EXPLORING THE EXPERIENCES OF WOMEN WITH COMPLEX TRAUMA AND THE PRACTICE OF iREST–YOGA NIDRA

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CERTIFICATE OF APPROVAL

I certify that I have read EXPLORING THE EXPERIENCES OF WOMEN WITH COMPLEX TRAUMA AND THE PRACTICE OF iREST–YOGA NIDRA by Courtney Hartman, and that in my opinion this work meets the criteria for approving a dissertation submitted in partial fulfillment of the requirements for the PsyD in Clinical Psychology at the California Institute of Integral Studies.

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ABSTRACT

The main purpose of this study was to investigate the experiences of women who had complex histories of trauma, with an 8-week Integrative Restoration (iRest) intervention. The secondary objective of this study was to evaluate relationships between lifelong trauma exposure and perceived therapeutic gain using a phenomenological approach. First, literature discussing the neuroendocrinological effects of trauma, as well as neurological findings that support the effectiveness of mindfulness practices is reviewed. Then the iRest practice as well as its application for trauma–exposed populations is covered. The participants for this study were recruited from a transitional housing program and community office for women who have experienced domestic violence, mean age of 45, and ethnic backgrounds including African–American, Vietnamese, Mexican, and Polish–American. The Structured Interview for Disorders of Extreme Stress NOS (SIDES) was initially used to determine inclusion in the study. However, reasons for not including this measure—as well as overall limitations of assessment of traumatized individuals in the field—are discussed. Women were instead invited to participate in an 8-week iRest Yoga Nidra class based on self–reported histories of lifelong trauma. Upon completion of the 8-week protocol, the participants were interviewed about their experience with the protocol, and the interviews were analyzed to determine common themes. The phenomenological approach was chosen in

an attempt to capture the intricate experience of individuals who were coping with the effects of complex trauma, as well as responding to the exploratory nature of this study. Seven general themes emerged in the present study: The experience of the practice as positive and helpful; The use of body sensing; Difficulties linking the practice with life circumstances and trouble focusing; Differences between practice in the group versus practicing alone; Increased self-awareness and revelatory experiences; Increased self-regulation; Trouble articulating. The findings of this study contribute to the knowledge of treatment best practices for disorders related to complex trauma, as well as contributing a holistic view of the investigated phenomena to the current research literature.

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INTRODUCTION

In this study, I explored how women who have complex trauma histories experience the iRest–Yoga Nidra practice. The U.S. Department of Veteran Affairs (2014) reports that about 60% of men and 50% of women will experience at least one trauma in their lives, and that about 7–8% of the U.S. population will have PTSD at some point in their lives (Para 2, bullet 1). Briere & Elliot (2003) found in their national sample "examining the prevalence and psychological sequelae of childhood sexual and physical abuse that 32.3% of women and 14.2% of men reported childhood sexual abuse, and 22.2% of men and 19.5% of women reported childhood physical abuse" (p.1210). A randomized study done by Frans, Rimmö, Åberg, & Fredrikson (2005) found that 5.6% of the participants met criteria for PTSD, with 80.8% having experienced at least one traumatic event (p.297). Figures like these highlight how crucial is the exploration of trauma related disorders, given its prevalence in the U.S. alone.

There is further concern to be raised when considering that a history of trauma has been linked with multiple other risk factors. Among people with major depressive disorders, those with a history of trauma had greater numbers of depressive episodes than those without trauma histories (Zlotnick, Warshaw, Shea & Keller, 1997). There have also been widely researched correlations with trauma exposure and substance abuse (Duncan, Saunders, Kilpatrick, Hanson, & Resnick, 1996; Grant et al., 2006), with high numbers (30– 59%) of dual diagnosis in women (Najavits, Weiss, & Shaw, 1997). A history of trauma can also present in various diagnostic forms common in women, such as borderline personality disorder (Perry, Herman, Van der Kolk, & Hoke, 1990), as well as eating disorders (Vanderlinden, Vandereycken, van Dyck, & Vertommen,1993; Kent

& Waller, 1999). It has also been found that women were at significantly greater risk for worse functional and psychological outcomes after major trauma than men (Holbrook, Hoyt &Anderson, 2001). Women have also been shown to be at greater risk than men for more serious and/or chronic forms of victimization, like sexual assault and domestic violence (Pimlott–Kubiak & Cortina, 2003). Due to the chronic and interpersonal nature of trauma that women are more likely to experience, the current study aims to investigate—in its participants—those experiences of women that are often mislabeled or not treated at all.

In addition to varying comorbid diagnoses, exposure to trauma has also been shown to correlate with the increased use of medical services and physical disorders, sometimes without identifiable biological causes (Boscarino, 1997, Katon, Sullivan & Walker, 2001). The widely researched connections between trauma and increased risks of medical health problems also brings to light the issue of the significant medical costs accrued by those who have been exposed to trauma or have unresolved PTSD symptoms. For a review see (Friedman & Schnurr, 1995). The widely researched connections between trauma and increased risks of medical health problems also brings to light the issue of the significant medical costs accrued by those who have been exposed to trauma or have unresolved PTSD symptoms. Women who had histories of sexual abuse had significantly higher primary care, outpatient costs, and more emergency visits than women who did not report abuse (Walker et al., 1999). The researchers estimated that the total attributable cost for those with histories of maltreatment—in the HMO population of 163,844 adult women that was used in the study—"was $8,175,816 per year" (Walker et al., 1999, p. 613). The overutilization of medical services, and consequent increased

health care costs, are not only detrimental to the individuals but also to the national economy (Solomon & Davidson, 1997).

Advancements in neurobiology are supporting the claims that chronic exposure to trauma can result in physiological changes to structures in the brain. An understanding of the neurological and physiological effects of trauma is important in considering effective treatment approaches. Therefore, a more in–depth explanation of these effects will be provided. This overview will also orient the reader to the growing body of quantitative literature concerning the use of meditation to treat trauma symptoms. The present study will draw from neurological findings—as well as phenomenological research on both the effects of trauma and benefits of meditation and mindfulness–based practice—to show how iRest–Yoga Nidra could benefit trauma–exposed individuals, though not without intrinsic difficulties.

The effects of chronic trauma have been linked to dissociation, chronic hyper–arousal, memory impairment, and to decreased emotion regulation and satisfactory social relations (Herman, 1992; Pelcovitz et al., 1997; Van der Kolk, Roth, Pelcovitz, Sunday & Spinozzola, 2005). The physiological changes that occur in the chronically trauma–exposed brain, then, are well–documented. The researcher hypothesizes that such changes may create exceptional difficulty in engaging in mindfulness and mediation practices. In contrast, studies have shown that long–term meditators have increased regulatory, encoding, and self–observing abilities (Hölzel et al., 2007; Pagnoni, Cekic, & Guo, 2008; Chiesa, Calati, & Serretti, 2011; Creswell, Way, Eisenberger, & Lieberman, 2007), making meditation–based treatment methods theoretically ideal for trauma–related disorders. This study therefore raises the question, how can society bridge the gap

between the mindful and the traumatized brain?

Body sensing and movement techniques have also been shown to be beneficial for a variety of health problems. Moreover, such techniques have recently been shown to be an essential aspect of trauma treatments due to the increasingly acknowledged impact trauma has on the mind and the body (Rothschild, 2000; Van der Kolk, 1998; Levine, 1997). Studies concerning the neuroendocrine system are here reviewed to give the reader a more thorough understanding of this phenomenon. Although the benefits of body and mindful–awareness are increasingly known, the use of these techniques in treating chronically traumatized individuals is surprisingly rare. The research investigating use of these tools with women with complex trauma is even sparser. A multifaceted approach incorporating body awareness, mindfulness, and associated skills, may be shown in the near future to have the greatest efficacy in the treatment of chronic trauma. The current study aimed to investigate whether iRest–Yoga Nidra— combining aspects of body awareness and mindfulness mediation techniques—is a practice that can be used as an effective adjunct therapy for chronically traumatized individuals.

REVIEW OF THE LITERATURE

Given the previously stated gaps in the research literature, this study is exploratory in nature. Phenomenology is an approach that "questions the structure and essence of lived experience" (Rossman & Rallis, 2012, p.6). The phenomenological approach was chosen with this in mind. This overview of the research explores the relationships between meditation and complex trauma from a quantitative framework, to provide the reader with an understanding of the physiological effects of trauma and the

inversely beneficial impacts of meditation practices. However, such research fails to find a quantifiable solution to treating trauma with the known benefits of the practice of meditation. The phenomenological approach aims to explore the lived experience of the participants in a holistic and mindful way. Van Manen (1984) describes phenomenology as "the attentive practice of thoughtfulness" (p.1). The thoughtful, mindful investigation of lived experience is directly in line with the principles of Yoga Nidra, the protocol being currently investigated. In Yoga Nidra the practitioner is observing thoughts, emotions, and beliefs just as a phenomenological researcher attempts to holistically observe the intricate parts of the chosen phenomenon, without becoming attached or identified with any one part of the whole. My ongoing inquiry into being engaged, yet disidentified, is a crucial variable in this study. The phenomenological researcher and the iRest practitioner are attempting to experience each moment fully while simultaneously maintaining peripheral awareness of the experience as a whole. In this phenomenological study I aim to explore how women with complex trauma histories experience the iRest practice, in order to increase my ability to serve this often misunderstood and undertreated population.

Trauma Diagnosis

The term complex trauma in itself is a rather complex concept. In the *Diagnostic and Statistical Manual of Mental Disorders,* 5th ed, the criteria for Posttraumatic Stress Disorder are as follows: "having exposure to actual or threatened death, serious injury, or sexual violence, by either directly experiencing it, witnessing in person as it occurs to others, learning that the traumatic event(s) occurred to close family members or friends,

or experiencing repeated or extreme exposure to aversive details of the traumatic event(s)" (APA, 2013, p. 271). A specific description of the recurrent, interpersonal, and early exposure to trauma is lacking, although researchers (Herman, 1992; Van der Kolk et al., 2005) have attempted to create diagnostic labels that would be more representative of these types of trauma. The designations Complex PTSD and Disorders of Extreme Stress Not Otherwise Specified (DESNOS) are two ways in which childhood trauma, and chronic trauma exposure have been conceptualized (Roth, 1997; Pelcovitz et al., 1997). Herman (1992) discusses complex trauma at length, distinguishing it from PTSD with the three categories of somatization, dissociative, and affective (p. 380). The categories for the DESNOS diagnosis were created by two teams— one in New York (Spitzer, Kaplan, & Pelcovitz, 1989 as cited in Pelcovitz et al., 1997), the other in Boston (Herman & van der Kolk, 1987 as cited in Pelcovitz et al., 1997). The above researchers reviewed the existing research literature on trauma in children, women victims of domestic violence, and concentration camp survivors. They then created a list of 27 symptoms frequently described in, but not addressed by, *DSM–III–R* criteria for PTSD. Herman (1992) arranged the 27 symptoms into seven categories: Dysregulation of (a) affect and impulses, (b) attention or consciousness, (c) self–perception, (d) perception of the perpetrator, (e) relations with others, (f) somatization, and (g) systems of meaning (Van der Kolk, 2005, p. 391). The researchers also found that—although there was no correlation with age of onset and lifetime PTSD—there was a trend showing the earlier the age of onset of the trauma, the more likely it was for the individual to suffer from the DESNOS symptoms, in addition to PTSD (Van der Kolk et al., 2005, p. 394).

The *International Statistical Classification of Disease Related Health Problems,* 10th ed., (ICD-10) moderately accounts for this type of posttraumatic presentation with their diagnostic category of "Enduring Personality Changes after a catastrophic event," which includes: "a hostile or distrustful attitude towards the world, social withdrawal, feelings of emptiness or hopelessness, a chronic feeling of being 'on edge', as if constantly threatened, estrangement" (WHO, 1992, p. 209). It has also been found that although there can be overlap of symptoms between the classical diagnosis of PTSD and DESNOS, the DESNOS diagnosis can be present in the absence of PTSD (Ford, 1999), which leads to the conclusion that DESNOS, or complex trauma, could be investigated as a separate phenomenon.

Lenore Terr (1994) proposed a framework for classifying childhood trauma according to the chronicity of the trauma. According to Terr (1994), Type I traumas are single occurrence incidents, whereas Type II traumas involve prolonged or repeated experiences of the traumatic events. Type II traumas are also referred to as repeated and interpersonal traumatic events such as childhood sexual abuse. Rothschild (2000) goes on to further differentiate Type II traumas with two subtypes, Type IIA describes those who experienced multiple traumas and came from stable background and are therefore able to separate one trauma from another with coping skills set in place from early development. Types IIB are those who have experienced multiple traumas, but are unable to separate one occurrence of trauma from another. Type IIB can be further divided into Type IIB(R), which experienced a stable upbringing but the complexity of trauma was so overwhelming that the individual can no longer maintain resilience; a holocaust survivor is one example. Type IIB(nR) occurs when those individuals did not develop internal

resources of resilience and therefore cannot separate or manage their multiple traumas.

Experiencing Type II trauma can complicate what would be considered classical PTSD symptoms, such as re-experiencing, numbing, and hyper arousal; with additional features such as impaired affect regulation, dissociation and memory disturbances, disturbances of self-image, and relational problems (Green at al., 2000). Looking at the impacts of childhood trauma from an attachment perspective also aids in the understanding of the life-long implications of this type of trauma. Convergences within the field of neuroscience and attachment theory, for example, are allowing researchers to see that insecure attachment can be a precursor for the development of disorders like PTSD (Schore, 1996, 2002). The profound impact such early-onset, long-term trauma has on the attachment system and personality traits helps account for why those with complex trauma histories often fall under the umbrella of personality disorders, such as Borderline PD (Herman, 1992).

Understanding dissociative disorders is also important when discussing the potential effects of complex trauma and subsequent diagnosis those individuals may receive. The *DSM 5* includes "dissociative reactions (e.g. flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring," (p. 271) as one of the possible intrusive symptoms that needs to be accompanied with exposure in one of the previously stated ways to a traumatic event (*APA*, 2013). The dissociative continuum of disorders included in the *DSM 5* includes dissociative amnesia, characterized by the "inability to recall important autobiographical information, usually of a traumatic or stressful nature, that is inconsistent with ordinary forgetting" (p. 289); dissociative identity disorder, formerly referred to as multiple personality disorder, characterized by

the “disruption of identity by two or more identities or personality states, which may be described in some cultures as an experience of possession”(p. 292); and depersonalization/derealization disorder, characterized by “the persistence or recurrent experiences of depersonalization: unreality, detachment, or being an outside observer with respect to one’s own thoughts, feelings, sensations, body or actions; or derealization: unreality or detachment with respect to surroundings, or both” (APA, 2013, p. 302). Dissociative disorders could be said to represent the other end of the traumatic response continuum as dissociation has been found to be the typical response to prolonged and repeated exposure to trauma (Perry, Pollard, Blakley, Baker & Vigilante, 1995). It has been found that children’s responses to trauma tend to more frequently utilize dissociative responses, as fight-or-flight responses are often not an option. Perry, Pollard, Blakley, Baker & Vigilante (1995) discus the various responses that children have to trauma and how repeated exposure can lead to long-lasting neurological changes in the brain. The authors explain that trauma responses can fall on two continua, the hyperarousal continuum, which engages the fight-or-flight response, and the dissociative continuum, which utilizes different neurological areas. The dissociative response is more likely to be used the more the individual feels immobile, helpless, and powerless. This coping strategy is also more likely to be used by women (Perry et al., 1995) given the types of trauma that are common, (e.g. rape, domestic violence).The symptom complexity of complex PTSD or DESNOS and the lack of a standardized label for this symptom cluster make researching into the disorder difficult and ‘complex.’ The current study aims to investigate the experiences of individuals who have experienced complex trauma—regardless of a diagnosis label—as well as the ways in which this multifaceted

variable influences treatment efficacy with the iRest protocol.

Neuroendocrine System

To investigate the effects and implications of complex trauma on the mind and body, a basic understanding of the neuroendocrine system is crucial. The neuroendocrine system is a complex body system that controls stress responses as well as many other bodily processes. The Hypothalamic Pituitary Adrenal (HPA)–axis is a large part of this system, made up of the hypothalamus, the pituitary gland, and the adrenal glands. Associations between effects of traumatic life events and dysregulation of the HPA–axis have been made throughout the trauma literature. The HPA–axis usually becomes activated following the experiences of exhaustion, loss of control, or the perception of loss of control (Henry, 1992). The Sympathetic Adrenal Modularly System (SAM) is another component of the stress response systems in which the sympathetic nervous system stimulates the medulla to secrete epinephrine and norepinephrine. Both secretions of the medulla are stress hormones, which create "fight-or-flight" responses (Lundberg, 2011). These "fight-or-flight" reactions can be seen as hyper arousal, hyper vigilance, and the inability to modulate emotions discussed in the diagnosis of trauma related disorders.

The physiological response to stress is largely mediated by an increase in the production and secretion of corticotrophin releasing hormone (CRH). CRH is a stress hormone that is released from the periventricular nucleus (PVN) of the hypothalamus into the portal circulation (de Kloet, Sibug, Helmerhorst & Schmidt, 2005). The PVN of the hypothalamus also secretes vasopressin which, along with CRH, stimulates the secretion of adrenocorticotropic hormone (ACTH) from the anterior pituitary gland (de Kloet et al,

2005). Other stress hormones—epinephrine and norepinephrine—are secreted from the adrenal medulla in response to actual exposure to stressors or even in the anticipation of future stressors. Such physiological responses testify to the deregulating effect that thoughts—and most severely, flashbacks—can have on the individual (Lundberg, 2011). ACTH stimulates the adrenal gland to release cortisol. In a normal system, when cortisol is produced in the adrenal cortex it creates a negative feedback system that inhibits the release of CRH on the pituitary gland and hypothalamus. In the chronically traumatized system, however, there may be a failure of this inhibitory mechanism, thus creating a state of perpetual arousal (Ehlert, Gaab & Heinrichs, 2001).

In a study that took blood samples from patients—both on the site of a serious injury and shortly after admittance to the hospital—and found that cortisol levels negatively correlated with injury severity (Hetz, Kamp, Zimmerman, von Bohlen, Wildt & Schuettler, 1996). The researchers attributed this finding to the failure of the adrenal cortex to respond normally to ACTH. Another study—in which blood samples were taken within 51 hours from rape victims—found that women who had a previous history of assault had lower mean cortisol levels than those women who had never been assaulted before. Based on these findings the researchers concluded that previous traumatization reduced the cortisol response to trauma (Resnick, Kilpatrick, Dansky, Saunders & Best, 1993). Another study investigated HPA–axis disturbances by comparing depressed nonabused, depressed abused, and normal control children. It was discovered that the depressed abused children had significantly greater overall ACTH released after being given the CRH, relative to the depressed nonabused children and control group. The results showed that the depressed abused children had significantly greater total, peak,

and net ACTH response after being given the CRH than the children in the other two groups (Kaufman et al., 1997). These findings support what Ehlert et al. (2001) suggest—that type II trauma and early life exposure to various types of traumatic events can lead to the development of physiological vulnerability, characterized here as a persistent sensitization of the HPA–axis. These findings support the assertion that past and ongoing traumas are important variables to be considered in the treatment of trauma and trauma related disorders.

Increased pituitary adrenaline reactivity to psychological stress induction has also been found in adult women with history of sexual or physical abuse (Heim et al., 2000). The researchers found that women who had experienced early adverse experiences did have sensitization to the HPA–axis, in which more traumatic events experienced in adulthood correlated to higher ATCH responses (Heim et al., 2000). The excitatory effects that early and prolonged exposure to trauma has on the reactivity of the endocrine system can provide insight into the phenomenological experience of those individuals with extensive trauma histories.

Ehlert et al. (2001) reviews psychoneuroendocrinological contributors to various stress related disorders and point out varying ways in which the HPA–axis becomes dysregulated. HPA–axis dysregulation has been linked with reduced adrenocortical activity (hypocortisolism) in participants with PTSD (Chrousos and Gold, 1992). While there have also been studies showing a hypersecretion of cortisol (hypercortisolism) in victims of accidents (Hetz et al., 1996) and melancholic depression (Gold, Licinio, Wong, & Chrousos, 1995). The variations in findings, Ehlert et al. (2001) suggests, may be due to the variation in PTSD symptoms over time, and the fluctuation of HPA–axis

hormones. PTSD sufferers may have inadequate coping strategies, genetic predispositions for HPA–axis dysregulation, prenatal or early–life stress, making maladaptations to traumatic experiences more likely (Ehlert et al., 2001). In light of the above studies, it may be that variations in cortisol levels and HPA–axis dysregulation could be mediated by the following factors: whether or not the individual had previously experienced trauma, and whether they are continuing to experience trauma. This variation among findings also highlights the spectrum of findings within the PTSD literature, due to the lack of delineations between individuals with PTSD and those who would be more precisely diagnosed with complex PTSD.

Neuroimaging Studies of Trauma

The neuroendocrinal effects of trauma are being increasingly investigated in neuroimaging studies, advancing medical understanding of how to combat the impact of trauma. It has been found that there are biological changes and failures in the functioning of varying structures that play vital roles in the experience of PTSD. A Consideration of the quantitative evidence for the impact trauma has on the brain allows for a more complete understanding of how best to treat individuals with PTSD.

There has been supporting evidence found for the role of the ventromedial prefrontal cortex in the process of fear extinction (Quirk, Russo, Barron & Lebron, 2000). Speaking in behavioral terms, fear extinction is the decrease in conditioned fear responses that normally occurs when a conditioned stimulus is repeatedly presented in the absence of the aversive unconditioned stimulus. A failure in this system is thought to be involved in PTSD (Milad, 2006). The medial prefrontal cortex has been suggested to play

a large role in retaining the fear–extinguished memories. It has also been suggested that in PTSD there is an observed exaggerated amygdala response and diminished medial prefrontal cortex response to actual or perceived threat (Liberzon et al., 1999; Shin et al.; Wright, Cannistraro, Wedig, McMullin, Martis, & Rauch, 2005; Rauch et al., 1996).

PTSD symptom severity—as determined by scores on the Clinician–administered PTSD scale (CAPS)—was also negatively correlated with blood flow in the medial frontal gyrus during traumatic imagery and recollection (Shin et al., 2005). Areas in the prefrontal cortex, then, are being shown to be crucial to understanding the symptoms of PTSD, as well as the treatment of PTSD. It has also been found in women who had a history of early sexual abuse, that the acquisition of fear conditioning was associated with greater increase in anxiety symptoms, and activation of the amygdala (Bremner et al., 2005). Greater amygdala activation during fear conditioning was seen in participants with PTSD (Shin et al., 2005). Increased activation of the amygdala in PTSD patients may suggest that fight-or-flight responses in these individuals would occur more quickly, and be more difficult to control than those not suffering from this trauma disorder, making mindfulness practices more difficult.

Bremner et al. (1995)— using MRI based measurement—found in patients with PTSD a decrease of 8% in right hippocampal volume, relative to controls. Patients were found to have deficits in hippocampal based verbal declarative memory function that was correlated with decreased hippocampal volume. The researchers also found 12% reduction of left hippocampal volume in abuse related PTSD (Bremner et al., 1997). A meta–analysis examined hippocampal structural abnormalities in individuals with PTSD, trauma–exposed, and nontrauma exposed control groups This meta–analysis discovered

significantly smaller hippocampal volumes in those with PTSD, and even significantly smaller bilateral hippocampal in trauma exposed groups without PTSD, relative to controls (Karl et al., 2006). Hippocampal volume was correlated with severity of depression in traumatized borderline patients (Driessen et al., 2000), and with dissociation in type II PTSD patients (Stein, Koverola, Hanna, Torchia, & McClarty, 1997). This decrease in hippocampal volume may be due to the chronic release of cortisol in these individuals, which has been shown to decrease hippocampal volume (Lupien et al., 1998), characterizing the physiological changes that occur in the brains of traumatized individuals.

A study showing psychological brain changes in the anterior cingulate PTSD by De Bellis, Keshava, Spencer & Hall (2014) found that the total N–acetylaspartate and creatine ratio was lower in the PTSD secondary to maltreatment children than in the matched comparison group. The researchers concluded that their findings suggest neuronal loss in the anterior cingulate cortex, which has been shown to be involved in transient mood changes, depression and anxiety disorders (Brody et al., 2001; Mayberg et al., 1999; Mayberg et al., 2000) as a result of childhood PTSD. Dysfunctions in this brain region have also been implicated in PTSD, allowing exaggerated emotional and behavioral responses, as well as potentially serving a critical modulating function of conditioned fear responses (Hamner, Lorberbaum & George, 1999).

Mindfulness may be one treatment option to increase the deficit coping strategies in those patients who develop PTSD and complex PTSD. However, the changes that occur in traumatized brains may be an enduring obstacle to those treatments. The dysfunction of the hippocampus may underlie memory deficits in PTSD, and medial

prefrontal cortical dysfunction as well as hyperresponsivity of the amygdala may represent the mechanism of a failure of extinction to fear responding and emotional dysregulation in PTSD.

Neurological Studies of Mindfulness

There has been preliminary support for a neurobiological basis for the usefulness of mindfulness meditation in several clinical conditions such as anxiety and mood disorders (Bishop, 2002; Coelho, Canter, & Ernst, 2007; Baer, 2003). The studies done with mindfulness are varied just as those done with trauma, as there is no one agreed upon definition of the term. There are several variations of mindfulness based practices, for example, Vipassana meditation, mindfulness based stress reduction, as well as the use of different foci during meditation (the breath, observation and labeling of thoughts, or mantra meditation), which could explain why differences among findings have been observed.

A study investigating Vipassana mediators compared with matched controls using voxel based morphometry, to determine changes in the gray matter concentration, showed increased gray matter concentration in the right hippocampus, right anterior insula and left inferior temporal gyrus (Hölzel et al., 2008). These findings presumably reflect the training of bodily awareness during mindfulness meditation due to the observed involved regions thought to be used in interoceptive awareness. This study provides evidence for the structural changes that occur in region of the brain that are used to engage in meditative activities in those who regularly meditate. A functional magnetic resonance imaging (fMRI) study performed while participants engaged in silent mantra meditation found the most significant activation in the bilateral hippocampus and

parahippocampal formations. These findings correlated with several previous studies with experienced meditators. The authors proposed that further research should be done to determine the possible memory consolidation function of this meditation–correlated hippocampal activation (Engström, Pihlsgård, Lundberg & Söderfeldt, 2010). Vipassana meditation practice was reported to activate the anterior cingulated cortex (ACC) and the dorsal medial prefrontal cortex (dmPFC) in both hemispheres. These findings suggested that the meditators had enhanced abilities in regulating their attention as a result of long term meditative practices (Hölzel et al., 2007). Long-term Zen practitioners were found to have shorter neural responses linked to conceptual processing in the cingulate cortex, which has been said to be functionally linked to stream of consciousness thought (Pagnoni et al., 2008). These findings add support to the claim that meditative training enhances the ability to voluntarily regulate the flow of spontaneous thought.

Another study attempted to determine neural correlates with dispositional mindfulness, using the self report measure the Mindful Attention Awareness Scale (MAAS). The MAAS is a scale designed to measure trait levels of mindfulness (e.g., "I find it difficult to stay focused on what's happening in the present,") (Creswell et al., 2007). The results of this study showed that greater levels of trait mindfulness were significantly associated with greater activity throughout the prefrontal cortex during affect labeling as well as bilateral amygdala deactivation (Creswell et al., 2007, p. 562). The researchers concluded that greater mindfulness enhances affect regulation pathways. These findings in particular are relevant to the use of mindfulness in the treatment of PTSD as enhancements in affect regulation would be most beneficial to traumatized populations.

Overall, findings suggest that the cultivation of mindful attention is related to voluntary regulation of emotions and cognitions. Reorganization of brain activity, where voluntary sustained attention reduces excessive emotional reactivity provides the basis for more informed clinical treatments of trauma related disorders by incorporating these techniques (Chiesa et al., 2011). Treatment for these trauma related disorders could target neural firing patterns which are not linked through the hippocampus, causing the person to be vulnerable to being overwhelmed by sensations, images, bodily behaviors, or upsetting emotions. The continual activation of implicit only memory, like those experienced by individuals with complex PTSD, can lead to flooding of emotions or rigidity which are key disadvantages of complex PTSD. Treatment of these disorders should be focusing on achieving an integrated state, where bodily sensations are perceived, and emotions are linked to behavioral impulses.

Memory and Trauma

The effects of chronic stress responses on the consolidation of memory are also highly relevant to the discussion of complex PTSD. Trauma can impair the brains ability to balance integration and differentiation processes. Siegel (2003) suggests that if an individual's "self-organizational properties are impaired" (p. 24) they are unable to attain "maximum complexity, and that's what mental disorder can be conceptualized as involving" (p. 24). Implicit, or procedural memory, operates unconsciously and is involved with storage and recall of procedures and behaviors. Bicycle riding is an example of something implicit memory makes possible to do without thinking about each step required to carry out the action. The emotional aspect of implicit memory is thought to be carried out in the amygdala and the limbic system, and due to the unconscious

quality of these memories they can be experienced as if they are happening without the individual being conscious that something is being recalled (Siegel, 2003), like the flashbacks experienced in PTSD.

Explicit or declarative memory is comprised of those facts and events that can be consciously recalled and described verbally. Explicit memory can be further divided into episodic and semantic memory. Episodic memory involves memories of experiences and events in a serial form with different elements of a particular event distributed in the various visual, olfactory and auditory areas of the brain, which are all connected together by the hippocampus to form an episode. Episodic memory does require consciousness in order to be encoded and has features of self and time, which allow the individual to have the sense that they are remembering. Siegel (2003) suggests that due to the complexity of the orbitofrontal cortex, self-awareness, autobiographical narratives, and the resolution of trauma are all interrelated.

The maturation of the orbitofrontal cortex (where episodic memory is said to be mediated) takes place during preschool years, which "may be the neurobiological basis" for why "autobiographical memory and self-awareness" (p. 26) continue to develop and only first emerge during this period of childhood (Siegel, 2003). Memories of trauma can be intricately linked with the individual's sense of self and self-awareness, especially when the trauma occurs in early developmental stages, the fight, flight and hyperarousal which accompany trauma interfere with forming a cohesive and articulated verbal memory of events and the individual may even lose a sense of themselves (Van der Kolk, 2001). It is thought that some cases of PTSD are caused by the failure for traumatic events to be encoded into explicit storage, like in the cases of engagement in the

dissociative defense. Is it for example, the goal in EMDR treatment is to transfer out of the emotional memory system to the episodic, though I has been found both types may be active before reaching resolution of the traumatic memory (Smith & Jones, 1993).

Dissociation can turn the individual's focus of awareness away from a traumatic event, and therefore the hippocampus will not be engaged around those avoided aspects of the event. By focusing attention away from the traumatic event, the memory will not be placed in focal conscious attention and instead into implicit memory, which is encoded without conscious attention. Conscious attention, Siegel (2003) explains, is needed to engage the hippocampus. Without engagement of the hippocampus the experience will become part of emotional and behavioral implicit memory. A large release of stress hormones temporarily shuts down the integrative function of the hippocampus and without engagement of the hippocampus the experience will become part of emotional and behavioral implicit memory. Those implicit only representations are an aspect of PTSD caused by massive stress hormone secretion or dividing of attention. Siegel (2008) described in his book, *The Neurobiology of We,* that in flash backs, due to unresolved trauma, the hippocampus has been blocked from performing its integrative function, which makes an individual vulnerable to having laid down elements of implicit memory in a nonintegrated way. Therefore when these memories are retrieved they impact the individual without knowledge or control. When these implicit memories are not able to move to autobiographical memory the event is re-experienced as if it were happening in the present.

This phenomenon also pertains to the psychogenic amnesia of traumatic memories that has been noted in the literature (Andrews et al. 2000; Van der Kolk &

Fisler, 1995) and the additional traumatic memories recalled during clinical counseling sessions. There has been further distinction made within the field of traumatic memories that have been repressed, meaning that they were initially within conscious awareness and were 'actively forgotten' (Anderson, 2001) and those that were not encoded into explicit memory due to dissociation. It has been suggested that repression is the result of inhibitory responses to fear cues in the brain, specifically with increase dorsolateral prefrontal activation and decreased hippocampal activation (Anderson et al., 2004).

In a PET imaging study by Shin, McNally & Kosslyn (1999) where personal abuse scripts were read to women who had experiences childhood abuse, with and without PTSD, greater regional cerebral blood flow decreases were found in anterior frontal regions in the PTSD group than in the comparison group. They explained this deactivation of the regions used for effortful recall supports the idea of the automatic or effortless retrieval quality of traumatic memories in those with PTSD. In *The Body Remembers,* Rothschild (2000) explains that it is typical for individuals to lack the explicit memories to make sense out of disturbing implicit memories, which manifest as bodily sensations. She describes that one of the goals of trauma therapy is to help these individuals understand their bodily sensations, as Siegel (2008) described, making implicit memories explicit. Thus, one way researches are beginning to find making these implicit memories explicit possible is through attention and work with the body.

Body Awareness and Trauma

In Peter Levine's book, *Waking the Tiger: Healing Trauma*, he describes the similarities between the human fight–or–flight system and other mammals due to the mammalian brain, including the amygdala and hippocampus which is responsible for

emotions found in all mammals. He explains that with the addition of the neo–cortex humans have the unique experience of becoming locked in a traumatized state without being able to wholly experience and move through traumatic events. This experience of being 'locked in' (Levin, 1997) may also be due to dissociation, a common defense used to cope with trauma, which can actually increase the likelihood of developing PTSD (Murray, Ehlers & Mayou, 2002).

There can be a delayed reaction to trauma exposure which occurs due to post traumatic shock (Levine, 1997). Levine (1997) describes the example of a rape victim murdering the perpetrator months or even years after the event, highlighting biologically driven reaction to defend oneself once they have come out of the immobility state seen in animals. He goes on to explain that post traumatic anxiety can be understood as a response to this intense aggression being turned inward rather than allowing for outward expression. Levine (1997) suggests that the only way out of immobility or rewiring the traumatized brain, is gradually through the felt sense (p. 104). The felt sense, as described by Gendlin, in his book, *Focusing*, is a way that this trauma can be worked through. Gendlin (1981) defined the felt sense as follows:

> The felt sense is not a mental experience but a physical one. A bodily awareness of a situation a person or an event. An internal aura that encompasses everything you feel and now about the given subject at a given time– encompasses it and communicates it to you at a given time (p.33).

This felt sense can be used in healing trauma in order to observe sensation in its parts, as a tightness in the chest, and as a whole, as in generalized anxiety, which can lead to a state of integration. A variety of body centered techniques have been in recent years gaining attention in the area of medicine. In the review conducted by Ross & Thomas

(2010) of research done using yoga techniques in the treatment of cancer patient and survivors, they found evidence for the feasibility and efficacy of yoga interventions improving a variety of factors including quality of life. In the behavioral health setting the work by Kabat-Zinn (1990) using mindfulness and body sensing techniques in their Mindfulness Based Stress Reduction (MBSR) has been used in a variety of settings. Davidson et al. (2003) in their randomized control study found significant effects on brain and immune functioning using the MBSR program.

Somatic Experiencing and the Trauma Resiliency Model developed by Peter A. Levine (1997) are also an example of body focused interventions that are being used in the treatment of trauma. These models focus on the patterns of dysregulation of the nervous system rather than cognitive and emotional effects of trauma (Leitch, Vanslyke & Allen, 2009). In a study using these techniques done with 142 social workers who survived Hurricanes Katrina and Rita found significant gains in indicators of resiliency and decreased PTSD symptoms (Leitch, Vanslyke & Allen, 2009). Another study done using a modified version of the Somatic Experiencing Therapy with 150 south Indian tsunami survivors found significant treatment effect immediately and at four and eight week follow up (Parker, Doctor & Selvam, 2008).

One of the first in the field to discuss the importance of the mind-body connection in individuals with PTSD and trauma exposure was Bessel Van der Kolk (1994) in his article “The Body Keeps the Score.” He describes the physiobiological effects of trauma and the feedback loops between psychological arousal and trauma related memories. He goes on to discuss the various psychopharmocological treatments that aim to reduce symptoms such as hyperarousal, intrusive reliving, numbing, and dissociation, which are

usually essential in PTSD treatments. Although there is some evidence that these treatment have been successful Van der Kolk (1994) addresses the limited number of studies and the need for further investigation into effective treatment approaches which consider the profound psycho and physiological impacts complex trauma has on the individual. In her book, *The Body Remembers*, Rothschild (2000), quotes Van der Kolk (1998):

> If it is true that at the core of traumatized and neglected patients' disorganization is the problem that they cannot analyze what is going on when they re–experience the physical sensations of past trauma, but that these sensations just produce intense emotions without being able to modulate them, then our therapy needs to consist of helping people stay in their bodies and to understand these sensations. (p. 3).

Rothschild (2000) writes that there is a need in the field of research and treatment of PTSD to "build bridges" between what is known from neurological and behavioral research about the impacts of trauma on the mind and on the body (p.xi).

Not only are links being made between responses to trauma like hyperarousal and emotional dysregulation and their effects on the body, but there is also an important discussion around the effects of dissociative responses and the body. Nijenhuis et al. (1999) discuss how psychological dissociation is commonly accompanied with somatoform dissociation which involves disturbances in sensation, such as pain, movement and general bodily functions. In his book, *The Feeling of what Happens: Body and Emotion in the Making of Consciousness,* Damasio (2000) describes how the biological mechanisms underlying emotions do not require consciousness. He explains that the lack of consciousness of bodily states is linked with alexythimia, as emotions are intrinsically bodily states. With repetitive use of the dissociative defense, the individual becomes increasingly disconnected from their emotional and bodily sensations thus

limiting their ability to cognitively understand their emotional experience. Dissociative and eventually alexythimic individuals are then unable to regulate or cope with affective responses (Frewen & Lanius, 2006). Thus, bringing awareness into bodily states can be seen as a key element of the treatment of trauma and its effects. In the words of Peter Levine (2005), "Through sentient bodily experience humans are able to access their most primal sensations and feelings. These foundations form the vital core of balance, self–discovery, and wholeness— the ordinary miracle of healing" (p. 3).

Integrative Restoration (iRest®) Yoga Nidra

Responses to trauma can now be understood to happen at two levels. One at the physiological level, with the endocrine and nervous systems, and the other at the cortical level, with brain structures being altered by the continuous release of stress hormones. Integrative Restoration (iRest®) Yoga Nidra is a practice that addresses the effects of trauma at both levels. As is shown saw in the previously mentioned mindfulness studies, the traumatized brain is often physically altered with decrease volume of the hippocampus and decreased activation of areas in the prefrontal cortex. Thus, the required use of the prefrontal cortex or the ability to sustain attention and integration of sensations in many mindfulness practices may be extremely difficult for individuals who have experienced multiple traumas. Yoga Nidra could be seen as one of the optimal treatment modalities for chronically trauma-exposed populations for a variety of reasons, which will be further explored in the following sections.

In a study done testing the feasibility of iRest as an adjunct therapy for PTSD with military personal at the Walter Reed Medical Center found a decrease in PTSD symptomology on the PTSD Checklist (Engel et al. 2007). Engel et al. (2007) concluded

that iRest may be a beneficial and acceptable treatment approach for soldiers experiencing significant PTSD symptoms. Stankovic (2011) found that veterans with combat related PTSD reported decreased rage, anxiety, and emotional reactivity, and increased feelings of relaxation, peace, self-awareness, and self-efficacy, despite their challenges with mental focus and intrusive memories after eight weekly iRest sessions. iRest has also been shown to be a feasible and acceptable intervention for military medical health care providers (Bingham, Inman, Walter, Zhang & Peacock, 2012). Research is being conducted at the Brooke Army Medical Center, North Chicago VA, and the Washington VA investigating the utility of iRest with PTSD populations (Integrative Restorative Institute, 2014).

Integrative Restoration (iRest) is an adaptation of Yoga Nidra, which can be understood as a form of yoga education focusing on "empowering the individual to realize their innate wellbeing and inherent freedom from suffering" (Miller, 2011). This particular protocol, iRest*,* has been designed for a secular audience, requiring no previous or long-standing mediation or yogic training. The translation of Yoga Nidra can be understood as *sleep of the yogi,* implying that a normal person is asleep to their *True Nature* whether they are awake, dreaming, or in deep sleep, while Yogis are awake to their True Nature throughout all states of consciousness (Miller, 2011, p. 2).

One's True Nature then, is the quality of pure Being; being awake and aware of everything arising and passing away within awareness, without becoming identified with any one thought, emotion, or sensation. The iRest protocol was largely drawn from teachings of Tantra*,* which is an accumulation of practices and ideas based on the spiritual movement that arose in India and later spread to influence schools of Buddhism

and Hinduism (White, 2000). The fundamental teachings and concepts present in iRest are part of ancient accumulation of human wisdom that has been expressed in a variety of forms such as the teachings of Trika-Shasana as found in the revelation story *Siva Sutra* and teachings of Yoga found in the *Yoga Sutra of Patanjali* that emphasizes *pratyahara,* Sanskrit for restoration of the senses to their natural functioning (Miller, 2011, p. 3). The practice of Yoga Nidra has been spread and revitalized in recent times the teachings of multiple yogis, Swami Sivananda and his disciple Satyananda Saraswatti, the founder of the Bihar School of Yoga, to name a few (Miller, 2011, p. 4).

For the beginning iRest practitioner the *Progressive Path of Purification* is emphasized. This path is meant to be a way to clear obstacles of beliefs, misperceptions, mental and behavioral patterns which may still be with the individual from previous life experiences. Thoughts, emotions and beliefs are seen as messengers that can be welcomed and listened to, providing greater access to internal areas which may be unresolved and beginning to move forward or back into the True Nature (Miller, 2011). One powerful way in which these internal messages are worked with is by welcoming emotions and their opposites. The concept is that every feeling, emotion, or belief that arises is subject to the law of opposites. Welcoming both the negative and positive aspects of emotions without attachment or aversion allows the individual to move past the endless cycle of pain and pleasure and to experience her True Nature as the ground from which these experiences arise (Miller, 2011, p. 6). As the opposites immerge the individual is invited to meet them both. Miller (2011) describes the metaphor of wave mechanics when two opposites meet the result is mutual neutralization. Yoga Nidra can create the environment for new insights to emerge that may have been blocked by

holding on to or identifying with one of the opposites. This practice is thus said to allow for dis-identification from thoughts, emotions, and beliefs (Miller, 2011). Moving back and forth between one and its opposite facilitates the development of the individual's internal locus of control, increasing self-regulation, also key to the treatment of complex trauma. By experiencing emotions in this way, the complete identification with one's overwhelming experiences, such as in flashbacks in PTSD, gradually become an experience that can be observed and tolerated.

The process of dis-identification is an important aspect of iRest. In the Progressive Path of iRest the individual is moved through what are called the six sheaths of identification. Miller (2011) explains that the six sheaths (Physical, Energy, Emotional, Mental, Sheath of Joy, and Sheath of Ego–I) "create the sense of being the separate, limited 'I,' who experiences dissatisfaction and suffering" (p. 6). As one is able to meet each messenger (emotion, thought, sensation), the natural process of dis–identification occurs. It is important to note that dis-identification is not dissociation, but rather iRest invites dissociated experiences back into consciousness by meeting and welcoming. Once these experiences have become conscious the individual is increasingly able to dis–identify from the experience which were controlling or dictating the Self.

Awareness and dis-identification is also cultivated through taking into account sensations in the body. The iRest protocol leads the practitioner through a body scan in which all bodily sensations arising into awareness are acknowledged. The practitioner is invited to experience her body as a field of sensations which is constantly changing within Awareness. The practitioner is invited to observe how thoughts, emotions and beliefs are connected to sensations in the body as well as noticing reactions, thoughts or

beliefs about to the bodily sensations. Careful attunement to the body can deepen understanding of what the messengers are attempting to communicate, and how those messages are pushed out of consciousness or blocked. Once bodily sensations, and emotional and cognitive experiences, are brought into awareness, the individual is asked to 'pull back' beyond those perceptions and to become aware of the unchanging awareness in which all of the changing sensations arise within. This often leads to a sense of openness or vastness allowing for a perhaps momentary dis-identification from those perceptions. The individual is able to heal through natural dis-identification, by inviting in the experience, placing it in the field of awareness, welcoming it in, and greeting it. It is also important for each individual to discover her own experience, and not be told what to discover, welcoming unique feelings beliefs, emotions, and thoughts. Just as Carl Rogers (1961) suggested the process to a good life includes "discovering that if one is truly open to their experience and does what feels right, it will prove to be a trustworthy guide to behavior which is truly satisfying" (p. 189). Allowing the individual to be open to unique discoveries is one way in which the iRest protocol has been changed from traditional Yoga Nidra technique to accommodate for differences between modern Western cultures and eastern tradition. Although the iRest protocol is presented in a linear fashion, each individual is encouraged to move fluidly through and between each stage and to inquire deeply into what is emerging in their awareness in each moment.

Stages of iRest

In the first stage of iRest the participant is invited to set an intention for their practice. One of the intentions is meant to be to remain awake and alert throughout the practice (Miller, 2011). This intention is set so as to increase the ability to keep the mind

focused on a single point, and thus can be turned toward self-inquiry without being distracted by thoughts and emotions which arise during the practice and throughout life. This intention is said to come from the True Nature and or deep desire to know and understand ourselves. The second stage is the heartfelt desire. Once the intention has been set the participant is invited to recognize their deepest heartfelt desire, prayer which may be expressions of love, health, and feelings of wholeness. The heartfelt desire is then to be thought of in the present tense, as if it were already are already in existence (Miller, 2011). The heartfelt desire is imagined in the present tense due to the emphasis on the eternal now. The iRest practice invites the participant to acknowledge that the time is always now and that their conceptualizations of the past and present are exactly that, concepts. It is also stressed that these prayers should be felt using as many of the senses as possible. Thus, becoming aware of how one's body feels when imagining the heartfelt desire, or to become aware of images that may simultaneously arise. Feeling the heartfelt desire with one's entire body allows for a much more powerful experience more likely to affect change. Stage three of the protocol is the inner resource. The inner resource is described as an internal place that provides feelings of peace, security, and grounding whenever one may need it during the practice or throughout or daily lives (Miller, 2011). The Inner Resource is important due to the possibility that intense feelings, beliefs, memories, and thoughts may arise during the practice. The iRest participant is invited again to feel their inner resource with their entire body, by conjuring images of places, people, objects anything which conjures feelings of love and safety. The inner resource is then remembered if an overwhelming experiencing begins to takes place during the practice (Miller, 2011).

The fourth stage is named the Sheath of Sensation. In this stage attention is turned to the body. Focusing on and welcoming in bodily sensations, which are thought of as messengers of deeper perceptions and experiences (Miller, 2011), is practiced in this stage. The practice creates more awareness of the body's subtle cues which indicate that there is something amiss and thus action steps can be more easily taken to prevent sickness. Greater attunement to bodily sensations leads to the realization of the deeper more essential messages that are arising from one's True Nature (Miller, 2011). The protocol also incorporates a variety of body sensing techniques such as Progressive Muscle relaxation developed by Dr. Edmund Jacobson (1929) and Autogenic training developed by Schultz and Luthe in the 1930s, which have shown to be helpful for decreasing stress, bodily pain and tension, and an increase in energy and restful sleep (Miller, 2011, p. 43). This process of attuning to and relaxing the body leads to a dis–identification from the body by increasing the capacity to observe and listen rather than reacting and attaching to bodily sensations.

Stage five is referred to as the Sheath of Breath and Energy. Once the participant has become aware of bodily sensations on a subtler level they become aware and mindful of how they are breathing, and thus can begin to explore what is called the *Energy Body*. In this stage, through a variety of breathing techniques incorporated in the protocol, the practitioner begins to mindfully experience the breath as a multidimensional flow of energy that again points to the True Nature (Miller, 2011). Stage six is the Sheath of Feelings and Emotions. In this stage the practitioner begins to experience their emotions as messengers of information, and thus acknowledge and welcome them. The practitioner also begins to recognize the constantly changing state of emotions and to work with each

emotion and its opposite. Working with emotions and their opposites while in a relaxed state increases the practitioner's ability to be with rather than react to emotional states. Welcoming and observing emotions and their opposites then also allows the practitioner to experience the deeper awareness that is beyond emotions and facilitates freedom from, or dis–identification from, those emotive states.

Stage seven is referred to as the Sheath of Intellect: thoughts, beliefs, images, and memories. In this stage the practitioner becomes aware of the constantly changing mental thoughts and images that are underlying the constantly changing emotions. As in the previous stage, the thoughts or beliefs are paired with their opposite in order to increase comfort with being with both as well as to reveal the expansive awareness of True Nature which lies beyond. The practice of opposites present in iRest due to the acknowledged part that they play in suffering (Miller, 2011). The importance of working with opposites has been discussed in the writings of Gestalt (Ingerson & Neil, 2005) and Carl Jung (1977) and is a crucial aspect of the iRest protocol (Miller, 2011). As positive emotions and beliefs cannot be separated from their negative opposite, they are linked to suffering, and thus by working with and accepting both the practitioner is able to experience the stillness and vastness beyond the never ending cycle of opposites. Thus in this stage work is done around observing , noting, and welcoming thoughts beliefs and images as well as the essence of True Nature which is becoming more revealed through each stage.

The eighth stage is the Sheath of Joy and Equanimity. This stage comes about as the practitioner reaches disidentification from emotions, thoughts and beliefs and is thus freed to experience the inherent joy and peacefulness in their True Nature (Miller, 2011). With the continued practice of iRest the ever presence of joy and equanimity are reveled

despite of the negative thoughts or emotions which may be simultaneously present. The practice also includes techniques to create the physical and psychological experience of relative joy, like inviting memories of joy, pleasure, and breathing exercises which emulate laughter. Not only do these relative joyful experiences increase the likelihood of experience more positive experiences, but the "iRest protocol then welcomes the participant to notice the ground of continuous joy, which is our True Nature" (Miller, 2011, p.141).

The ninth stage of iRest is the sheath of I–ness, awareness of spacious consciousness pervading and then merging together. The participant is made aware that throughout their practice, and even while embodying the sheath of Joy, bliss and love, there is the presence of what is called the I–thought. Miller (2011) created a ninth stage which provides the practitioner an opportunity to explore how that I–thought continues to separate them from the joyous and spacious ground of the True Nature. This ninth stage has been broken down into four sub stages. Spacious consciousness is the first of these sub stages in which the practitioner becomes interested in the nature of awareness. Miller (2011) writes the "ego–I" (p.145) is brought into question when the practitioner's attention becomes turned to inquire on the nature of awareness itself, often anxiety and fears can surface as a result of this process and falling away of self–concepts. This sub stage is meant to acknowledge these fears as well as to invite the participant to continue to explore the vast spaciousness of awareness. The next sub stage of the Sheath of I–ness is the awareness of emptiness. Once the practitioner begins to truly experience and dwell in the spaciousness of awareness, the inherent quality of emptiness becomes clear. There is also an inherent paradox in this awareness, which is that it is full in the sense that it

contains everything, but everything within awareness also dissolves, and thus it is empty. The practitioner is encouraged to feel this experience, as the paradox itself allows the mind to stop, for it cannot be conceived by the mind. Here a useful tool, the Map of Self–Recognition (Miller, 2011, p.xvii) is provided in order to assist the practitioner in recognition of where they are in their spiritual journey, as derived from many ancient teachings (Miller, 2011, p. 147). The next sub stage is the awareness of formlessness. With more familiarity with the spaciousness and emptiness of awareness a realization of the formless nature of objects and body arise. This eventually leads to a constant meditative presence throughout life's daily tasks, without interest in engaging thoughts as they come and go (Miller, 2011). The meditation is no longer a thing to be done, but becomes the constant state which allows for the awareness of formlessness and True Nature.

The last sub stage of the Sheath of I–ness is the awareness of the appropriating I–thought and the Subtle Witness. During the final stage the participant if asked to inquire into the nature of the separate 'ego–I', the thought that claims, I am sad, or I am hungry. The practitioner also begins to be able to discriminate the difference between the objects that are coming and going within awareness, the ego–I thought and the pure awareness itself in which everything is arising (Miller, 2011, p. 151). Miller (2011) calls this point the Great Turn of Undoing, in which "the witness turns upon itself, the one who is welcoming turns and welcomes him/herself" (p. 151). Miller (2011) describes the phenomenon of the infinite regress, occurring when the "I" appears to observe the "I" (p. 152). He explains that when sustained attention is given to "the witness witnessing itself" (p. 152) the I–thoughts dissolve into pure Being.

iRest and Trauma

In the iRest protocol the varying levels of physiological reactions to stress and trauma are acknowledged to have profound effects on the brain as well as the body. Throughout the iRest protocol participants are encouraged to become aware of all bodily sensations in order to understand and work through deeply embedded neural pathways caused by repetitive exposure to trauma and the resulting physiological responses.

In their discussion of Acceptance and Commitment Therapy Orsillo and Baten (2005) discuss the limitations of the current research on treatments of PTSD (CBT, exposure therapy, EMDR, Stress Inoculation therapy) that have been found to reduce symptomology, such as narrowly defining treatment outcome to statistical change in PTSD symptom level (p. 96). They also discuss the theme of exposure in many of these treatments and how the patterns of avoidance of many suffering from PTSD make these treatments difficult to administer. They therefore suggest as an alternative, providing treatment methods devoted to increasing openness to one's emotional experience (Orsillo & Baten, 2005, p. 103). This concept can be seen in the iRest protocol as attention to the Pointer Sisters. These are described to be messengers who provide insight into the "fundamental errors of misperception that interfere with our psychological health and healing" (Miller, 2011, p.xv).

This concept invites the individual to welcome all sensations that arise into awareness as a messenger for what is most needed in their path to recovery. In working with survivors of trauma introducing the Pointer sisters first is usually helpful, as to introduce the idea that they are already whole and their traumatic experiences are imposed on top of their already existing wholeness (Miller, 2011). This comes from the

belief that there is right action paired with every situation and that emotions are messengers sent from the innate wisdom of one's True Nature. The practitioner is encouraged to understand that each Pointer Sister arrives with a question to help recognize how one has "abandoned some relative or absolute truth through misperception" (p. 14) and thus the intention is to move back to an understanding of this truth and right action which reveal's True Nature (Miller, 2011).

Becoming aware of bodily sensations, as in the fourth stage, is important in light of the previous discussion of the neurological effects of trauma, and the importance of body work in treatment of trauma. The iRest protocol acknowledges the connection between bodily sensations and the corresponding regions in the brain. Thus, relaxation can be achieved at a brain or mental level by relaxing the body and vise versa.

Another salient aspect of iRest that is optimal for chronic trauma populations is the introduction to and the development of the Inner Resource. Rothschild (2000) describes treatments of PTSD that can cause re–traumatization as those that induce too much arousal for the individual's nervous system without the physical and psychological resources to cope with such arousal. She suggests teaching the individual how to "hit the brakes" (p. 95) before going forward with trauma treatment. This use of a "safe place" (p. 95) was first introduced in hypnosis for working with traumatic memories in which the individual remembers a site of protection in which they have actually been to before so that there will be somatic resonance when remembering it (Napier, 1996 as cited by Rothschild, 2000, p. 95). The Inner Resource can be seen as such a mechanism, although there is no need for the participant to have actually been there. The Inner Resource is described in a variety of ways, usually the participant is invited to provide the language

that is most applicable to them, as a way to "activate and nourish the innate sense of well-being, security, safety, calm, trust, joy, self-compassion, self-kindness, self-friendliness, equanimity, peace and tranquility" (Miller, 2011, p. 269). Images of places or people that have been calming in the past are encouraged to be used initially in order to more easily connect with the felt sense of security, however images are then encouraged to be let go of, and to concentrate solely on the felt sense of peace and security. In working with chronically trauma exposed populations the risk of retraumatization is a concern. In intense moments of emotional arousal, which may occur in any treatment setting, therefore the development of the Inner Resource is crucial. It can provide the individual with a sense of self efficacy, which as a result of learned helplessness, is often greatly diminished or absent in these populations (Overmier, 2002); allowing the traumatized person to begin to make a different choice when they are experiencing the upsetting emotional arousal that leads to fight, flight, or dissociation. Those who have experienced chronic trauma can be neophobic, afraid of the new, and thus make familiar choices that may result in pain, rather than a new and unfamiliar choice (Smith & Jones, 1993). Learning to apply the Inner Resource during these moments can begin to restructure the habitual responses, allowing the individual to regain a sense of control over these automatic trauma responses. Accessing the Inner Resource and experiencing a felt sense of safety, peace and well-being also enables the release of oxytocin, a neurotransmitter which has been found to reduce the behavioral responses to stress (Miller, 2011; Windle, Shanks, Lightman, & Ingram, 1997).

The inherent experience of joy and equanimity which iRest reveals also serves to repair areas of an individual's brain and life that have been damaged by trauma.

Researchers have found that positive affect is linked with the left prefrontal activation (Davidson, 2002), which has been found to be more active in regular mediators (Davidson et al., 2003). These findings are interesting in light of the effect trauma has on the prefrontal functioning discussed in the literature review. Feelings of peace and ease may also be difficult for those who have experienced chronic traumas to spontaneously create, as beliefs about the necessity and efficacy of pain and sacrifice have been reinforced by a lifetime of experience. Thus, the increase in experiences of joy, as revealed by regular practice of the iRest protocol may serve to increase functioning in areas of the brain which have been stunted or damaged by repeated experienced of trauma.

Making a distinction between dissociation and dis-identification in the iRest practice is important given the dissociative tendencies present for individuals with complex trauma. The use of guided imagery in mindfulness exercises, for example, can allow dissociation to be a consciously “controlled dissociation switching focus from an unpleasant emotional state to a more tolerable one” (Corrigan, 2002, p. 9). The Inner Resource, and Yoga Nidra, could be conceptualized as a form of ‘controlled dissociation’ when they are used to help the individual to modulate their experience so as not to become overwhelmed by a particular emotion or memory. Ultimately, however, the Inner Resource and Yoga Nidra are not a form of "controlled dissociation" (p. 9) but of dis-identification, wherein one is able to be with all that is arising, without the need to escape or to defend against (Corrigan, 2002). Dis-identification arises when the practitioner is willing and able to be with her experience, rather than defending against or trying to escape it. In the beginning stages, especially for those whose histories are full of

experiences which would be intolerable to most and who have a lifelong pattern of escaping and defending against them, it's important to offer the tools to build the ability to be with all aspects of their experience (R. Miller, personal communication, 2012).

Research Question

The research around trauma and mindfulness–meditation practices in the field is extremely varied with little agreement upon what complex trauma is or which mindfulness–meditation practices qualify as suitable treatment methods. As the previous literature review has shown the research is also commonly divided among bodily awareness and meditation and their relationships to trauma. Phenomenological studies have begun to examine the use of practices like concentrative meditation and tantric work with women who have experienced ongoing interpersonal trauma and have found that there is ongoing healing which takes place throughout and beyond the practices (Lewis, 2002; Kane, 2006). Work has also been done exploring the benefits of meditation and body sensing techniques for health care providers and found benefits across the board (Raingruber, 2007; Solomon, P., 2007). There has been little research exploring the experience of Yoga Nidra practitioners, however, especially with those who have a history of complex trauma. Phenomenology thus begins with the acknowledgment that there is a gap in researcher's understanding and further clarification will be of collective benefit (Lyman, 2010). The primary goal of this research is to gain a greater understanding of how women who have complex trauma histories experience the iRest–Yoga Nidra practice. The subquestions which will further guide this inquiry are: What were the most significant aspects of their experience throughout the iRest practice? What was the most difficult experience throughout the iRest practice? How do they feel this

practice has impacted them?

QUALITATIVE METHODOLOGY

Although there have been exponential advancements in the field of neuroscience the literature is still far from complete. The quantitative literature fails to comprehensibly explore the experiences of those with complex trauma histories, or to provide an absolute treatment method. It has been suggested that due to the complexity of posttraumatic responses and outcomes that a phenomenologically based framework should be used to guide the assessment of those who have been exposed to extreme and sustained trauma (Briere & Spinazzola, 2005, p. 401).

Phenomenological Research

The purpose of qualitative research is to describe, explore, and explain a specific phenomenon (Creswell, 2009; Kazdin, 2003). A qualitative phenomenological approach is being taken in the present study due to the need for exploration of this under researched area. The research around complex trauma is lacking a cohesive understanding of what types of treatment work best, and how complex trauma can even be defined. The research specifically on the effect of meditative practices with individuals with complex trauma is especially an area in need of further investigation. Qualitative research is used for exploratory purposes to provide an in–depth understanding of outcomes (Carter & Morrow, 2007; Creswell, 2009; Kazdin, 2003), and has been endorsed as the best strategy for exploring a new area of psychological study (Boyatzis, 1998; Carter & Morrow, 2007; Mitchell, 2004).

Phenomenology is often considered a philosophical perspective in addition to

being a qualitative research method (von Eckartsburg, 1998). Van Manen (1984) wrote:

> On one hand phenomenological research requires of the researcher that he stands in the fullness of life, in the midst of the world of living relations and shared situations, on the other it means that the researchers actively explores the category of lived experience in all its modalities and aspects. (p.40).

The existential–phenomenological researcher aims to generate awareness and understanding about real life experiences (Polkinghorne, 1989). In the phenomenological study the aim is to extract the meaning of the participant's existence through the exploration of their subjective experience (von Eckartsberg, 1998). The phenomenological researcher must also be aware of the process within which the data is being collected in order to extract the most authentic description of the particular phenomenon being explored.

The phenomenological approach assumes that there is meaning embedded in the experience, and thus the researcher must continuously bracket her assumptions and reflect upon the meaning of the material presented. Thus the final 'goal' of this research is to extract the essence of the individuals' experience (Denne & Thompson, 1991). In this type of study the importance does not lie in attaining the adequate number of randomly chosen participants for statistical significance to confirm a hypothesis. Instead, phenomenological research is described by Van Manen (1984) as the 'attentive practice of thoughtfulness; as a minding, heeding, and a caring attunement–a mindful wondering about the project of life" (p. 38).

This research method parallels the type of mindful attentiveness to all that is arising in awareness, and to fully engage in the research process, as the Yoga Nidra

practitioner is invited to become fully present to all sensations in the body and the mind. Thus, in the current research study I must be fully engaged throughout the entire process, in the same way that the iRest protocol will invite the participants to wholly welcome their experiences, in order to understand the lived experience of the participants.

Participant Recruitment Procedure

Recruitment began approximately two months before the planned start date of the study. The clinical director, Jean Rhea, asked case managers at both of the emergency shelters to think about woman currently living there whom they thought would be able and interested to participate in the study. The case managers were also asked to tell their residents about the information and recruitment meetings that were held a month prior to the beginning of the study. The emergency shelter is a 24-bed shelter for battered women and their children and the transitional shelter is a 31-bed housing program where formerly battered women and their children may stay up to 18 months. An initial recruitment informational meeting was held with the residents of both shelters in which the iRest teacher and I were present to introduce and answer questions about the study and then provided a short iRest meditation in order to provide an experiential understanding of what would be taking place during the eight week study. Prospective participants were also informed of the need for an intake interview lasting approximately one hour and consisting of going over the paperwork that they had been given that day(Appendices A–D) and a series of questions designed to understand their experiences of trauma (SIDES, Appendix E). Within the letter of consent there is a section requesting permission to tape record the intake interview and the final interview for purposes of transcriptions as well as a protocol of confidentiality procedures for use and storage of

the interview data. I then took contact information from interested women and shortly after the meeting called to schedule a time with each woman to conduct the intake interview.

After the first group of women, who were recruited from the Emergency Shelters, began the 8–week iRest series the clinical director contacted case managers from the Riley Center's Community Office. The Community Office offers drop in services to battered women as well as to former residents of the Emergency and Transitional shelters. The case managers referred clients who they thought would be a good match for the study based on availability for the 8-week series. A second recruitment meeting was held at the community office for women who use services there, as well as a partner program, A Women's Place. Interested women were asked to schedule an intake interview with me and were provided with necessary paperwork, invitation to the study and the iRest Student handbook during the recruitment meeting (Appendices A–H). Once all of the intake interviews were conducted, two groups were held, with the second group beginning two weeks after the first group. One group was held at the emergency shelter, solely for residents of the shelter due to the confidential location of domestic violence shelters. A second group was held in the meditation room of the community office for those interested women using services at the Riley Center and A Women's Place or who may have been currently living in shelters at different locations. These sites were chosen due to the administration's prior knowledge of the iRest program and their interest in offering it to their clientele.

Eligibility

The intake trauma assessment tool initially used to determine eligibility, the

Structured Interview for Disorders of Extreme Stress (SIDES, Appendix E), was given during the intake interview. This structured interview was designed to assess for the presence of impaired affect modulation, self–destructive and impulsive behavior, dissociation, somatic complaints, feelings of ineffectiveness, shame, despair or hopelessness, impaired relationships with others, and loss of previously sustaining beliefs (Pelcovitz et al., 1997). This measure also includes a question for the interviewee to briefly describe traumatic experiences that have occurred throughout her life. Initially, this assessment measure was going to be used to determine eligibility for the study as the DESNOS diagnosis most closely resembled a Lifetime Complex PTSD diagnosis of which there is no assessment tool currently in existence, although there are multiple lifetime trauma exposure inventories (see www.ptsd.va.gov for a comprehensive review of all current PTSD and Trauma Exposure measures).

The SIDES was administered to 520 participants as part of the *DSM– IV* field trails testing the suitability of adding the DES diagnoses to future versions of the *DSM* (Pelcovitz et al., 1997, p.5). The structured interview has excellent interrater reliability and high internal consistency (Pelcovitz et al., 1997), however, in the current study the tool failed to qualify numerous women for the diagnosis of DESNOS based on the criteria set forth by Pelcovitz et al. (1997). Considering this discrepancy it is useful to examine the participants who were used in the field trial for this assessment measure in comparison to the women who were interviewed for the current study. Out of the 520 participants, 395 were treatment seeking and were used based on sequential admissions to one of the five outpatient clinics: (a) Medical University of South Carolina–VA Medical Center, Crime Victims Research and Treatment Center, (b) Massachusetts General

Hospital, Trauma Clinic, (c) Duke University and Duke University Medical Center, Dept of Psychology and Psychiatry, (d) North Shore University Hospital–Cornell University Medical College, Division of Child and Adolescent Psychiatry (e) University of Missouri, Community Psychological Services. Traumatized women who used a proactive, problem–approaching style of coping were more likely to seek treatment for their psychological problems (Rayburn, Wenzel, Elliott, Hambarsoomians, Marshall, & Tucker, 2005, pg. 675). Although no information is provided about the cultural, racial or socioeconomic status of these individuals the fact that they are treatment seeking at a university sets them apart from the women not seeking treatment, who are living below the poverty line in the current study. The other 128 participants used in the field trial were the first to respond to a random digit dial throughout Charleston, SC and St. Louis, MO. This portion of the study was done in an attempt to make the findings more generalizable beyond a treatment seeking population. One must consider, however, the self–selecting bias inherent in this methodology, and the differences between those individuals who would be able and willing to schedule an in person interview after being randomly screened over the phone from the women in the current study. In the current study the women did not have a home phone nor the time to schedule an in person interview with someone randomly calling as their lives were so chaotic performing the treatment protocol where they were living was not always a guarantee they would be able to attend a session. This study investigated the relationship among traumatic events, coping, depression, and mental health service seeking in sheltered homeless and low–income housed women (Rayburn et al, 2005, p. 673).

These discrepancies between populations are also highlighted if compared with

other studies that have used this measure to qualify participants. Although an exhaustive search of all studies using the SIDES as an intake measure was not completed a brief survey of these studies shows samples of self selected, predominantly Caucasian women (McLean & Gallop, 2003) and veterans in inpatient treatment for chronic posttraumatic stress disorder (Ford & Kidd, 1998) have been used. The issue of unrepresentative samples in the PTSD outcome research has been discussed in the literature (Spinazzola, Blaustein & van der Kolk, 2005). The authors conclude by recommending the need for future studies to include more information about inclusion and exclusion criteria, participant demographics, and comorbidity profiles and to test applicability of treatment methods with unstudied combinations of PTSD and comorbid disorders (p. 434–435).

The current study's lack of symptom endorsement using the SIDES measure may have also been influenced by being given the assessment by someone who the participant had only meet once, as well as varying levels of self-reflection and openness. This lack of endorsements is not surprising given that some research has found defenses such as denial and dissociation used to cope with early trauma as well as subsequent stress (Putnam, 1989, Pelcovitz et al., 1997). Given the use of such defensive and self protective mechanisms, it is also important to consider the subsequent stress that the current study's population was currently experiencing given their utilization of shelter services. This variable may set these women additionally apart from the other study samples that have been used with this assessment measure. This study also found that the two women who did endorse enough questions to qualify for the diagnosis based on criteria were the only two women who were currently in individual treatment with a counselor or therapist. This could be attributed to greater insight, openness and comfort

with a mental health provider in those who were currently in treatment versus those who were not, and may be an area to pursue in future research studies with this population. The assessment measure was given to all participants for the sake of continuity, as the study began with the prospective participants being given the measure.

Instead of using qualification of a diagnostic label of DESNOS based on responses to this measure to determine eligibility for the study, I used the self–report of lifetime traumatic experiences and no previous experience with the iRest practice as the eligibility criteria. This decision was made after interviewing eight women, all of which, according to their self reported histories of trauma had experienced Lifetime Complex Trauma but repeatedly did not endorse most of the questions on the SIDES.

Not including this measure in the eligibility requirements was also in keeping with the phenomenological approach, which is aimed at creating awareness and understanding around real world experiences and giving descriptive, subjective accounts into the meaning of particular aspects of human experiences (Polkinghorne, 1989; von Eckartsberg, 1998). Multiple women denied having the symptoms that the SIDES assessed for, but subjectively met the criteria for complex trauma given their reported life histories and their current and prolonged experiences of homelessness. Thomas R. Insel, M.D., the director of National Institute of Mental Health made a statement in April of 2013 saying that NIMH will no longer be funding research projects that rely exclusively on *DSM* criteria. “We have understood that symptoms alone rarely indicate the best choice of treatment” (Insel, paragraph 2, 2013). NIMH has launched the Research Domain Criteria (RDoc) which aims to incorporate genetics, imaging, cognitive science and other levels of information to lay the foundation for a new classification system

(Insel, 2013) NIMH is now interested in research projects that "look across current categories" (Insel, paragraph 6, 2013). Insel (2013) goes on to say that "Clinical trials might study all patients in a mood clinic rather than those meeting strict major disorder criteria" (Insel, paragraph 6, 2013). This expanded view of eligibility is directly relevant to what was done in the current research project which included women who reported having trauma experiences beginning in childhood and who were either living in a domestic violence shelter or using services of the Riley Center Community Office, who were all struggling with housing, financial and support system issues.

Therefore, given the phenomenological approach and Dr. Insel's suggestion for research to look past a diagnosis for inclusion, it seemed most appropriate to include these women in the study so as to most accurately explore and present the experiences of women who have experienced lifetime complex trauma and the iRest practice.

Fear Systems, Could Mindfulness Help?

LeDoux (2001) describes how cue-specific conditioned stimuli are transmitted to the thalamus by external and visceral pathways. He states that those pathways going towards the brain then reach the amygdala by means of two parallel circuits: a rapid subcortical path directly from the dorsal (sensory) thalamus to the amygdala, the low road; and a slower regulatory cortical pathway encompassing the primary somatosensory cortices, the insula, and the frontal cingulate cortex. These different pathways highlight how some responses to fear bypass the processing of the cortex and lead to automatic fight-or-flight reactions that is, fearful reactions rather than mindful responses. LeDoux (2001) explains that contextual conditioned stimuli are projected to the lateral amygdala from the hippocampus and perhaps the bed nucleus of the stria terminalis, a subcortical

system which serves as an output pathway for the amygdala. The long loop pathway, or the high road, indicates that sensory information relayed to the amygdala undergoes higher-level processing, allowing for assignment of significance based on prior experience with complex stimuli. The level to which the cortex is involved in fear conditioning is clinically relevant, as it can determine the severity of PTSD symptoms by providing context and analysis of the feared stimuli, rather than automatic fear reactions (LeDoux, 2001).

It has been proposed by Herry and Garcia (2002) that after extinction there needs to be a certain level of activation of the medial prefrontal cortex, otherwise there will be persistent fear responses. Felmingham, Kemp, & Williams (2007) also proposed that PTSD may develop from impaired extinction of conditioned fear responses, and the ventromedial prefrontal cortex has also been named to provide inhibitory control over the amygdala fear based processes (Phelps, Delgado, Nearing & LeDoux, 2004). Without activation of the prefrontal cortex the individual may not be able to fully integrate and resolve the traumatic experience. Charney (2004) suggests that "resilience to the effects of trauma may be characterized by the ability to keep specific conditioned stimuli within their original context, reversible storage of emotional memories, and facilitated extinction" (p.205), all of which may be facilitated by mindfulness practices.

Synaptic plasticity, for example in amygdala-dependent learned fear, is an area which may shed light on how those processes can be consciously restructured using mindfulness techniques (Shumyatsky et al., 2002; Charney, 2004). These changes in the brain could indicate that with extended concentrative practice structures in the brain can actually be altered, potentially undoing the damage trauma has caused.

Chronic “hyper-responsiveness of the locus coeruleus,” which is a nucleus in the brain steam that is the principal site for brain synthesis of noradrenaline, has been shown to “contribute to chronic anxiety, fear, intrusive memories, and an increased risk of hypertension and cardiovascular disease” (Charney, 2004, p. 197). In some patients with panic disorder, PTSD, and major depression, there is evidence of heightened locus coeruleus–norepinephrine activity (Charney, Woods, Goodman & Heninger, 1987; Geracioti et al., 2001; Southwick et al., 1997). In addition to the increased stress responses, Charney (2004) explains that that “a high level of activation of the locus coeruleus–norepinephrine system actually inhibits prefrontal cortex functioning” (p. 197); increasing the likelihood of fight-or-flight reactions rather than reflective responding. Herein lies the potential for difficulty with mindfulness based treatments due to the aspect of the stress response systems to inhibit the prefrontal cortex.

In addition to the fight-or-flight responses, the freeze response which can be seen as a dissociative response to trauma must be considered. Researchers (Perry et al., 1995) suggest females with trauma histories tend to have more affective and dissociative features than males with similar histories. The dissociative response is also more likely to be utilized by young children, as it is more likely that becoming still and compliant will be effective than to flee or fight. During a time of abuse the child moves from fight-or-flight, hyperarousal, which can only be sustained for a given amount of time. If the preserved threat continues the nervous system will begin to reverse itself and switch to the dissociative continuum (Perry et al. 1995; Smith & Jones, 1993). It was found that derealization and chronic dysphoria were the best predictors of childhood sexual abuse in a study of adult patients with Borderline personality disorder (Ogata et al, 1990). The

purpose of dissociative response is to allow the individual to continue to function while preventing painful material to arise into consciousness (Smith & Jones, 1993). Dissociation has been divided into primary and secondary dissociation; with primary dissociation referring to the intrusion into conscious awareness of fragmented traumatic memories which are primarily in sensory, olfactory, auditory, or kinesthetic sensations (Van der Kolk et al., 1996). It was shown in one study, which exposed patients with PTSD to trauma script–imagery, that the Anterior Cingulate cortex (ACC), which is involved with effortful and intentional control of attention for regulating emotional, cognitive, and autonomic responses, was inactive. The researchers suggested that this finding was congruent with clinical observations that these patients have difficulty regulating their emotional responses to triggers of their traumatic histories (Frewen & Lanius, 2006). It has also been found that there is a lack of thalamic activation during primary dissociative responses. This has been suggested to indicate this type of reliving is a dysregulation in the normal communication between thalamus and cortex, where "thalamic inputs representing the objective sensed state of the external world fail to influence cortical representations" (Frewen & Lanius, 2006, p. 115). Findings such as these support clinical observation that primary dissociative responses create the emotional and phenomenological reliving of traumatic memories as if they are occurring in the moment.

Secondary dissociation, as defined by Van der Kolk at al. (1996), is mentally leaving the body and observing what is happening from somewhere else, often described as from above, during moments of trauma, or triggering experiences. In contrast to the findings with primary dissociation, individuals with PTSD who demonstrated secondary–

type dissociation showed increase right ACC and medical prefrontal cortex (mPFC) activity when compared with non psychiatric controls. The researchers suggest that these findings possibly denote an enhanced suppression of limbic emotion circuits (Frewen & Lanius, 2006). This type of neural response could be understood as the phenomenological correlate to decreased arousal, numbing, analgesia, and lack of movement, as seen in the freeze response of animals (Nijenhuis et al., 1999).

The responses to trauma are widely varied as are the types, duration and frequencies of traumas. Thus, approaching the treatment of trauma in an open and flexible way so as to be able to account for the divergent experiences of all trauma exposed individuals is crucial. Practices in mindfulness may be not only be effective for the treatment of trauma, but also in the research of it effects.

Interview Procedure

The initial intake interview was scheduled with the prospective participants after the recruitment meetings. These either occurred on site or I made a follow up phone call to participants who had given their contact information following the meeting. The intake interviews were given at the Riley Center community office in one of the offices made available by the Riley Center administration or on site for the women living in the domestic violence shelter in one of the case management offices. During the intake assessment I explained the experimental procedures, went over the research participant bill of rights, limits of confidentiality and the participants' option of seeking additional support through a counselor available through the Riley Center if the need should arise, as well as obtained consent to record the intake interview and the final interview. I then asked the prospective participants to share in as little or as much detail as they felt

comfortable the traumatic events they had experienced beginning as early as they could remember. The research then administered the SIDES (Appendix E). Upon completion of the SIDES protocol I briefly assessed the potential participant's current emotional state to determine whether any further support was needed. They were then informed that they would be contacted in the next week to notify them of their status of enrollment into the study.

iRest Procedure

Upon recruitment of nine participants who were deemed eligible for the study and signed consent forms were obtained, the iRest eight session class series began, first with the shelter group with four participants and then two weeks later the Community Office (CO) group with six. The classes at the shelter took place in the Sanctuary room and in the meditation room at the CO to keep outside intrusions at a minimum, to facilitate the process of feeling at ease and safe throughout the iRest practice, as well as providing adequate space for all of the participants to comfortably lie in the reclining position suggested for the iRest practice. The iRest series was be lead by Loriel Star a Level III Certified iRest ® Yoga Nidra Teacher who has completed three levels of advanced training with Integrative Restoration Institute. She has taught iRest Yoga Nidra at a variety of locations throughout the San Francisco Bay Area including yoga studios, counseling centers, San Francisco County Jail's C.O.V.E.R. Program for incarcerated veterans, the San Francisco VA, St. Vincent De Paul's Wellness Center and the California Institute of Integral Studies.

The iRest sessions consisted of three phases. The first phase, lasting 30 to 40 minutes, included the didactic component in which a portion of the iRest practice was

explained and discussed as well as some experiential examples given. The participants were also given the student packet (Appendix G) in the first class, which included handouts for each of the class session providing visual examples and descriptions of each of the phases of iRest as they were being taught. The first phase also included a brief check giving the participants the opportunity to discuss their experiences with the iRest home practices, to ask questions and share insights. The home practice was introduced in the initial session, and all participants were given an MP3 player with the prerecorded full length iRest practice (for transcript see Appendix I) pre–loaded onto it. Participants were strongly encouraged to listen to and do the home practice a minimum of three times a week between sessions. I checked in with each participant individually at the beginning of each class to maintain a self–report record of how often each participant listened to the recordings each week.

The second phase, lasting 30 to 35 minutes, consisted of the guided iRest meditation practice in which all of the participants were asked to lie down or sit in a reclined position with eyes closed. Each of the guided meditations focused on the aspect of iRest that was discussed in the didactic portion of the session. The participants were taken through the phases of iRest beginning with an emphasis on the inner resource. This resource was emphasized in order to begin with grounding the clients in their felt sense of safety and peace so that if any upsetting material arose they had this important tool to bring themselves back to a feeling of safety and calm. The following sessions proceeded through the phases of iRest in a linear fashion as listed in Appendix F.

The third phase concluded the sessions with a 10–minute period of discussion, questions, and reactions about the practice. The final phase was designed to allow the

participants to learn from interpersonal in the moment experiences. The enhancement of learning has been show in studies focusing on group performance of those trained in a group verses individually (Hollingshead, 1998; Moreland, Argote, & Krishnan, 2002). It has also been found that groups who were trained separately, but told afterwards about other member's skills improved over those who were trained separately with no communication (Moreland & Myaskovsky, 2000). This speaks to the benefits of allowing participants to discuss their experiences and to ask questions at the end of each session, fostering integration of the material as well as increased therapeutic gain of noting each other's shared experience.

I was present throughout the entirety of the sessions to facilitate the process by providing additional blankets or supports used to increase the comfort of the participants while doing the practice. I also tracked the fidelity of the session to the original class outline in order to be able to note any deviations in timing or sequence.

As the study progressed it became apparent that there would need to be a missed class make up option available due to the highly chaotic and transitional nature of the lives of the women who were participating in this study. Originally I asked the participants to sign an agreement that they would not miss any of the iRest classes otherwise forfeiting their eligibility in the study, however, it quickly became apparent this eligibility criterion was too stringent given the obstacles faced by this population. Therefore, if any participant was not able to attend a class the iRest teacher arranged a makeup session. The makeup sessions were briefer than the class sessions and did not include the guided iRest portion of the class. The iRest teacher and I met individually with the participant explained missed lesson material and checked in about any

experiences or questions the participant may have had while doing their home practice with the iRest recording they were given at the beginning of the study.

Central Interview Questions

The current research study used a semi–structured interview (Appendix J), as it has been suggested that this form of interviewing is as ideal way to collect data as it allows the researcher to create a dialogue with the participant and questions can be modified based on given responses (Smith & Osborne, 2007). The conversation and the relationship between the participant and the researcher were used to provide a feeling of safety that allowed the individual to describe their experience of participating in the iRest practice (Creswell, 2012; Moustakas, 1994). In the context of a semi–structured interview in a phenomenological study the order of the questions is less important than in other interview formats, and the researchers is more free to follow the respondent's interests or concerns (Smith & Osborne, 2007). Thus, based on the participant's responses the ordering of the rest of the interview could be modified, as well as the use of probes to follow up major questions. Some of the interview questions were taken from Kane's (2006) adaptation from a phenomenological study conducted by Cummings's (1994) Experience of Meditation Interview including, "Describe how your typical meditation session progressed from start to finish."; "What did you find most challenging about meditation in the early stages of the study?"; "What did you notice as your meditation progressed over the period of six weeks?"(p.506). As suggested by Osborne (1990) the interviews will begin with open–ended questions in the attempt to avoid leading the participants to substantiate any ideas that the research may have about their experience. Thus the initial question was "Please tell me in as great of detail as you are able about

your experience of the iRest practice as a whole" (Appendix J). I was then be prepared with a variety of probes or queries in order to follow up with any areas that seemed to be relevant or interesting to the research questions. These probes took the form of: Could you explain what you mean by that? How did it feel? How did it feel in your body? Is there anything else you can think of to add? Or reflecting back what they had just said in order to make sure that I understood what had just been said. These probes were designed with the intent of taking the participant deeper into their individual lived experience in order to obtain the richest responses possible. The second part of question one reads: "Describe how your typical meditation session progressed from start to finish." (Cummings, 1994 as cited by Kane, 2006, p. 506). This question was included in order to encourage the participant to think in detail about their experience within the iRest practice, and to facilitate remembering by going through an average practice in order to, like the probing questions, gain a richer and more thorough idea of their lived experience.

The second set of questions in the interview aims to understand, "What would you say was the most difficult part of the practice for you?" (Cummings, 1994 as cited by Kane, 2006, p. 506). This question was included in order to explore the potential difficulties that women with complex trauma histories would have with meditation practices based on the information sited in the literature review around the neurological changes which occur in the brain, and difficulties with emotional regulation, dissociation and somatic complaints. Questions 2a–c, "Did this change over time? In what ways were you able or unable to work through or overcome these challenges? How do you think your overall experience was impacted by these difficulties?" Were designed to investigate whether difficulties within the practice were surmountable, and what if

anything allowed the participant to overcome difficulties. Information gleaned from these questions could be incorporated into future studies, or uses of the iRest protocol with this population. The participant's perception of their ability to cope with difficulties as well as the perceived impact of these difficulties is also crucial to the understanding of the participant's experience with the protocol.

The third main question of the interview is "Looking back on your whole experience with the iRest practice, which part would you say was the most impactful?" This question was designed in order to explore the aspects of the participant's experience that were most notable for them. This question was also designed to deepen what may have already been described in their response to the first question, and may follow or become part of the first question. Responses to this question will also be important for future work in this area, perhaps leading to adjustments in the protocol, which incorporate areas women in this population found most helpful or meaningful.

The fourth question in the interview, "What did you notice as your meditation progressed over the period of eight weeks?" was designed to first extract an unprompted reflection on how the participants experienced change, if any, from the beginning to the end of the eight week iRest series. The second portion of this question was as follows:

> Before we started the iRest practice I asked you some questions about your experiences or responses to trauma like: being able to calm yourself down after becoming upset, feelings of anger, caring about keeping yourself safe, having difficulty keeping track of time, or staying in the present moment, feelings of guilt, helplessness, like something is wrong with you, like no one can understand, difficulty trusting others, thoughts about the perpetrator, difficulty working through conflicts, hurting yourself or others, trouble with digestion, chronic pain, cardiopulmonary problems, thoughts, behaviors, or problems involving sex, feeling hopeless about the future. To what extent have you experienced a change in each of these areas?

This question was designed to look more specifically at the participant's experience of the practice's impact on the major areas of functioning which have been shown to be the core features of complex trauma (Van der Kolk et al., 1994; Pelcovitz et al., 1997). This question was followed up with a query asking the participants to try and put themselves back to where they were eight weeks ago in order to get a felt sense of how things may have shifted for them in relation to these domains of functioning.

The next question in the interview protocol is "How do you feel being in the group impacted your experience rather than experiencing this practice alone?" This question was designed in light of the known therapeutic benefits of participating in a group can have, like creating feelings of universality and belonging (Bettelheim, 1947; Bloch, 1981; Yalom, 1985). It has also been found that there are different but equally important therapeutic processes in group and individual treatments which be gained from these different modalities (Holmes & Kivlighan, 2000). Thus, this question also attempted to explore the influence of participating in a group which may have impacted the overall experience as a separate factor from the iRest protocol. This question also explored how the participants experienced the home practice, which involved doing the practice individually and how that portion of the study impacted their experience.

The following question, "Looking to the future, do you see iRest playing a role in your life?" was designed in order to explore the participant's present outlook on how this experience could translate into the perceived future. This may have also served to place the present moment within the participant's larger life narrative, which has been partly done by taking inventory of the past experiences of trauma, and the effects those experiences have had on their functioning. By looking to the future I was attempting to

create a balanced understanding of the participant's total experience.

The final question, "Looking back on all of the things we've talked about today is there anything you would like to add about your experience with iRest, or participating in the study as a whole?" was included to end the interview as it began with an open invitation for the participant to discuss anything that may not have been touched upon throughout the interview, that may have occurred to them during the process of recounting their experiences in the study. This question also asked about being a participant in the current study, rather than only focusing on the iRest protocol to account for any nuances of the present study design which may have particularly impacted the participants, and thus would be notable for inclusion in the final discussion of the results.

Data Analysis

The first phase of data analysis according to phenomenological methodology (Creswell, J.W., 2012) is bracketing. Bracketing is the process in which the researcher attempts to recognize and articulate experiences, presuppositions and biases to allow the reader to take the researcher's position into account when interpreting the data. The present researcher takes the constructivist world view in which the meaning of life and reality of an individual is constructed based on lived experiences, time, place, and the complex interactions of society through language, history and action (Schwant, 1994). Schwant (1994) quotes Nelson Goodman (1984) at length on his description of constructionism, saying that the constructivist not only believes that humans do not find knowledge but rather construct it; but that the world view includes the idea that the process of thinking is not to arrive at an accurate description of the world, but rather to increase understanding, integrate new and take out old, to create something that fits

together and creates opportunity for further inquiry. I am also influenced by my sociocultural background as a Caucasian female, being educated from a psychodynamic orientation. I am further influenced by my experience with the iRest protocol, and my belief in the utility and effectiveness of the practice as well as my personal experience with meditation, and beliefs in the benefits of a regular practice.

The data of this study were defined as the information that was given by the participants in the semi–structured interview at the end of the 8–week iRest series. I began, as suggested by Hycner (1985), Osborn (1998) and [C]Dryer (personal communication, [2012]) by reading over all of the interviews to get a feel for the material. Then, on a sentence-by-sentence basis, the themes were interpreted and organized into higher-order clusters (Osborne, 1990). The interpretation was done by first organizing the material into categories to focus the analysis and labeling those categories with a term, often a term taken from the actual language of the participant (Creswell, 2009; Rossman & Rallis, 2012). Those categories arose mainly from the semi structured interview questions, as the participants were all asked the same questions, and therefore gave responses based on those prompts. The categories were: First response, Typical Session, Pros, Cons, Body Sensing, Group vs. Home Practice, Changes, and Other. Once the Data was organized into these larger categories labels within those categories were created to describe the nuances of information within the categories. The topics labeled became the codes for the data. After a few rounds of refining and reducing these labels by combing those which related to each other, as well as agreed upon by the two co-coders. A final list of codes was then generated for preliminary analysis. The codes were then tallied and graphed (Appendix K) in order to get an idea of how often each code was

present in the data and how often each individual participant used each code. Ellenberger (as cited by Hycner, 1985) writes, “each individual has his own way of experiencing temporality, spatiality, materiality, but each of these coordinates must be understood in relation to the others and the total inner ‘world’” (Ellenberger, 1958 as quoted in Hycner, 1985 p. 291). Therefore themes found within each individual interview will be discussed as well as themes found across all interviews. These themes both individual and group serve as the major findings of the study (Creswell, 2009). These themes were then combined into a general descriptions in an attempt to describe the essence of participants’ experiences. Creswell (2009) describes the final phase of data analysis as making an interpretation of the meaning of the data; however I acknowledge that meaning making happened at all levels of the analysis. The phenomenological researcher aims to find a structure shared by the all of the participants that presents itself in the data, rather than looking for a structure based on preconceived notions (Osborne, 1990). I found that not imposing interpretations in an attempt to understand what was being communicated was one of many unexpected challenges that arose in the present study. The solution of transparency has therefore been applied to give the reader as much insight into the process of how the themes were created as possible.

Validity

In the present study validity of the findings was checked by the use of two additional coders, to review the data and check for interrater reliability of the codes created (Osborne, 1990; Creswell, 2009). Unfortunately, the normal validity measure of incorporating feedback from the participants around the ability of the created themes to reflect their lived experiences was not feasible for the present study due to the transient

nature of the participants' living arrangements; therefore follow up interviews were unable to be obtained. The important aspect of bracketing has also been incorporated into the methodology to provide the reader with the opportunity to understand the lens through which the researcher's interpretation of the data takes place (Giorgi, 1975).

Comparing the original iRest class series outline (Appendix G) with the actual flow of the two 8–week class series that took place there were a number of deviations that should also be noted as impacting the validity of the study. Firstly, due to the unplanned need for multiple make up sessions for all but one of the participants, the class structure was changed based on which classes each participant missed, although every attempt was made to stay as close the original structure as possible within the provided make up sessions. There were also times, like session five for group 2, where the first portion of class was spent going over Emotion and Feelings, material from class four, because many of the participants (3 of 5) had missed the previous class. Also, Appendix G indicated that the opposites of feelings would be discussed in class three with body sensing and breath, however class three for both groups one and two only covered physical sensations and breath sensing, then in class four for group one the idea of emotions and feelings as well as working with opposites was introduced and discussed. In group two, because class four was minimally attended working with opposites, as well as emotions and feelings was reintroduced in class five, and then followed by the lesson for class five, which was Core Beliefs. In class six Appendix G says that there would be an emphasis on working with Joy, for both groups the iRest teacher worked more with noticing how a preference—like choosing a color that the participants liked from the room—impacted their bodies, and continued to work with opposites. In this session the

iRest teacher also introduced a Shruti box, which was introduced for another exercise in which participants were invited to hum various tones and sounds and notice how this impacted them. At the end of the guided practice the iRest teacher also introduced the sound of singing bowls during the final portion of the meditation practice, which was reportedly enjoyed by all but one participant during class discussion and also in the post intervention interviews. These interventions bring in areas of sound healing and vocal meditation that have not been discussed in the current study, but could be considered to be additionally helpful and beneficial and could be explored in future studies.

In both groups the seventh session, rather than moving to witnessing like Appendix G notes, the class was spent exploring the lesson of joy, with a chocolate mediation, and other experiential practices. The final session for both groups the lesson of Witnessing was discussed, in which an invitation and experiential practice was done asking the participants to "just be" as well as to wonder who it is that's noticing the thoughts (sheath of I–ness). Although these multiple variations and needs for adjustment to the original class outline do pose a problem for internal validity, a priority was made to accommodate the inconsistent attendance of many of the participants so as the present study was exploratory and discovered factors to be considered for future studies, as will be further discussed in the Limitations section.

Ethical Considerations

In working with a population who has experienced complex and chronic trauma it is important to consider possible procedural factors which may be triggering or lead to risk of retraumatization. Therefore, before asking participants to give a brief description of their trauma histories I discussed the potential for upsetting material to arise in the

process of the intake assessment as well as the iRest series, and all potential participants were informed of the availability to counseling referrals through the Riley Center. I also discussed with the iRest teacher the benefit of beginning the class series with an introduction of the inner resource so as to provide a coping tool for the participants if upsetting emotional states did arise as they moved through the protocol. The participants were also be informed of the limits of confidentiality before any participation in the study.

Ethical considerations were made to determine the assessment measure that was used for the current study. Upon review of the Trauma Exposure Measures (see ptsd.va.gov) there are many that could have been used for the current study, like the Life Stressor Checklist Revised (LSC–R) (Wolfe & Kimerling, 1997). This measure was considered at it was designed to focus on events related to women, like abortion. The LSC–R was not used however, as some of the questions asked, if endorsed, would have breached the limits of confidentiality and would have required further investigation and reporting on my part. Therefore, the present study did not use these types of measures so as to limit this potential confound. Future researches should keep these variables in mind when selecting assessment measures for trauma.

RESULTS

The study began with a total of 11 women, four in one group and seven in the other group. The final number of women who were able to complete the eight week iRest series and be interviewed after the final session was six.

Codes

The final list included 92 codes that were created based on the above method. A full list of the codes and the frequency they were seen in each transcript is included in Appendix K.

Level 1

Once the final list was created only five appeared in all six of the transcripts. Those codes were as follows:

Body Sensing, defined as any discussion of body awareness, sensing the body, in a positive way, for example; “Like when you guys would do the body scan, being aware of my whole body.”

Help, defined as general descriptions of the practice being helpful, for example “iRest help me to explore what is inside myself, what is the purpose of life.”

Positive, defined as a general feeling that their participation in the practice was a positive experience, “It was a very good thing.”

Positive Change, defined as describing a way that the participant changed at some point from before where they started to the time of the post experiment interviews in which they experienced a positive change within themselves, for example “It took me to a more relaxing spot in my thought process.”

Barriers, defined as a description of difficult outside circumstances that were obstacles to treatment, for example “Barriers of everyday struggle, things that you’re faced with,” and “The other night, they brought a crack addict in and I had a hard time

going to sleep and I tried to do that, but at certain points it's just sometimes it's hard for me to do it, because she kept us up all night, she was like screaming and yelling in her sleep."

Level 2

The next level of results were the ten codes that were found in all transcripts except for one. This one transcript was considered an outlier as this interview was shorter than all of the others, and although she reported having gained little to no benefits from the practice she was unable to explore or explain her areas of difficulty with the practice, or why she found it unhelpful. For example, no codes of *difficulty* appeared in her transcript although it did appear for everyone else. The codes for this level were as follows:

Difficulty, defined as describing a difficulty with the practice, "She just say close your eyes and think about what do you want, my mind was white, can't think about anything."

Group Practice, defined as descriptions of liking the group but not indicating a preference for the group over doing the home practice alone, for example "Being in the group really helped me because I was able to hear other people [sic] thought patterns."

Universality, defined as the experience of feeling that that person was not alone in her feelings and experiences as a result of being in the group, "After the practice we had the time for shared idea, the people talk, I think the other people had the same feeling with me, "Because they talk about how was her experience and I can learn about that and I think oh I'm not the only one that feel that way."

Home Practice Difficult, defined as the description of having some sort of difficulty with doing the iRest home practice in between sessions, for example "When I remember, when I was just hearing the tape, because I was just trying to do everything it's, silent, my past is coming back to me and I don't want that."

Learning, defined as a general description of learning and learning from the class specifically, for example "Learning about the different emotions that people experience, "I learned how to stay more relaxed"

New, defined as describing the iRest practice as being a new experience, for example "Something I never experienced before."

Past Experiences Negative, defined as a description of how one used to be or negative experiences the participants had in the past, for example "Before I used to have panic attacks, "Before practice iRest, I sad [sic] all the time I feel very sad."

Reactive, defined as describing being less reactive, slower to respond to others as a result of the practice, for example "Before the iRest if somebody fighting with me I start fighting with that person, but now I just, I just control myself" and "I am slow to answer, I observe more."

Self Awareness, defined as saying something that indicates to self–awareness, for example "Because another factor, I can now see my family and talk with them every day, I think is important" and "I think good communication with my family is what I want and what I need every day."

Trouble Articulating, defined as an indication to that the individual was having

difficulty in expressing herself, or the thoughts and feeling she was trying to convey, for example “And just kind of I guess you would wanna call it, like escaping to that, when, you know, I don’t know how to describe it.”

Revelations, defined as a statement that indicated to that the participant and had a realization of something important as a result of her participation in the iRest practice, for example “But I think I don’t cry anymore because I learned that I need to love myself” and “I just care it has to be fine, it has to be just love me. You know what ever happened to me, that’s why it has to go.”

Level 3

The next level of results were those that were mentioned in four of the six transcripts. These codes all related to control.

Self Control, defined as the general description of controlling one’s self, or having control over oneself, for example “I think I can control myself more” and “It’s being aware of my whole body and being able to calm that down.”

Control Emotions, defined as having a sense of control specifically over ones emotions, for example “How to control my tension and my anxiety.”

Control Thoughts, defined as a description of having control specifically in regards to ones thoughts, or mind for example “It was more something to help me with my thought patterns and learning how to relax my mind.”

Level 4

The final level of code patterns that emerged were the two codes that only occurred in the shelter group. Those were the following:

Self Love, defined as the discussion of increased experience of self love, or the benefits of increased sense of loving oneself, for example "I think it's important to love myself, because no one else can love myself."

Self Focus, defined as the discussion of an increase in focus on the self, or setting oneself as a priority, for example "I think it really helped me just don't think about other people, just think about me."

Positive Focus, defined as the discussion of having a positive focus in one's life, or focusing on the positive, for example "Like positive way of thinking about my family, friends, the goal for my life."

Themes

The themes were created from the codes by noticing the frequency with which codes occurred, as well as which codes occurred together and were linked to each other creating complex ideas. This process is difficult to explain as Colaizzi (1978) expresses "in this step the phenomenological researcher is engaged in something which cannot be precisely delineated, for here he is involved in that ineffable thing known as creative insight" (as cited by Hycner, 1985, p. 287). However, based on the above patterns that emerged in the codes the following themes were determined.

Theme 1: The practice was experienced as positive and helpful.

All of the participants expressed some degree of appreciation for the practice and discussed some portion of the practice that was helpful and that they enjoyed. Aside from the outlier everyone else went on to discuss how they had experienced positive changes

within themselves in many different forms throughout the eight weeks that they largely credited to the iRest practice. These positive changes were discussed in the form of learning various new skills, like the Inner Resource and Heart felt desire. They were also expressed by many of the women in terms of the use of opposites, and how this allowed them to focus on the positive aspects of life rather than being bogged down by the negatives. This use of the opposites is slightly different than the original intention of the opposites, where by pairing every emotion with its opposite one is able to observe and experience the sensations beyond the cyclical good and bad, pleasure and pain. A few of the women in the current study used this tool to "look on the bright side" and notice more positive things, which they stated they had more difficulty doing before learning this tool.

Theme 2: The use of body sensing.

When discussing specific parts of the iRest protocol that the women found helpful, or that simply stood out to them all six of the women discussed body sensing at some point. All of the women expressed that bringing their awareness to their bodies as they were invited to do in the iRest practice was not only a new experience, but one that they found surprisingly helpful. One women even went so far to describe how bringing awareness to her body allowed her to realize what her Heart Felt Desire was, that being that she wanted to feel good in her body. The body scan was always done in the beginning of the practice, after touching on the intention, inner resource and Heart Felt Desire, and this seemed to serve as a grounding tool for the women, and allowed them to more fully enter into the practice. As one woman described it, it was the only thing she could really "get into."

Theme 3: Difficulties with the practice linked with life circumstances and trouble focusing.

Difficulties with the practice were discussed by all but one participant, although that participant did describe not enjoying the practice because "meditation just isn't my thing." Although difficulties were discussed, they were often minimized. This may have occurred in part due to the participant's perception that I would only want to hear positive accounts about the practice despite my attempts to verbally discourage this tendency, as will be discussed later in the limitations. The difficulties that were discussed were often in the form of what were called "barriers" or discussion of outside life circumstances that would get in the way of either the participant's ability to do the practice, implement learned skills (e.g. tapping into the Inner Resource) or to live the way they wanted to generally. For example, one women discussed living in a shelter where she had been unable to access her Inner Resource because there was a "crack addict" who was screaming all night long in the same room in which she was attempting to sleep. Difficulties were also discussed in terms of not being able to focus, or being distracted when trying to listen to the recording of the iRest home practice. This relates to the next theme of being in the group rather than doing the practice alone. Much of the conversation around having difficulties emerged when the women explained what it was like to do the home practice, and how outside circumstances as well as being distracted or having trouble focusing kept them from doing the iRest practice on their own throughout the week between sessions.

Theme 4: Differences and benefits of doing the practice in the group versus practicing alone.

All but one of the participants expressed enjoying being in the group and experiencing what Yalom (1985) described as Universality, which is the feeling that one has that others share their experience(s). This concept for some women was extended beyond the feeling of not being alone in their experience to the feeling that one's emotions or thoughts were real and valid because others expressed having those similar feelings. Throughout the interviews the importance of having the live teacher giving the protocol rather than only hearing the voice on the audio recording was another reason the group was preferred. It seemed that having the iRest teacher present had a containing effect, where the participants had less trouble focusing on what she was saying than when listening to the recording. A few women also expressed their appreciation for being able to ask the teacher questions and to hear questions that other women would ask, as learning was another common concept expressed as a benefit to participation in the present study.

Theme 5: Increased self-awareness and revelatory experiences.

All of the woman, except one, expressed what was considered to be self- awareness and at least one revelatory statement. The current study deemed a statement revelatory when it seemed the participant had realized something of great importance to her about herself, or about what she needed or hoped for, for her life. One example of this theme was, "After coming out of it and just living right now, with all the love and support that I have

from people has kind of put her in the past and just living right now with all the love and the support that I have from people. It has really hit home for me."

This theme also linked with what was perceived as self awareness, for example, "Because another factor, I can now see my family and talk with them every day, I think is important, "I think good communication with my family is what I want and what I need every day."

These two codes often occurred together, although some statements coded self-awareness weren't always revelatory. They created a theme, however, because they seemed to be some of the most profound statements made by participants in the sense that through self-exploration, initiated by the iRest practice, these women had come to important realizations that have the potential to beneficially impact them for the rest of their lives.

Theme 6: Increased self-regulation.

All of the women, but one, reported being less reactive. This took many forms. Some women said they found themselves being "slower to answer," others described it in terms of increased control, self-control, control over emotions, thoughts and behaviors. The discussion of these topics was prominent throughout the transcripts as an area that was notable for all those who described it. The participants described stories of how they were previously (before iRest) much more reactive in confrontations and how they had all noticed themselves being able to slow down before simply reacting, or as one women explained it, "But now when I has some situation that make me angry I just have to, with iRest, I know how to breath, how to relax, and just come back to my, I stay more

clearly."

Theme 7: Trouble articulating.

This theme came from not only the "trouble articulating" code that appeared in all but one of the transcripts, but also incorporates the "contradiction" code that was used when a participant contradicted something she said earlier in the interview, which came up in three of the transcripts, as well as the "I don't know" code that was used when the participant would say "I don't know," and also appeared in three of the transcripts, therefore all six of the participants contributed to the formulation of this theme.

There was a pattern among all of the women, beginning with the intake interviews of having a difficult time describing their internal experiences. This difficulty with self-expression was evident in the post interviews as well. Often the women were at a loss for words, and had trouble describing what it was that was meaningful or impactful about the eight week iRest series. This difficulty with self–expression was a separate issue from the trouble articulating that seemed to be based on the variable that for two of the six women that were interviewed English was their second language. I attempted to code this sort of trouble articulating separately by using a separate code when it seemed that not knowing how to say something in English was the main source of the difficulty.

Limitations

There were a number of limitations to the current study. The use of the phenomenological methodology, which largely depends on the self–reports of participants as the means of understanding their experiences, was in itself limiting. The validity problems in self-report studies are well–known, underreporting, response bias.

Although the aim of the phenomenological study is to get to the essence of a given phenomenon, the current study was challenged with issues related to self–report for reasons beyond what could be normally expected due to the nature of trauma. It has been documented that individuals with PTSD have decreased blood flow to Broca's area, the region in the left frontal cortex responsible for creating language, when shown scripts of their trauma narratives (Rauch et al. 1996; Shin, L. H. et al, 1999). These findings indicate that when individuals are triggered with remembering their trauma histories the ability to produce speech is inhibited. This phenomenon may help explain the lack of symptom reporting in the current study during the intake interviews, as the first question posed to the participants was for them to recount their traumas. Beeghly & Cicchetti (1994) found that maltreated toddlers use fewer words to describe how they feel and are restricted in their attributions of internal states to self and other. These finding may provide initial evidence that individuals, like the women in the current study, who have experienced trauma since childhood are at a disadvantage in being able to verbally express themselves, thus the Trouble Articulating theme. This must also be considered when interpreting the findings of the current study, as the participants reports of the positive outcomes they experienced due to their participation in the iRest practice may reflect an overvaluing of the impact of the practice. This aspect of trauma symptomology therefore poses a problem with self-report as the sole data. Future studies with this population may be better served by using more sensitive assessment instruments or historical evidence when available.

Another potential limitation to this study relating to the participant's ability to communicate verbally may have been the impact of my perceived societal standing.

Being a young Caucasian female may have inhibited the participants' feeling of comfort in sharing their experiences both before and after the research intervention given their reported histories of marginalization and trauma. In contrast, the issue of overly reporting positive outcomes by some participants may have been an attempt to please me or saying what they thought I would want to hear. The issue of image management or social desirability bias where the participants in both the pre and post intervention interviews may have wanted to present overly positive aspects of the self and acquired skills may have also contributed to the findings.

The issues of attrition and consistent attendance were also major limitations to the current study. The *Barriers* code could be considered in regard to this limitation as the context of these women's lives must be taken into account. Although it is difficult to know exactly what caused the high attrition rate, some of these women were forced to relocate due to conflicts with the organization's policies, had health concerns and inconsistent housing. The women who were able to complete the series also faced many challenges. Table 1 shows the amount of absences and therefore the number of make-up sessions that each participant was required to complete in order to be eligible for a final post intervention interview. This speaks to the larger issue that future researchers working with this population should take into account. In order for these women to be able to successfully complete all eight of the iRest classes, or equivalent in makeup sessions, I had to be willing to make multiple follow up phone calls, and arrange to be available at varying times outside of the scheduled iRest meetings. Although it would be ideal to first require stabilization in the form of permanent housing and no current exposure to traumatic events, what is more realistic is the need for flexibility on the part

the researcher, or therapist as stabilization may not come until some form of therapeutic intervention has been consistently provided for a period of time. This again speaks to the issue that Spinazzola et al. (2005) raise, in the need for future researches to attempt to engage and treat more severely traumatized populations who may not be ideal research candidates. Researchers working with this population must be aware and understand of the multiple barriers these women face to treatment, both internal and external.

CONCLUSIONS

The current study aimed to explore the experiences of women who had experienced lifelong trauma, or complex PTSD, with the iRest–Yoga Nidra meditation protocol. As the research progressed, however, it became clear that there were variety of other domains that were important to explore and that could contribute to the current body of knowledge around treatment and assessment of complex PTSD and meditation practices. The need for further investigation and clarification on a variety of topics, such as how to define and assess complex trauma, cultural and ethical considerations, as well as appropriate ways to assess for treatment efficacy, was an unexpected outcome of the current study.

To begin, the research on complex trauma is extremely heterogeneous, and some could argue unrepresentative of populations who are most impacted by this type of ongoing interpersonal trauma (Spinazzola et al., 2005). A clearer definition of complex trauma, as well as more research on representative samples, with accurate reporting of demographic information is needed in the field.

The difficulty with accurate assessment of the complex trauma phenomenon was

a major aspect of the current study. As has previously been discussed, the assessment instrument originally intended to determine eligibility into the study was unable to qualify multiple women for the DESNOS diagnosis. The women were, however, assumed to have complex trauma given their self-reports of exposure to traumatic incidents starting in childhood, and their admittance into the shelters and ability to attain services at the Riley Center. The Riley Center's criteria were therefore also taken into account, as they require that women are self-identified survivors of domestic violence for admittance into their programs.

It may be useful to explore some of the findings pertaining to the current study's use of the SIDES assessment measure. The SIDES contains 48 two-part questions. The first portion of the question makes a statement like "Small problems get me very upset. For example, I get angry at a minor frustration. I cry easily." The examinee is then asked "Was this true for you after the experience" or "Has this been true for you as long as you can remember." *After the experience* is understood to be after the traumatic experience that was discussed at the beginning of the interview before administration of the questionnaire. This phrasing in itself is difficult given the complex nature of the women's trauma, as it seems to suggest that there was only one traumatic incident that occurred. The phrase, *as long as you can remember*, may have been an attempt on the part of the creators to account for lifelong trauma survivors, however both options seemed to cause confusion, and resulted in minimal endorsement of the statements. The second part of the questions then asks, how true has this been in the past month, and then gives five options, one of which is 0, none at all, 1–3 which are statements increasing in severity, and 4, not applicable. Many of the women experienced confusion with this structure. Often women

would immediately say no to the initial statement and I would then remind them that it was not asking if it was true right now, but if it had ever been true *at some point in their lives,* which was the lifetime definition given by Pelcovitz et. al (1997, p. 10*)*. This lack of reporting was especially notable if it seemed the narrative the woman had previously given included a description of what was being asked about, but when asked directly she indicated it had never been true. For example talking about how she used to always get in fights, and then saying "I have trouble controlling my anger" was a statement that was never true for her. Another example of how the responses varied was sometimes a women would answer no to the initial statement, but then endorse one of the follow up options to how true has this been in the last month. The structure of these questions was also slightly confusing as one women responded that the statement, "I feel angry most of the time" was never true for her, however in the last month the option, "I feel quite angry but am able to shift to other matters" was true. Although it seems possible that the more general and more severe sounding statements would not be endorsed, and the less severe sounding options for in the last month would be endorsed; in order to receive a diagnosis of the DESNOS a woman had to endorse all but one of the subscales, which is based on lifetime data, not current data (Pelcovitz et al. 1997, p. 9–12).

Although explaining why this phenomenon took place is beyond the scope of the current study it is important for future researchers to take up when considering appropriate assessment tools for this population. The responses could reflect the overall difficulty that some of the woman had with the structure of the questions. This response pattern may also reflect the difficulty that these women have reflecting on their life experience as a whole, as well as evidence of their impairment in reporting their

experiences due to the impacts of chronic trauma exposure, as has previously been discussed.

It is interesting to note some of the items that were endorsed by the women who both qualified for the DESNOS diagnosis based on their responses and who were in individual therapy, when compared to the women's responses who did not qualify based on responses and who had never been in individual therapy. Items like, "I am too ashamed of myself to let people get to know me," "I sometimes think that people had the right to hurt me," endorsing cardiopulmonary and sexual symptoms and "I believe life has lost its meaning," showed some of the highest contrast between the level of severity with which they were reported to be true in the past month, versus being denied as ever being true for the nonqualifying women. These items may represent some of the concepts that are most difficult to acknowledge to be true for those not receiving ongoing psychotherapy, and may therefore be influenced by self–awareness as increased by participating in individual therapy. Although the idea of the importance of individual therapy is only conjecture, it is nevertheless and interesting finding which could be further developed in future studies.

For a more reliable assessment of complex trauma there may be a need to give multiple assessment measures (for overview see Briere & Spinazzola, 2005). The Trauma Inventory scale (Briere, 1995), for example, is a measure designed to assess the overall level of acute and chronic posttraumatic symptomatology experienced by an individual without any specific reference to any given traumatic event (p.406). The Trauma and Attachment Belief Scale (TABS; Pearlman, 2003) measures disrupted cognitive schemata and need states associated with exposure to traumatic events. The Inventory of Altered

Self Capacities (Briere, 2000) is a standardized test of difficulties in the areas of relatedness, identity, and affect regulation. The scales of the IASC assess the following domains: Interpersonal Conflicts, Idealization–Disillusionment, Abandonment Concerns, Identity Impairment, Susceptibility to Influence, Affect Dysregulation, and Tension Reduction Activities. The IASC scales have been shown to predict self–reported child abuse history (especially sexual and emotional maltreatment), adult attachment style, "borderline" and "antisocial" personality features, relationship problems, suicidality, dysfunctional sexual behavior, and substance abuse (Briere, 2000; Briere & Runtz, 2002). The Tension Reduction Behavior (TRB) scale of the TSI, and the Tension Reduction Activities (TRA) of the IASC, are measures that can be used to assess specific dysfunctional behaviors common to complex posttraumatic distress (Briere & Spinazzola, 2005, p. 408). Using multiple assessment measures is difficult in a research situation, as it is highly time consuming as well as psychologically and emotionally demanding for the perspective participant. The benefits of giving such in–depth assessment should always be weighed with the potential costs of psychological stress that such extensive assessing could impose, especially for those who may have a complex trauma history and may continue to experience a highly chaotic and stressful lifestyle.

In spite of the all of the acknowledged limitations there were several hopeful findings in the current study. One of the participants who did qualify for the diagnosis of DESNOS according to her responses to the SIDES had some of the most positive statements in the post intervention interview. For example she endorsed questions like, "I feel that I have something wrong with me after what happened that can never be fixed, and in the last month, I feel like I am a permanently damaged person." However, in the

post interview she made revelatory statements such as “I think it’s important to love myself because no one else can love myself.” These findings give some weight to the positive outcomes that were stated to have occurred by the participants. In the case of this individual she showed an initial presence of self-awareness and openness about her level of difficulty and suffering, but then reported dramatic positive change after participating in the 8-week iRest series.

The themes that emerged were also powerful in spite of all of the challenges of self-report with this population. The first theme was that all but one of the women found the practice positive and helpful, this included the “working with opposites” tool. The women used this iRest tool in their own way, to look on the bright side. This variation is notable, as the original intention is different in the iRest protocol. It is offered more as a way to view each emotion, thought and feeling that arises as part of the cycle of pleasure and pain; the individual is invited to meet both of the feelings and it’s opposite eventually allowing for dis-identification from thoughts emotions and beliefs (Miller, 2011). Although many of the women seemed to understand this tool as more of a way to see the good with the bad, it also shows that they were able to think about the practice, internalize it and make use of it in a way that was helpful for them in the moment. This could also be examined in relation to the phases of iRest, as the idea of opposites was introduced with the sixth stage of iRest, feelings, and emotions. Miller (2011) describes the idea of systematic desensitization, where negative emotions are paired with their positive opposite while the body is in a relaxed state (p. 79). This approach, although it was described by the women as allowing them to see the good, may have been the beginnings of what Miller (2011) describes as making new associations with negative

emotions, that is experiencing them while in a relaxed state, allowing the women to eventually have "enhanced emotional control, spontaneous and appropriate responsiveness, inner joy and an ease that pervades every situation and circumstance" (p. 79). Their use and discussion of this tool is evidence that their responses were not based solely on image management, but that they were attempting to make use of the tools that were offered, and found them helpful.

The use of body sensing, or the fourth stage of sensation, and the unanimous discussion that this specific tool in the iRest protocol was particularly helpful is also in line with current research on how to treat complex trauma. Many researchers have discussed the importance of using body sensing techniques in the work with traumatized individuals in order to allow them to stay in their bodies and explore and tolerate sensations that may have been intolerable, and blocked off due to repeated use of the dissociative response (Levine, 2005; Damasio, 2000; Nijenhuis et al., 1999; Rothschild, 2000; Van der Kolk; 1998). Miller (2011) states that beginning to sense subtle sensations in the body allows for heightened awareness of other feelings, emotions, thoughts, joy, and eventually True Nature and pure Awareness (p. 42). This finding is notable as the spontaneous discussion of the effectiveness of the body sensing portion of the iRest protocol was mentioned by all of the participants. The unprompted nature of these responses and the substantial support in the literature allows one to conclude that this aspect of the practice was significant despite reporting biases. The effectiveness of body sensing is an important finding in regards to the effectiveness of using the iRest protocol for this population and may be a portion of the practice that can be made more prominent as it is a promising starting point for deeper change and peace.

The theme of increased self-regulation was another encouraging finding given the previously discussed relationship between trauma and decreased emotional regulation. "The lack or loss of self-regulation is possibly the most far reaching effect of psychological trauma in both children and adults" (Van der Kolk, 1996, p. 187). Researchers have found that long–term meditators had increased emotion regulatory abilities, (Hölzel et al*.,* 2007; Creswell et al., 2007; Chiesa et al., 2010). This may be due to the increase use of processing through the prefrontal cortex, which has been linked to mindfulness (Phelps et al., 2004), rather than immediately reacting with fear or aggression resulting in a bypassing of the processing of the cortex leading to automatic fight-or-flight reactions (LeDoux, 2001). This increased processing is also an area that is contributed to by all aspects of the iRest protocol, from welcoming automatic reactions into awareness, calling on the inner resource, and paring negative sensations with their opposites. It could, therefore, be extrapolated that the decrease in reactivity that was reported by the participants was a result of exactly this process. Although the intervention was only 8-weeks in duration, it is encouraging that all but one of the participants volunteered this self-observation and linked it with their experience of the iRest practice.

The women's increased ability to focus when they were in the group versus doing the practice on their own was also notable. This finding could be related to the theme of difficulties with the practice as it is linked with chaotic life circumstances. It could be assumed that a large contributor to why the participants preferred the group to doing the practice alone was that the rest of their daily lives were not conducive to performing a relaxation technique that is ideally practiced in a quiet, calm and peaceful environment. When participants were doing the iRest practice in session the door to the room was

closed, no one was allowed to enter or exit the room while the iRest sessions were going on and comfortable areas to lie down were created for each participant. The iRest session therefore were in an environment that was presumably very different from what was often possible for these women on a daily basis. Table 1 shows the average number of times each woman reported that she did the iRest home practice in between sessions. None of the women consistently met the recommended three times per week. This, again, may indicate the difficulty in this type of therapeutic intervention given the chaotic nature of these women's life. This finding however, also speaks to the clear preference that all of the women had for receiving the practice in a group setting versus doing the practice alone. This may speak to the initial hypotheses of the research that due to the impacts that trauma has on the brain, meditation would be difficult for chronically trauma–exposed individuals. Many of the women expressed having difficulty concentrating on the recording when they practiced alone, and that something about being in the group was helpful in allowing them to stay more focused on what the instructor was saying as well as generally better able to stay in the present moment. Although it is not surprising that a therapeutic intervention would be more effective when delivered in person rather than via a recording, it is hopeful that despite the inherent challenges of meditation for an individual with a complex trauma history, there can be benefits, especially if the meditation takes place in a supportive group setting.

The eventual aim of the iRest practice is that one is able to have a sense of calm and awareness in every moment, and for example be able to get in touch with the Inner Resource when one is in especially trying circumstances. It is also encouraged that individuals perform the practice sitting, standing and even walking so as to be able to

gradually be able transfer the feeling of calm and awareness beyond the reclining position in which the practice is normally experienced. This transfer, however, is an ability that requires much time to develop, especially for those coping with the symptoms of chronic trauma. It is therefore, understandable, that for the women in the current study a sense of calm and the ability to focus was markedly more difficult when attempting to perform iRest without the support of the group. This finding is important in considering how best to implement this practice with the current population, as the additional benefits of participating in a group were important and effective.

Another interesting finding was that three codes, self-love, self-focus, and positive-focus, seemed to have a large impact on the women's experience of the practice were found only in the shelter group. These codes had to do with discussions about the need to love oneself, to put oneself as a priority, to become aware of what one's own desires and needs are, as well as the idea of focusing on the positive aspects of situations, or generally "the positive" in life. Although the same protocol was given to both groups, it is interesting that these themes were only expressed in one. This may have happened for a variety of reasons. The increase in familiarity that the women in this group had with each other, as they were all living in the shelter together as well as participating in the group may have contributed to the finding. This may account for an increased sense of comfort and intimacy among the group members that did not exist in the community office group where the women had more limited exposure to other group members. It was suggested by administrative staff of the Riley Center that this difference occurred because other groups are held at the shelter, some of which groups focus on similar topics like self-care. This idea suggests the importance of outside supports such as individual and

group therapy in conjunction with the iRest protocol. The women in the shelter group may have also had an increased sense of safety and continuity in their lives as they were living in the shelter which provides a dependable and structured living environment that the women accessing services through the community office may not have been experiencing. This idea indicates the need for stability of housing and transportation for individuals before beginning a treatment so as to allow for continuity and optimal efficacy of the practice.

Table 1

Participant Make Up Sessions and Reported Home Practice

Participant	Missed sessions/Required make up sessions	Average reports of weekly home practice
1	2*	1.00
2	5	0.25
3	0	1.75
4	2	2.20
5	4	1.00
6	3	0.00

Note: Author's table.

*One of these was not a full absence as she came in after discussion of the lesson for that day but participated in iRest practice.

The issue of regular attendance was important in the current study and should be considered for future studies with this population. Table 1 shows the number of times each woman was absent and therefore had a make-up session rather than the full iRest class. Even in the shelter group in which the practice was being held where the women

lived, it was difficult for many of them to attend regularly, and all but one of the women in the entire study had at least two absences. The one women who was able to attend all eight sessions did not have a job or children living with her at the shelter, which were two reasons that many of the other women gave for why they were not able to attend sessions. There were other reasons given in the community office group, mostly around housing and family crises. Although all participants were asked to sign a participant agreement that included they would not miss any of the sessions, it became clear as the study progressed that this was a nearly impossible standard to hold due the variety of barriers to treatment that exist in these women's lives, as discussed in the limitations section. Make up sessions consisted of the iRest teacher having a shorter session, usually about 20 minutes, in which she would go over the lesson with the individual that they had missed, and potentially a brief experiential exercise which served to clarify the lesson. Although the limitations of this method are clear, it is also important to consider the need for alternative treatment models that take into account the circumstances from which woman who represent the complex trauma population are coming from.

The issue of cross-cultural applicability is important to consider in any research study, and was one that came to the forefront in the present study. The Riley Center is a bilingual shelter that admits monolingual Spanish speaking women. Many of those women showed great interest in being part of the study, as the original outreach meeting was given to all of the women who were currently in the shelter, with a translator present. The current study did not include monolingual Spanish speaking women as it would have a required a translator present for all of the iRest classes as well as for the pre and post interviews, because the iRest teacher and I were both monolingual English speakers. This

exclusion was an unfortunate but not uncommon circumstance as Latinas make up a large percentage of women with complex trauma histories but who are, along with other ethnic minorities, often not represented in research studies. The National Violence Against Women Survey found that there was little difference in Latina and non-Latina women's reports of intimate partner physical assault and intimate partner stalking. However, Latinas were significantly more likely than non-Hispanic women to report that they were raped by a current or former intimate partner at some time in their lifetime (Tjaden & Thoennes, 2000, p. 27). Tjaden & Thoennes (2000) also discuss the need for more research on intimate partner violence among specific racial and ethnic groups. According to the 2010 census Hispanics are the largest minority group in the United States, and yet many research studies and treatments are not designed with cultural and linguistic differences in mind (Humes, Jones & Ramirez, 2012). This includes the iRest protocol which does not currently have a Spanish translation. It has been found that Latina women underutilize formal helping resources because of language barriers, cultural barriers, and differences and fear and mistrust (Bloom et al., 2009). It is, therefore, important for the iRest protocol, and other treatment modalities shown to be useful for treating complex trauma to be made applicable for all populations who could benefit from them. In addition, cultural factors such as a strong orientation toward family and community must be taken into account in interventions and programs that attempt to treat symptoms in a culturally competent, effective, and respectful manner. Complex trauma needs to be considered a community problem that affects, and is affected by, multiple variables in the environment and society in which it occurs.

In closing, a comment on the research process as a whole from my personal perspective may be useful given the phenomenological methodology of the present study. As was stated previously, the phenomenological researcher aims to extract the meaning of the participant's existence through the exploration of their subjective experience (von Eckartsberg, 1998). The research's subjective experience is useful data, just as the countertransference reactions of the therapist are said to be useful in the psychoanalytic therapy process. The researcher found that there was great difficulty involved with being mindful to all that she was experiencing throughout the study. This may be that the level of stress and chaos that was present in almost every phase of the project was overwhelming, similar to a dissociative trauma response. The impacts of hearing multiple trauma accounts, as well as working closely with women with such intense trauma histories only became evident when the researcher began to experience signs of vicarious trauma, such as intrusive images, avoidance, and exhaustion. There was a certain level of adaptability that was necessary in order for the study to be possible, which in many ways paralleled how the women in the study were forced to constantly adapt and survive in the dire circumstances of their lives. Many times throughout the process the researcher experienced feelings of hopelessness, anger, exhaustion and apathy; perhaps a modulated version of what the women in the study experience on a continuous basis. There was a feeling of being pulled into a highly volatile, and unpredictable world and using the skills of the iRest protocol that were being offered was challenging to apply beyond time spent in the experimental group. This speaks to the profound difficulties these women face, not only in being able to find day-to-day stability, but also in achieving a baseline of calm equanimity. Future researcher's working with this population should keep these

challenges in mind, as well as the need for a personal practice of self-care and awareness. This study has shown that in spite of the many difficulties in working with underprivileged populations with chronic trauma exposure, iRest can be a helpful and healing conjunct therapy.

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APPENDIX A: RECRUITMENT LETTER

To Prospective Participants in this Research Study:

You are invited to participate in a study to better understand how women with trauma history experience the practice of iRest®Yoga Nidra. The procedure will involve an initial intake interview, which has been designed to last approximately 45 minutes and no more than 90 minutes, an eight week guided Yoga Nidra practice followed by a semi-structured interview at a location and time convenient to you and the interviewer. The intake interview will be recorded for the purposes tracking eligibility in the study, and the final interview will be recorded for purposes of transcription and has been designed to last approximately 45 minutes and no more than one hour.

In the first phase of the interview you will be invited to talk with the interviewer in a manner that you find safe and comfortable about your experiences, thoughts, beliefs, and feelings about your trauma history and your experience with the iRest practice, in the second phase the interviewer will ask you specific questions of research interest regarding the presence of specific experiences or feeling you may have and if they have changed during the course of iRest. The third and last phase of the interviews will give you and the interviewer an opportunity to refine your shared understanding of the topics discussed and to talk about your perceptions of the interview process. No prior preparation on your part is required for any part of the interview process.

For the protection of your privacy, all information received from you will be kept strictly confidential, and your identity will be protected within the limits of the law (see the attached confidentiality statement). The research procedure has been designed not to collect unnecessary identifying information and any identifying information (such as the contact information necessary to arrange the interview) will be kept separate from the interview data. Your data will be identified only by codes. The interviewer will ask you to refrain from giving names and when necessary to use only first names when referring to any other persons in your interview. Only the investigator and two auditors (who will monitor the validity and reliability of the research process) will have access to the data associated with this study; electronic data will be password protected and hardcopy data will be stored in a locked area and destroyed within a year of the transcription date.

To further ensure your privacy, the investigator will transcribe all data and no third-party transcribers will be used. In the reporting of information in published materials, the investigators will alter any information that might identify you, included your name and city, to ensure your anonymity. The investigators will omit from published materials any particular details you specify and will ask you to specify any other measures that you deem appropriate to further safeguard confidentiality.

No direct benefit including any monetary recompense or any specific benefits resulting from your participation is offered or guaranteed. If you choose to participate, your contribution will help increase understanding how those who have trauma histories experience Yoga Nidra which has rarely been discussed in the professional literature.

This study is designed to minimize potential risks to you. Nonetheless, this inquiry may touch sensitive areas for some people. Depending on your unique history with the topic, you may experience discomfort when discussing situations that were

challenging for you. The purpose of some of the questions is to elucidate the possible conflict between trauma and a Yoga Nidra practice. Thus there will be a limited number of counseling sessions made available to you through the Riley center which you may choose to utilize in the case that any questions asked during the course of research or participation in the iRest practice cause emotional or psychological distress. If you have any concerns or questions before, during, or after your interviews, the interviewer will make every effort to discuss them with you and inform you of options for resolving your concerns/facilitate referrals to supervisors, consultants, or therapists if such a need should arise. Should you at any time wish to discuss any issues related to your contribution to this study, including questions regarding your rights as a participant, suggestions for how to minimize potential risks, or concerns that you have been put at risk, you may contact—anonymously, if you wish—the principle investigator, Courtney Hartman at [withheld for privacy] or via email: [withheld for privacy]; the chair if this research project, Douglas Vakoch, PhD at [withheld for privacy] or the CIIS HRRC coordinator Emi Kojima at [withheld for privacy].

If you decide to participate in this research, you may refuse to answer any question, withdraw your consent, and/or discontinue your participation, at any time during the conduct of the study and for any reason without penalty or prejudice. You may request a summary of the research findings by providing your mailing address with your signature.

_____
Participant's Name (please print)

_____ _____
Participant's Signature Date

_____

_____
Street Mailing Address (optional)

APPENDIX B: INFORMED CONSENT FORM

Confidentiality Agreement

Your participation in this study will remain confidential, and your identity will not be stored with your data. Your responses will be assigned a code number, and the list connecting your name with this number will be kept in a locked room and will be destroyed once all the data have been collected and analyzed. Your participation in this study will remain confidential and there will be no link between your responses and your identity.

There are certain situations where a psychologist is required by law to reveal information, usually for the protection of the patient, research participant, or others. A report to the police department or to the appropriate protective agency is required in the following cases:

- ***Where there is a reasonable suspicion of child abuse; in the case of a person 16 years of age or under has been the victim of abuse or neglect or in the case that a reported perpetrator of past child abuse is still posing a reasonable threat to other person's under the age of 16.***
- ***Where there is a reasonable suspicion of elder adult physical abuse; in the case of a person 60 years or older is the victim of abuse or neglect.***
- ***Where there is a reasonable suspicion that you may present a danger of violence to others;***
- ***Where there is a reasonable suspicion that you are likely to harm yourself unless protective measures are taken.***

_____ _____

Participant Signature Date

APPENDIX C: RESEARCH PARTICIPANT BILL OF RIGHTS

As a participant in a research study, you have the right:
1. To have enough time to decide whether or not to be in the research study and to make that decision without any pressure from the people who are conducting the research.

2. To refuse to be in the study at all, and to stop participating at any time after you begin the study.

3. To be told what the study is trying to find out, what will happen to you, and what you will be asked to do if you are in the study.

4. To be told about the reasonably foreseeable risks of being in the study.

5. To be told about the possible benefits of being in the study.

6. To be told whether there are any costs associated with being in the study and whether you will be compensated for participating in the study.

7. To be told who will have access to information collected about you, and how your confidentiality will be protected.

8. To be told whom to contact with questions about the research, about research–related injury, and about your rights as a research subject.

If the study involves treatment or therapy:

9. To be told about the other nonresearch treatment choices you have.

10. To be told where treatment is available should you have a research–related injury, and who will pay for research–related treatment.

Taken from: http://research.uiowa.edu/hso/index.php?get=bill

APPENDIX D: PARTICIPANT AGREEMENT GUIDELINES

In an attempt to create a feeling of safety and security for our participants as well as the importance of having consistency in our study there are a few guidelines we ask that all of our participants agree to before entering the iRest® Yoga Nidra study.

- I agree to come to all eight of the iRest sessions, except in the cases of extreme and unforeseen emergencies.
- I agree to participate in a 45–90 minute interview with the researcher within a week after finishing the 8th iRest class.
- I agree to be sober at all of the iRest classes as well as the final interview.
- I agree to do my best to do the iRest home practice at least three times a week and will honestly report how often I am able to do the home practice.
- I agree to keep all information that is shared by other group members in the iRest classes confidential and will not discuss anything beyond my own experience with anyone.
- I understand that I do not have to share anything will in the group, and can decide to discontinue my participation in this study at any time.

_____
Print Name

_____ _____
Signature Date

APPENDIX E: SIDES

APPENDIX E: SIDES

Structured Interview for Disorders of Extreme Stress-NOS (SIDES)

This instrument is meant to be given after the SCID-PTSD or the CAPS

==========

Name: _____ **Age:** _____ **Sex:** ____ **Date:** _____

Nature of traumatic experience(s) :

How old was patient? _____ **Duration of trauma** _____ **Time since the trauma** _____

Instructions:
What follows are descriptions of typical reactions someone could have after traumatic experiences such as you have had. Please indicate if you had similar feelings soon after the experience or as long as you can remember. After each reaction that you feel describes your behavior indicate how severely you felt that reaction in the past month. If the reaction is not one you feel describes you, enter a four, for not applicable, as the severity rating for the past month.

NOTE: In view of the fact that some interviewees may be victims of interpersonal violence or other severe trauma very early in life, and essentially have no experience with pre-traumatic functioning, the preamble "after the experience" may not apply. Alternative wording (e.g. "as long as I can remember") is suggested where appropriate.

I) ALTERATIONS IN REGULATION OF AFFECT AND IMPULSES

Ia. Affect Regulation

1. Small problems get me very upset. For example, I get angry at a minor frustration. I cry easily.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	**0**
Sometimes I overreact a little	**1**
Sometimes I get very upset, or everything upsets me more than it used to	**2**
Often I get extremely upset, have tantrums	**3**
Not applicable	**4**

2. I find it hard to calm myself down after I become upset and have trouble getting back on track.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	**0**
I get momentarily upset	**1**
It keeps coming back to me hour after hour	**2**
I get completely consumed by it	**3**
Not applicable	**4**

3. When I feel upset, I have trouble findings ways to calm myself down.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I need to make special efforts to calm myself (e.g. talking, sports, listening to music)	1
I need to stop everything and focus all my energy on calming down	2
I need to resort to extreme measures, like getting drunk, taking drugs, or doing other harmful things to my body	3
Not applicable	4

IIb. Modulation of Anger

4. I feel angry most of the time.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I feel quite angry but I am able to shift to other matters	1
My anger gets in the way of doing things	2
My anger dominates my daily life	3
Not applicable	4

5. I have thoughts or images of hurting somebody else.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
Yes, fleeting thoughts	1
I think about hurting people every day	2
I can't stop thinking about hurting people	3
Not applicable	4

6. I have trouble controlling my anger.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I snap at people	1
I yell or throw things	2
I actually attack people physically	3
Not applicable	4

7. I worry about people finding out how angry I am.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0

I have trouble confronting someone when they hurt me	1
I do not confront the person I'm angry at, but I show my anger in other ways	2
I do not let anyone know in words or actions that I am angry	3
Not applicable	4

Ic. Self-Destructive

8. I have been in accidents or near accidents.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
Occasional accidents causing harm or pain but not requiring medical attention	1
One accident or episode requiring medical attention	2
More than one serious accident or episode requiring medical attention	3
Not applicable	4

9. I find myself careless about making sure that I am safe.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I think about the risks involved in relationships or situations, but do it anyway	1
I take undue risks regarding the people I am with or places I visited	2
I keep company with people who I know could be dangerous; not taking measures to protect myself in dangerous situations	3
Not applicable	4

10. I have deliberately tried to hurt myself (like burning or cutting myself).

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I hit or kick objects	1
I hurt myself deliberately (pinching, scratching, hitting, banging) without serious damage	2
I hurt myself deliberately in ways that cause serious physical damage	3
Not applicable	4

Id. Suicidal Preoccupation

11. I have thought about killing myself.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I was preoccupied, but had no plan	1
I made gestures or was chronically preoccupied with plans	2
I made one or more serious suicide attempts	3
Not applicable	4

Ie. Difficulty Modulating Sexual Involvement or Preoccupation

12. I make active efforts to keep myself from thinking about sex.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I try not to think about sex	1
I work very hard not to think about sex	2
I will not tolerate any thoughts about sex	3
Not applicable	4

13. It bothers me to be touched in general.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
It sometimes bothers me	1
It often or regularly bothers me	2
I simply could not stand it	3
Not applicable	4

14. It bothers me to be touched in a sexual way.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
Sometimes it bothers me	1
It often or regularly bothers me	2
I simply could not stand it	3
Not applicable	4

15. I actively avoid sex.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I find myself making excuses	1
I try not to have sex	2
I don't have sex	3
Not applicable	4

16. I find myself thinking about sex more than I want to.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I think about it too much	1
It distracts me from what I should be doing	2
I am obsessed with it	3
Not applicable	4

17. I find myself driven to engage in sexual activities without really feeling that I had a choice.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I feel the urge, but I do not act on it	1
I feel compelled to, but I force myself to stop	2
I engage in compulsive sex	3
Not applicable	4

18. I am active sexually in ways that I know put me in danger

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I am a bit careless	1
I talk myself into ignoring the danger or I only see the danger afterwards	2
I knowingly put myself in danger	3
Not applicable	4

If. Excessive Risk Taking

19. I expose myself to situations that might be dangerous, e.g. I get involved with people who might hurt me. I go to places that are not safe. I drive too fast.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I am a bit careless	1
I talk myself into ignoring the danger or I only see the danger afterwards	2
I knowingly put myself in danger	3
Not applicable	4

II) ALTERATIONS IN ATTENTION OR CONSCIOUSNESS

IIa. Amnesia

20. There are parts of my life that I cannot remember, or I am confused about what happened, or I am unsure whether certain important things did or did not happen to me.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
There are a few memory lapses	1
There are important gaps in my memory; there are missing periods	2
I have no memory for days, months, or years of my life.	3
Not applicable	4

IIb. Transient Dissociative Episodes and Depersonalization

21. I have difficulty keeping track of time in my daily life.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

IIIb. Permanent Damage

26. I feel that I have something wrong with me after what happened to me that can never be fixed.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I feel wounded, but that I can get better	1
I feel that parts of me are damaged but some parts of me still function	2
I feel like I am a permanently damaged person	3
Not applicable	4

IIIc. Guilt and Responsibility

27. I feel chronically guilty about all sorts of things.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I feel more responsible than I need to for things that go wrong	1
I blame myself for things that go wrong even when I had nothing to do with it	2
I blame myself and punish myself for whatever goes wrong, even when I have nothing to do with it	3
Not applicable	4

IIId. Shame

28. I am too ashamed of myself to let people get to know me. (How far did you go to hide from others? Did you avoid talking with people? Make up a cover story?)

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I make up stories to hide things I'm ashamed of	1
I avoid letting most people know who I really am for fear that they'll get to know me	2
I let no one get close to me to make sure they won't find out who I really am	3
Not applicable	4

IIIe. Nobody Can Understand

29. I feel set apart and very different from other people.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I feel quite different from people around me	1
I feel different from others and distant, estranged or alienated from them	2
I feel like I am from another planet and don't belong anywhere	3
Not applicable	4

IIIf. Minimizing

30. I feel that other people made too big a deal of your having been exposed to potentially dangerous or violent situations.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
Minimal	1
Moderate	2
Severe	3
Not applicable	4

** (The following section (IV) only applies to victims of interpersonal violence. For others skip to section V).**

IV) ALTERATIONS IN PERCEPTION OF THE PERPETRATOR

IVa. Adopting Distorted Beliefs

31. I sometimes think that people had the right to hurt me.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
They could not help it, they were mentally ill or drug addicted	1
I was pretty rotten; most people would have done the same thing if they had been in their shoes	2
I deserved everything I got	3
Not applicable	4

IVb. Idealization of Perpetrator

32. I sometimes think that the people who hurt me are very special.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
They are better people than I am	1
They are very special people	2
They possess special powers that give them the right to do what they did	3
Not applicable	4

IVc. Preoccupation with Hurting Perpetrator

33. I am preoccupied with taking revenge on the people who have hurt me.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I think about it, but move on to other things	1
I think about it so much that it gets in the way of taking care of daily activities	2
Taking revenge dominates my thoughts	3
Not applicable	4

V) ALTERATIONS IN RELATIONS WITH OTHERS

Va. Inability to Trust

34. I have trouble trusting people.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I am guarded and am suspicious of people's motives	1
People need to prove themselves over and over again before I let my guard down	2
I don't trust anybody	3
Not applicable	4

35. I avoid having relationships with other people.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I arrange to have lots of time by myself	1
I do not initiate contact with others. I do not make phone calls or write letters	2
I do not return phone calls, reply to letters. I stop conversations as soon as I can	3
Not applicable	4

36. I have difficulty working through conflicts in relationships.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I am quiet or avoid situations that might cause conflict, or I am easily hurt and offended	1
I have trouble hearing other viewpoints, or have difficulty standing up for myself	2
I quit jobs and relationships without negotiating, I threaten to sue people if they offend me, I can't stand it if people disagree with me	3
Not applicable	4

Vb. Revictimization

37. I find that other traumatic experiences keep happening to me.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I find myself occasionally hurt in relationships	1
I repeatedly find myself hurt in relationships	2
I am seriously hurt by people I love or thought I could trust	3
Not applicable	4

Vc. Victimizing Others

38. I have hurt other people in ways similar to how I was hurt.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
People have told me once or twice that I am hurtful	1
People have told me several times that I am hurtful, or I deliberately hurt people	2
I seriously hurt or injure other people in ways that are similar to ways I have been hurt myself	3
Not applicable	4

VI) SOMATIZATION

VIa. Digestive System

39. I have trouble with (circle item that apply), yet doctors have not found a clear cause for it.
   a) vomiting
   b) abdominal pain
   c) nausea
   d) diarrhea
   e) intolerance of food

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I have had some trouble-did not require regular medical attention	1
I went to the doctor, and was prescribed more than one medicine without relief	2
I had several doctor visits, hospital admissions, and/or invasive diagnostic tests	3
Not applicable	4

VIb. Chronic Pain

40. I suffer from chronic pain (circle items that apply), yet doctors could not find a clear cause for it.
   a) in your arms and legs
   b) in your back
   c) in your joints
   d) during urination
   e) headaches
   f) elsewhere

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
Some trouble-did not require medical attention	1
Visited a doctor, more than one medicine without relief	2
Several doctor visits, a hospital admission, and/or invasive diagnostic tests	3
Not applicable	4

VIc. Cardiopulmonary Symptoms

41. I suffer from (circle items that apply), yet doctors have not found a clear cause for it.
   a) shortness of breath
   b) palpitations
   c) chest pain
   d) dizziness

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember*?" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
Some trouble-did not require medical attention	1
Visited a doctor, more than one medicine without relief	2
Several doctor visits, a hospital admission, and/or invasive diagnostic tests	3
Not applicable	4

VId. Conversion Symptoms

42. I suffer from trouble with (circle items that apply), yet doctors have not found a clear cause for it.

a) remembering things
b) swallowing
c) losing your voice
d) blurred vision
e) actual blindness
f) fainting and losing consciousness
g) seizures and convulsions
h) being able to walk
i) paralysis or muscle weakness
j) urination

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
Some trouble-did not require medical attention	1
Visited a doctor, more than one medicine without relief	2
Several doctor visits, a hospital admission, and/or invasive diagnostic tests	3
Not applicable	4

VIe. Sexual Symptoms

43. I suffer from (circle items that apply), yet doctors have not found a clear cause for it.

a) burning sensations in your sexual organs or rectum (not during intercourse)
b) impotence (males)
c) irregular menstrual periods (females)
e) excessive pre-menstrual tension
f) excessive menstrual bleeding

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
Some trouble-did not require medical attention	1
Visited a doctor, more than one medicine without relief	2
Several doctor visits, a hospital admission, and/or invasive diagnostic tests	3
Not applicable	4

VII) ALTERATIONS IN SYSTEMS OF MEANING

VIIa. Foreshortened Future

44. I feel hopeless and pessimistic about the future.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I get discouraged and lose interest in planning for myself	1
I don't see a future and go through the motions of living	2
I feel condemned and have no future left	3
Not applicable	4

45. I don't expect I'll be able to find happiness in love relationships.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
I sometimes feel distant and disconnected from my loved ones	1
I go through the motions of relationships, but feel numb	2
I don't feel part of the human race, and cannot imagine ever loving anybody	3
Not applicable	4

46. I don't find satisfaction in work.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
Sometimes it is a routine, but I can forget about my troubles by working	1
Work is a burden, and I have trouble keeping my interest up	2
I could not care less about my work	3
Not applicable	4

VIIb. Loss of Previously Sustaining Beliefs

47. I believe that life has lost its meaning.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
Sometimes it seems pointless	1
I cannot think of a good reason, but I keep on living	2
I live in a huge void	3
Not applicable	4

48. There have been changes in my philosophy or religious beliefs—or in, the religious beliefs or philosophical beliefs I grew up with.

"Was this true for you *after the experience*" or "Has this been true for you *for as long as you can remember?*" Yes No

"How true has this been for you *in the last month*":

None; not at all	0
My beliefs have changed, but it was a normal progression of life	1
I am disillusioned with the religious beliefs I grew up with	2
I hate the religious beliefs I grew up with	3
Not applicable	4

SIDES Data Entry Sheet

Instructions:

Translate raw scores from the SIDES into scores on this sheet by circling the appropriate choice, according to the following scoring system:

1. For all "Yes" and "No" answers on the SIDES, circle the same on this sheet. (For items #39 – 43, only one of the somatic symptom types must be circled for a "Yes".)
2. For all severity scores of 0 or 1 on the SIDES, circle 0 on this sheet.
3. For all severity scores of 2 or 3 on the SIDES, circle the same number on this sheet.
4. For all severity scores of "Not Applicable" on the SIDES, circle * on this sheet.

SCALE I ...

1.	Yes	No	Ia.	0 2 3	*
2.	Yes	No		0 2 3	*
3.	Yes	No		0 2 3	*
4.	Yes	No	Ib.	0 2 3	*
5.	Yes	No		0 2 3	*
6.	Yes	No		0 2 3	*
7.	Yes	No		0 2 3	*
8.	Yes	No	Ic.	0 2 3	*
9.	Yes	No		0 2 3	*
10.	Yes	No		0 2 3	*
11.	Yes	No	Id.	0 2 3	*
12.	Yes	No	Ie.	0 2 3	*

SCALE I continued

13.	Yes	No		0 2 3	*
14.	Yes	No		0 2 3	*
15.	Yes	No		0 2 3	*
16.	Yes	No		0 2 3	*
17.	Yes	No		0 2 3	*
18.	Yes	No		0 2 3	*
19.	Yes	No	If.	0 2 3	*

SCALE II

20.	Yes	No	IIa.	0 2 3	*
21.	Yes	No	IIb.	0 2 3	*
22.	Yes	No		0 2 3	*
23.	Yes	No		0 2 3	*
24.	Yes	No		0 2 3	*

SCALE III

25.	Yes	No	IIIa.	0 2 3	*
26.	Yes	No	IIIb.	0 2 3	*
27.	Yes	No	IIIc.	0 2 3	*
28.	Yes	No	IIId.	0 2 3	*
29.	Yes	No	IIIe.	0 2 3	*
30.	Yes	No	IIIf.	0 2 3	*

SCALE IV

31.	Yes	No	IVa.	0 2 3	*
32.	Yes	No	IVb.	0 2 3	*
33.	Yes	No	IVc.	0 2 3	*

SCALE V ...

34.	Yes	No	Va.	0 2 3	*
35.	Yes	No		0 2 3	*
36.	Yes	No		0 2 3	*

SCALE V continued

37.	Yes	No	Vb.	0 2 3	*
38.	Yes	No	Vc.	0 2 3	*

SCALE VI

39.	Yes	No	VIa.	0 2 3	*
40.	Yes	No	VIb.	0 2 3	*
41.	Yes	No	VIc.	0 2 3	*
42.	Yes	No	VId.	0 2 3	*
43.	Yes	No	VIe.	0 2 3	*

SCALE VII

44.	Yes	No	VIIa.	0 2 3	*
45.	Yes	No		0 2 3	*
46.	Yes	No		0 2 3	*
47.	Yes	No	VIIb.	0 2 3	*
48.	Yes	No		0 2 3	*

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SIDES Score Worksheet

Lifetime Presence: Using the criteria listed below, calculate the lifetime presence ("yes/no") of symptoms for each subscale. For example, if 2 of items 1-3 are present, write "yes". Calculate the current presence for the overall scale by following instructions below. Indicate "yes" or "no" in the space provided.

Current Severity: Obtain a subscale score by averaging the items within each subscale. Place the average in the space provided. Total the subscale averages & divide by the number of subscales within each scale. The average of the subscales comprises the overall current severity for that scale. Items scored with an "*" are not included in the calculations. Mark these items with an "*" (or 0?) as the score.

SCALE I

	Lifetime Presence		Current Subscale Severity	
Ia.	2 of items 1 - 3		Average of items 1 - 3	
Ib.	2 of items 4 - 7		Average of items 4 - 7	
Ic.	1 of items 8 - 10	_____	Average of items 8 - 10	_____
Id.	Item 11	_____	Score for item 11	_____
Ie.	1 of items 12 – 18		Average of items 12 - 18	
If.	Item 19	_____	Score for item 19	_____

Current Presence (severity scores of 2 or higher on Ia AND presence of 1 of b-f) (yes/no): _____

Overall Current Severity: (average subscale scores) Total: _____ ÷ 6 = _____

SCALE II

	Lifetime Presence		Current Subscale Severity	
IIa.	Item 20		Score for item 20	
IIb.	1 of items 21 – 24	_____	Average of items 21 - 24	_____

Current Presence (severity scores of 2 or higher on IIa. or IIb.) (yes/no): _____

Overall Current Severity: (average subscale scores) Total: _____ ÷ 2 = _____

SCALE III

	Lifetime Presence		Current Subscale Severity	
IIIa.	Item 25		Score for item 25	
IIIb.	Item 26		Score for item 26	
IIIc.	Item 27	_____	Score for item 27	_____
IIId.	Item 28	_____	Score for item 28	_____
IIIe.	Item 29		Score for item 29	
IIIf.	Item 30		Score for item 30	

Current Presence (severity scores of 2 or higher on 2 of a – f) (yes/no): _____

Overall Current Severity: (average subscale scores) Total: _____ ÷ 6 = _____

SCALE IV: Do not score

SCALE V

	Lifetime Presence		Current Subscale Severity	
Va.	1 of items 34 – 36	_____	Average of items 34 - 36	_____
Vb.	Item 37	_____	Score for item 37	_____
Vc.	Item 38	_____	Score for item 38	_____

Current Presence (severity score of 2 or higher on any of a – c) yes/no): _____

Overall Current Severity: (average subscale scores) Total: _____ ÷ 3 = _____

SCALE VI

	Lifetime Presence		Current Subscale Severity	
VIa.	Item 39	_____	Score for item 39	_____
VIb.	Item 40	_____	Score for item 40	_____
VIc.	Item 41	_____	Score for item 41	_____
VId.	Item 42		Score for item 42	
VIe.	Item 43	_____	Score for item 43	_____

Current Presence (severity scores of 2 or higher on 2 of a – e) (yes/no): _____

Overall Current Severity: (average subscale scores) Total: _____ ÷ 5 = _____

SCALE VII

	Lifetime Presence		Current Subscale Severity	
VIIa.	1 of items 44 – 46		Average of items 44 - 46	
VIIb.	1 of items 47 or 48	_____	Average of items 47 - 48	_____

Current Presence (severity scores of 2 or higher on 2 of a or b) (yes/no): _____

Overall Current Severity: (average subscale scores) Total: _____ ÷ 2 = _____

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SIDES Summary Sheet

Instructions: Copy scores from the previous page (Score Worksheet) onto the corresponding places on the SIDES Summary Sheet. * Scores of 2 or higher are clinically significant. *

		Lifetime Presence	Current Presence	Current Severity
I.	**Alterations in Regulation of Affect and Impulses**		____	____
	Ia. Affect Regulation			
	Ib. Modulation of Anger			
	Ic. Self-destructive	____		____
	Id. Suicidal Preoccupation	____		____
	Ie. Difficulty Modulations Sexual Involvement Preoccupation	____		____
	If. Excessive Risk Taking	____		____
II.	**Alterations in Attention or Consciousness**			
	IIa. Amnesia			
	IIb. Transient Dissociative Episodes and Depersonalization			
III.	**Alterations in Self-Perception**			
	IIIa. Ineffectiveness	____		____
	IIIb. Permanent Damage	____		____
	IIIc. Guilt and Responsibility	____		____
	IIId. Shame	____		____
	IIIe. Nobody can Understand	____		____
	IIIf. Minimizing	____		____
IV.	**Alterations in Perception of the Perpetrator**		____	____
	IVa. Adopting Distorted Beliefs	____		____
	IVb. Idealization of Perpetrator	____		____
	IVc. Preoccupation with Hurting Perpetrator	____		____
V.	**Alterations in Relationships with Others**		____	____
	Va. Inability to Trust	____		____
	Vb. Revictimization	____		____
	Vc. Victimizing Others	____		____
VI.	**Somatization**			
	VIa. Digestive System			
	VIb. Chronic Pain			
	VIc. Cardiopulmonary Symptoms	____		____
	VId. Conversion Symptoms	____		____
	VIe. Sexual Symptoms	____		____
VII.	**Alterations in Systems of Meaning**		____	____
	VIIa. Foreshortened Future	____		____
	VIIb. Loss of Previously Sustained Beliefs			

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SIDES Summary Sheet

Instructions: Copy scores from the previous page (Score Worksheet) onto the corresponding places on the SIDES Summary Sheet. * Scores of 2 or higher are clinically significant. *

		Lifetime Presence	Current Presence	Current Severity
I.	**Alterations in Regulation of Affect and Impulses**		____	____ (Overall Severity)
	Ia. Affect Regulation	____		____
	Ib. Modulation of Anger	____		____
	Ic. Self-destructive	____		____
	Id. Suicidal Preoccupation			(Subscale Severity)
	Ie. Difficulty Modulations Sexual Involvement Preoccupation			
	If. Excessive Risk Taking	____		____
II.	**Alterations in Attention or Consciousness**		____	____ (Overall Severity)
	IIa. Amnesia	____		____
	IIb. Transient Dissociative Episodes and Depersonalization	____		____ (Subscale Severity)
III.	**Alterations in Self-Perception**		____	____ (Overall Severity)
	IIIa. Ineffectiveness	____		____
	IIIb. Permanent Damage	____		____
	IIIc. Guilt and Responsibility	____		____
	IIId. Shame	____		____ (Subscale Severity)
	IIIe. Nobody can Understand	____		____
	IIIf. Minimizing	____		____
IV.	**Alterations in Perception of the Perpetrator**		____	____ (Overall Severity)
	IVa. Adopting Distorted Beliefs	____		____
	IVb. Idealization of Perpetrator	____		____ (Subscale Severity)
	IVc. Preoccupation with Hurting Perpetrator			
V.	**Alterations in Relationships with Others**			(Overall Severity)
	Va. Inability to Trust			
	Vb. Revictimization			(Subscale Severity)
	Vc. Victimizing Others			
VI.	**Somatization**		____	____ (Overall Severity)
	VIa. Digestive System	____		____
	VIb. Chronic Pain	____		____
	VIc. Cardiopulmonary Symptoms	____		____ (Subscale Severity)
	VId. Conversion Symptoms	____		____
	VIe. Sexual Symptoms			
VII.	**Alterations in Systems of Meaning**			(Overall Severity)
	VIIa. Foreshortened Future	____		____
	VIIb. Loss of Previously Sustained Beliefs	____		____ (Subscale Severity)

van der Kolk, Pelcovitz, Herman, Roth, Kaplan, Waldinger, Guastella & Spitzer

APPENDIX F: RESEARCH STUDY INVITATION

8 week iRest® Yoga Nidra Study for Women who have experienced Trauma

My name is Courtney Hartman and I am a doctoral candidate in the clinical psychology program and California Institute of Integral Studies. I am conducting a research study as part of the requirements of my degree in clinical psychology, and I would like to invite you to participate.

I am interested in understanding how women who have experienced trauma experience the iRest Yoga Nidra practice. iRest is a research–based transformative practice of deep relaxation and meditative inquiry that has been designed to release negative emotions and thought patterns, calm the nervous system, and to develop a deep capacity to meet any and all circumstances you may encounter in life (www.irest.us).

If you decide to participate, you will need to call me in order to schedule an appointment for an initial intake interview which has been designed to last approximately 30 minutes and no more than one hour. The iRest guided meditation sessions will last 90 minutes and be held once a week for eight weeks. At the end of the eight weeks the will be a semi ‐structured interview at a location and time convenient to you and the interviewer. The interview will be recorded for the purposes of transcription and has been designed to last approximately 45 minutes and no more than one hour.

In the first phase of the interview you will be invited to talk with the interviewer in a manner that you find safe and comfortable about your experiences, thoughts, beliefs, and feelings about your experience with the iRest practice, in the second phase the interviewer will ask you specific questions of research interest regarding the presence of specific experiences or feelings you may have and if they have changed during the course of iRest. The third and last phase of the interviews will give you and the interviewer an opportunity to refine your shared understanding of the topics discussed and to talk about your perceptions of the interview process. No prior preparation on your part is required for any part of the interview process. You may feel uncomfortable answering some of the questions. You do not have to answer any questions that you do not wish to.

Information Regarding Confidentiality

For the protection of your privacy, all information received from you will be kept strictly confidential, and your identity will be protected within the limits of the law (see the attached confidentiality statement). The research procedure has been designed not to collect unnecessary identifying information and any identifying information (such as the contact information necessary to arrange the interview) will be kept separate from the interview data. Your data will be identified only by codes. The interviewer will ask you to refrain from giving names and when necessary to use only first names when referring to any other persons in your interview. Only the investigator and two auditors (who will monitor the validity and reliability of the research process) will have access to the data associated with this study; electronic data will be password protected and hardcopy data will be stored in a locked area and destroyed when no longer needed. Others in the group

will hear what you say, and it is possible that they could
tell someone else. Because we will be talking in a group, we cannot promise that what you say will remain completely private, but we will ask that you and all other group members respect the privacy of everyone in the group.

No direct benefit including any monetary compensation or any specific benefits resulting from your participation is offered or guaranteed. If you choose to participate, your contribution will help increase understanding how those who have trauma histories experience Yoga Nidra which has rarely been discussed in the professional literature.

Taking part in the study is your decision. You do not have to be in this study if you do not want to. You may also quit being in the study at any time or decide not to answer any questions you are not comfortable answering.

I am happy to answer any questions you have about the study. If you are interested in participating in the study please contact me at [withheld for privacy].or [withheld for privacy] to schedule an intake interview or contact my dissertation chair, Douglas Vakoch, PhD., at [withheld for privacy] or [withheld for privacy] if you have study related questions or problems.

Thank you for your consideration and I look forward to hearing from you!

With kindest regards,

Courtney Hartman
PsyD. Doctoral Candidate

California Institute of Integral Studies

[withheld for privacy]
[withheld for privacy]

APPENDIX G: OUTLINE OF iREST CLASSES, 1–8

OUTLINE FOR iREST EIGHT WEEK CLASS SERIES

First Class:

1st part: Didactic– 35– 40 minutes

- Personal Introduction
- What is iRest?
- Origins of iRest
- Its efficacy in supporting healing of trauma and other issues/conditions
- Its worldwide use as a method of stress reduction and resilience training
- Student Handout Packet and give very brief overview of steps of the protocol referencing the handout
- Explain the use of the practice recording (at least three times a week)
- Explain Inner Resource and work with handout– group interaction to help each student connect with some aspect of an Inner Resource
- Brief preparation for first iRest session; explain the hypnagogic state, snoring, resting in Awareness (as Witness), Welcoming, Messengers and nonstriving (ease of practice and not "fixing" oneself)

2nd part: iRest Session– 30–35 minutes

- Emphasis on Inner Resource

3rd part: Integration 15–25 minutes

- Sharing and questions

Second Class:

1st Part: Didactic– 30 minutes

- Check in about self–practice during the week

- Explain Intention (give handout for Intention) with group interaction
- Explain Heartfelt Desire (give handout) with group interaction

2nd Part: iRest Session 30–35 minutes

- Emphasis on Intention and Heartfelt Desire

3rd Part: Integration 25–30 minutes

- Sharing and questions (Integration)

Third Class:

1st Part: Didactic– 30 minutes

- Check in about self–practice during the week
- Explain working with Body Sensing and Breath
- Explain working with Feelings and the distinction between Feelings and Emotions
- Explain "working with Opposites"
- Work with the Feelings handout with group interaction

2nd Part: iRest Session– 30–35 minutes

- Emphasis on Breath and working with opposite Feelings

3rd Part: Integration– 25–30 minute

Sharing and questions

Fourth Class:

1st Part: Didactic– 30 minutes

- Check in about self–practice during the week
- Work with Emotions handout and group interaction
- Explain Witnessing

2nd Part: iRest Session– 30–35 minutes

- Emphasis on Emotions

3rd Part: Integration– 30 minutes

- Sharing and questions

Fifth Class:

1st Part: Didactic– 30 minutes

- Check in about self–practice during the week
- Explain what a "core belief is"
- Work with Beliefs handout and group interaction

2nd Part: iRest Session– 30–35 minutes

- Emphasis on workings with Beliefs

3rd Part: Integration– 30 minutes

- Sharing and questions

Sixth Class:

1st Part: Didactic– 30 minutes

- Check in about self–practice during the week
- Explain working with Joy and Joy's physiological benefits
- Group Interaction exploring Joy/ Happiness/Gratitude

2nd Part: iRest Session– 30–35 minutes

- Emphasis on working with Joy

3rd Part: Integration– 30 minutes

- Sharing and questions

Seventh Class:

1st Part: Didactic– 30 minutes

- Check in about self–practice during the week
- Explain Witnessing Awareness

- Talk about Pure Being; nothing to Do; to Know; to Fix; nothing Lacking and the sense of Timelessness (being in the moment) [5 Kanchukas]

2nd Part: iRest Session– 30–35 minutes

- Emphasis on Witnessing Awareness and Pure Being

3rd Part: Integration– 30 minutes

- Sharing and questions

Eighth Class:

1st Part: Didactic– 30 minutes

- Check in about self–practice during the week
- General Questions
- Questions about the practice and how to continue using iRest

2nd Part: iRest Session– 30–35 minutes

- Complete iRest Protocol

3rd Part: Integration– 30 minutes

- Sharing and questions

APPENDIX H: STUDENT HANDBOOK

iRest Student Handbook Separately Attached.

APPENDIX I: TRANSCRIPTION OF iREST PRACTICE DISC

Transcript of Home practice recording attached separately.

APPENDIX J: INTERVIEW QUESTIONS

Semi Structured Interview Questions

- Would you please describe, in the greatest detail you can, your experience of the iRest practice as a whole?

1a. Describe how your typical meditation session progressed from start to finish.

Queries/Prompts as needed: Could you say more about that?

Could you explain what you mean by that?

How did it feel? How did it feel in your body?

Is there anything else you can think of to add?

- What would you say was the most difficult part of the practice for you?

2a. Did this change over time?

2b. In what ways were you able and/or unable to work through or overcome these challenges?

2c. How do you think your overall experience was impacted by these difficulties?

Queries/Prompts as needed: Why do you think that was?

Could you say more about what that was like for you?

How did it feel? How did it feel in your body?

- Looking back on your whole experience with the iRest practice, which part would you say was the most impactful?

Queries/Prompts as needed: Why do you think that was?

Please tell me more about what is was like for you?

How has that impacted you? What were the effects?

How did it feel? How did it feel in your body?

- What did you notice as your meditation progressed over the period of eight weeks?

Queries/Prompts as need: Why do you think that was?

How was that for you?

4b. Before we started the iRest practice I asked you some questions about your experiences or responses to trauma like:

> being able to calm yourself down after becoming upset, feelings of anger, caring about keeping yourself safe, having difficulty keeping track of time, or staying in the present moment, feelings of guilt, helplessness, like something is wrong with you, like no one can understand, difficulty trusting others, thoughts about the perpetrator, difficulty working through conflicts, hurting yourself and/or others, trouble with digestion, chronic pain, cardiopulmonary problems, thoughts, behaviors and/or problems involving sex, feeling hopeless about the future.

To what extent have you experienced a change in each of these areas?

- How do you feel being in the group impacted your experience rather than experiencing this practice alone?

Queries/Prompts as need: Why do you think that was?

How was that for you?

How did it make you feel?

- Looking to the future do you see iRest playing a role in your life?

- Looking back on all of the things we've talked about today is there anything you would like to add about your experience with iRest, or participating in the study as a whole?

- Once I have conducted all of the interviews, and organized all of the data would you be willing to look over the information I have gathered from our interview and comment on the accuracy of my interpretations?

APPENDIX K: CODE FREQUENCY CHART

Table : Code Frequency Chart

	Participant no.					
Code	1	2	3	4	5	6
Self Control	3		7	3	8	
Acceptance	1		2	1	2	
Alone Can't Concentrate			1		2	
Barriers	1	2	8	11	2	1
Body Sensing	8	5	3	4	5	3
Calm		2	3	13		
Control Behavior			1			
Control Emotions	3		8	3	3	
Change	1	2		1	1	1
Class		5	4		2	
Comfortable	1	3	2		2	1
Comparing	4		3		15	
Connections	6		6	5	11	2
Confidence	4			3	3	
Contradictions	1		8			3
Control Thoughts	3		12	1	3	
Doubt	2					
Difficulty	2	2	2	1	6	
Deep			1	3		
Description		4	1	2	2	
Environment	2		5	1	3	
Fear	3		11	2	1	
Freedom		2				
Future		2	4	2	1	
Goals	3		3		1	
Group Negative		7	2			
Group Positive	2	2	3	1	1	
Helpful	9	1	7	7	2	2
Happy	4		2		2	
Heart Felt Desire	4		5		5	
Home Practice	6	1		1	3	
Home Practice Calm	1					
Home Practice Difficult	4	1	3	1	3	
Hypnosis					7	2
I Don't Know				3	1	9

Insecure	6		11	5	5	
Inner Resource	9		2	5	5	
Keep Trying	5		4	10	2	
Learning	3	6	10	1	1	
Love Other		1	1		1	
Learning Class	5	1	11	1	4	
Lay Difficulty						3
Lying Down			1		3	
Language	1				3	
Mind	4		1			
Meditation					3	5
Meditation Positive		4	4	2		3
New	1	9	6	1	2	
No Change			1			
New Experience			2			
Negative		3				1
Negative Focus						2
Not Helpful	1					5
Negative Thought Before	7		1		1	
Negative Thought Positive	2				6	
Outside Help	6	2		4	1	3
Other Love	6				2	
Patience		2	2		2	
Positive Change	15	8	12	7	14	2
Positive Experience		2	1	1	1	
Past Experience Negative	6	3	4	1	9	
Positive Future	13		13		7	
Preferred Group	6		5	1	4	
Present Moment			6		1	
Positive	6	4	4	4	1	1
Preference					4	
Productive	1					
Positive Thinking						
Question & Answer		3		2	1	
Relaxed	1	1	13		3	4
Reactive	3	6	1	1	5	
Resiliency		1	1	1		
Revelatory Statements	8	1	2	1	7	
Self–Awareness	8	4	5	12	6	
Singing Bowls	2		4			
Secure					2	
Self Focus	5		3		15	

Self Love			8					1						6								
Spirit					2																	
Trust											1		2									
Trouble Articulating	3			1			5					1			2							
Trouble Articulating Language			7												4							
Trouble Focusing							4			2					1							
Tools				1				2														
Time	10							5		4												
Trauma Trigger					4																	
Unknown					10																	
Universality	2				2			5		3			3									
Universal Validation			2																			
Voice			4				4						2			4						
Vision			1					5														

Note. Author's table.