation practice may have had an impact on the interviews and interpretations of the data as my own understanding of meditation may differ from those being interviewed. I believe this may have been evident when interviewing two specific participants who had significant more meditation experience than I had. During the interviews, I found myself questioning whether I was understanding and capturing their experiences accurately due to being at a different stage within my meditation practice. In contrast, when interviewing participants who appeared to be at an earlier stage or understanding of the practice, I found myself feeling drawn to conceptualize where they may be in their process, leading me to lose my own sense of presence during interviews. I also found myself having reactions when one participant shared criticisms about the technique and practice, which I later realized, was part of her own process and understanding, and helped me to further consider the negative effects, or harmful aspects of the practice which ultimately was beneficial.

Each participant also used their own language to describe their experiences, with some participants being extremely articulate and expressive, while others had a more difficult time capturing their experiences in words. For the latter, I asked further clarifying questions and reflected some of my own language, while assessing for accuracy, however, there may have been differences between my interpretations and language and the ideas that the participants may have been attempting to convey.

Another potential bias included my own desire to understand how Vipassana meditation works, particularly in focusing in on areas of somatic and emotional release. This bias became apparent with two participants who had difficulty describing their emotional experiences and were not able to fully answer some of the questions posed regarding emotional change. There is a possibility that I may not have fully captured the essence of their lived experience through the specific questions posed which is important to consider for future research questions.

### **Conclusion**

This study contributes to the scientific understanding of meditation and provides an in-depth phenomenological account of eight experienced Vipassana meditators. The participants provided rich and meaningful descriptions of their practice and provided the researcher and readers a unique glimpse of their internal worlds. They also shared the significance of their practice and the deep impact meditation has had on their lives. By acknowledging the philosophical foundations of the meditation technique, while capturing the embodied and emotional experiences of practitioners, this study provides

important insights into the meditative process while keeping with the context in which meditation was originally developed. Furthermore, in exploring a holistic view towards mind-body processes through first person accounts, the study explored the range and patterns of meditative experiences. My hope for this study was to provide important information for contemplative scientists in determining directions for future research, support clinicians in understanding how meditation or mindfulness may produce beneficial therapeutic effects, and support meditators in feeling a sense of community and connection through their shared stories.



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APPENDIX A  
Recruitment Script

## Recruitment Script

Dear Vipassana Meditators,

Would you like to support research on Vipassana meditation and share your meditation experiences? Please consider being part of the following study. In order to be eligible, you must have completed five 10-day Vipassana meditation courses. If you are interested in being interviewed for this study, please click on the link below. You will be directed to an informed consent form which will provide details of the study procedures and a demographic questionnaire which will take about 10 minutes to complete. Please note that you will be able to withdraw at any time if you choose not participate. This study is being conducted through the Department of Psychology and Philosophy at Texas Woman's University. The study has been approved by the TWU IRB (protocol #X). If you are interested in participating, please click on the link below:

[Link to Psychdata Here]

Thank you,  
Sapna Patel, M.A.  
Doctoral Candidate  
Counseling Psychology  
Department of Philosophy and Psychology  
Texas Woman's University  
spatel15@twu.edu

APPENDIX B  
Consent Form



TEXAS WOMAN'S UNIVERSITY  
CONSENT TO PARTICIPATE IN RESEARCH

Title: Embodied and Emotional Experiences of Meditators: A Qualitative Study

Investigator: Sapna Patel.....spatel15@mail.twu.edu

Academic Adviser: Sally Stabb, Ph.D.....sstabb@mail.twu.edu

Explanation and Purpose of the Research

You are being asked to participate in a research study for Sapna Patel, completed under the supervision of Sally Stabb, Ph.D. at Texas Woman's University. The purpose of this study is to understand your experiences with Vipassana meditation. To participate in this study, you must have completed five 10-day courses in Vipassana meditation.

Research Procedures

If you are interested in participating in this study, you will be asked to fill out a demographic questionnaire. The questionnaire will ask that you fill out your name, email address, phone number and questions about your meditation experience. Please note that you may or may not be selected for participation in an interview. If you are not selected for participation in this study, you will be thanked for your time and no further involvement will be required. If you are selected, you will be contacted via email or phone as you prefer for an interview.

If you are selected for interview participation, you will be asked to spend between 60 to 90 minutes of your time in a recorded telephone interview with the primary investigator. The researcher will ask you questions about your meditation experiences. You will be provided the interview questions ahead of time. You and the interviewer will choose a code name for use during the recorded interview before the start of the interview. The interview will be audio recorded and then transcribed by either the primary investigator or a research assistant. In order to be a participant in this study, you must be at least 18 years of age or older.

Once the interview is complete, you will be sent a copy of the transcript from your interview with themes and researcher interpretations. You will be asked to review the findings to ensure accuracy, completeness and fairness. You will be provided the opportunity to provide feedback and reflections regarding themes and findings. This will take approximately 20-30 minutes of your time and will be completed electronically.

### Potential Risks

Potential risks related to your participation in this study include the loss of confidentiality. Confidentiality will be protected to the extent that is allowed by law. All documents with identifying information will be stored in a password-protected database. A pseudonym will be used during interviews and within all written transcripts. Only the primary researcher will have access to identifying information. Interview recordings will be stored on a secure and encrypted external drive and will be destroyed at the conclusion of the study. Transcripts of interviews will be shredded within five years of the completion of the study. The results of this study will be published in the investigator's dissertation and may also appear in other research publications and local and national presentations. However, no names or other identifying information will be included in any publication.

There is also a potential risk of loss of confidentiality in all email, downloading, and internet transactions. Identifying information (name, email, phone number) collected through the demographics questionnaire will be kept confidential through Psychdata.com. Psychdata.com uses multiple security measures to ensure data security including data technology that encrypts survey questions and participant responses. The researcher and research advisor will be the only people who will have access to the Psychdata database.

Another risk of participating in this study is possible emotional discomfort. The researcher will be asking questions regarding your meditation experiences which will include physical, and emotional experiences. If you experience any emotional discomfort during the interview you may stop the interview at any time. You can also decline to answer a question or can answer to the extent that you feel comfortable. The questions will be sent to you before the interview so that you can decide what you are comfortable sharing. In the event that you experience any feelings of discomfort, resources will be provided to you.

Other possible risks include fatigue and your loss of time. The interview will last between 60 and 90 minutes. You are permitted to take breaks as needed during the interview. You may also stop answering questions at any time and end the interview.

A final risk relates to any coercion or pressure you may feel in participating in this study. Please know that your participation is completely voluntary. You are free to withdraw from the study at any time without penalty.

The researchers will try to prevent any problems that may occur during the research process. If there is a problem, you should let the researchers know at once and they will help you. However, TWU does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research.

### Participation and Benefits

Your involvement in this research study is completely voluntary, and you may discontinue your participation at any time without penalty. Your participation will help advance scientific research in the areas of meditation. Another benefit to you is that at the completion of the study, a summary of the results will be emailed to you upon request.

### Questions Regarding the Study

If you have any questions concerning this research you may ask the researchers; their email addresses are at the top of this form. If you have any questions about your rights as a participant in this research or the way the study has been conducted, you may contact Texas Woman's University Office of Research and Sponsored Programs at 940-898-3378 or via e-mail at [IRB@twu.edu](mailto:IRB@twu.edu). You may print a copy of this consent form to keep for your records.

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Please acknowledge that you have read and understand this information and are giving your informed consent to participate in this study. (Check one):

I AGREE to participate in this study

I DO NOT AGREE to participate in this study

APPENDIX C  
Demographic Questionnaire

### Demographic Questionnaire

1. Name:
2. Age:
3. Gender:
4. Ethnicity:
5. Sexual Orientation:
6. Highest educational degree you have completed and field of study:
7. Current profession or job title:
8. Past professions or job titles:
9. Preferred email address:
10. Best contact phone number:

## Vipassana Meditation Experience

Please provide the following information about your Vipassana meditation experience:

11. How long have you been practicing Vipassana meditation? Years\_\_\_\_ Months\_\_\_\_
12. How many 10-day Vipassana meditation courses have you taken?
13. When was your first 10-day Vipassana meditation course?
14. When was your most recent 10-day Vipassana meditation course?
15. How many additional Vipassana meditation courses have you taken in addition to those specified above? 20 days \_\_\_\_ 30 days \_\_\_\_ 45 days\_\_\_\_ other \_\_\_\_
16. If you have a regular practice, how often, on average, do you meditate?  
Number of times a week \_\_\_\_ or Number of times a month \_\_\_\_
17. Using the table below, please estimate the approximate hours per year that you meditate:

Approximate hours per year (one hour sittings):

once a week.....	50 hours
twice a week.....	100 hours
three times a week.....	150 hours
four times a week.....	200 hours
five times a week.....	250 hours
six times a week.....	300 hours
once a day.....	350 hours

Additional Experiences:

18. What other forms of meditation have you practiced?
19. What other forms of healing modalities have you practiced?  
(yoga, psychotherapy, massage therapy etc.)

APPENDIX D  
Semi-Structured Interview

### Semi-Structured Interview

Thank you for participating in this study. As I mentioned, I am conducting a study to understand your experience of Vipassana meditation. I would like to ask you a few questions about your meditation process. Please feel free to discuss your experience to the extent that feels comfortable to you. If there is a question you do not feel comfortable answering, please let me know and we can move to the next question. If something is unclear, I may ask you further questions to help clarify.

Let me know if you are comfortable beginning. If you have questions before we start, please ask them now.

1. Please describe what meditation means to you, how would you define meditation and what it is?
2. Please describe in detail any internal experiences that you had during your courses.
3. Please describe any physical sensations or somatic experiences that you had during your courses.  
How did you interpret or understand these somatic experiences?
4. Please describe any emotional experiences that you had during your courses.  
How did you interpret or understand these emotional experiences?
5. How are the physical and emotional experiences connected, if at all?
6. How have your physical experiences changed, if at all, across courses or since you started meditating?
7. How have your emotional experiences changed, if at all, across courses or since you started meditating?
8. Please describe any particular meditation experiences that had a significant impact on you. In what ways did these experiences impact you?
9. What is your understanding of awareness within your practice?  
What role does awareness have in relation to physical or emotional experiences?  
How has your awareness changed across courses, if at all?
10. What is your understanding of equanimity within your practice?  
What role does equanimity have in relation to physical or emotional experiences?  
How has your equanimity changed across courses, if at all?
11. How are awareness and equanimity similar or different? How would you define them?
12. What is, in your understanding, the mechanism through which meditation works?
13. What patterns have you noticed within your meditation during the courses, whether from hour to hour, day to day, or course to course?



14. How has your relationship changed, if at all, with your mind, body or emotions?
15. What have you learned about yourself or your way of being in the world because of your practice?
16. How has your understanding of meditation changed as you have progressed through your practice?
17. What challenges have you faced within your practice of meditation?
18. What is your current practice?
19. What motivates you to continue meditating?
20. What, if anything, would you like to share about your meditation experience that I may not have asked about?

APPENDIX E  
Referral Resources

## Referral Resources

The following resources are available to you to help you locate assistance:

American Psychological Association Psychologist Locator  
<http://locator.apa.org/>

National Register of Health Service Psychologists  
<http://www.findapsychologist.org/>

Mental Health of America Referrals  
<http://www.nmha.org/go/searchMHA>

Psychology Today Find a Therapist  
<http://therapists.psychologytoday.com/rms/>

National Board for Certified Counselors  
<http://www.nbcc.org/CounselorFind>