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The Body Recovers: Practitioner Perspective on Somatic Experiencing

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The Body Recovers: Practitioner Perspective on Somatic Experiencing

by

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The Clinical Research Project is a graduation requirement for MSW students at St. Catherine University – University of St. Thomas School of Social Work in St. Paul, Minnesota and is conducted within a nine-month time frame to demonstrate facility with basic social research methods. Students must independently conceptualize a research problem, formulate a research design that is approved by a research committee and the university Institutional Review Board, implement the project, and publicly present the findings of the study. This project is neither a Master's thesis nor a dissertation.

Abstract

Most individuals are exposed to a traumatic event in their lifetime, but not all go on to develop post-traumatic stress disorder (PTSD). PTSD is characterized by symptoms of intrusion and avoidance of stimuli related to the traumatic event, as well as dissociation. PTSD has been linked to a number of somatic syndromes including chronic fatigue syndrome (CFS), chronic lower back pain, hypertension, and hypothalamic-pituitary adrenal (HPA) axis dysfunction resulting in hormonal imbalance. Several evidence-based interventions for PTSD exist, including prolonged exposure therapy (PE), eye-movement desensitization and reprocessing (EMDR), and cognitive processing therapy (CPT), however many of these approaches address trauma using components of exposure or are not well-researched in addressing somatic symptoms related to trauma. Somatic Experiencing (SE) is an emerging intervention conceptually framed by the "bottom-up" processing theory. SE has been demonstrated to improve PTSD symptoms in early intervention studies across a variety of contexts and diverse populations, however research on SE is limited and the literature on SE is concentrated primarily in the theoretical realm. No prior studies have explored practitioner's perspectives on how SE benefits trauma survivors and which clients are best suited for SE. This study explores this question through qualitative interviews with three practitioners in a Midwestern metro area. A common theme of practitioner-client fit emerged in the data, as well as four main subthemes: (1) conceptualization of trauma, (2) psychoeducation of the Somatic Experiencing approach, (3) clients who do not benefit from Somatic Experiencing, and (4) self-awareness. Implications are discussed as well as gaps and suggestions for future research.

Key words: somatic experiencing, bottom-up theory, post-traumatic stress disorder, somatic interventions

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Practitioners are increasingly incorporating somatic therapy techniques as interventions to address symptoms of trauma as researchers gain knowledge in the underlying neurological effects of trauma on the autonomic nervous system, including somatic symptoms. Somatic Experiencing (SE) is an emerging trauma intervention that addresses the immediate effects of trauma on the nervous system by utilizing body-oriented introspection. Practitioners use this technique as an early intervention to address the effects of acute traumatic events such as natural disasters, and more recently the intervention had been implicated as a treatment for military sexual trauma. Utilizing qualitative interviews, the researcher will explore in more depth the ways in which Somatic Experiencing (SE) practitioners describe the process of addressing symptoms of trauma, which clients are best suited for Somatic Experiencing, and the manner in which this intervention alleviates symptoms of trauma.

Many people experience traumatic events in their lifetime, but not all develop post-traumatic stress disorder (PTSD) as a result. Trauma is defined as exposure or threat of death or serious injury or sexual violence that is directly experienced or witnessed by a close friend or family member, or through repeatedly being exposed to details of the trauma in the case of first responders or those working professional who are exposed to secondary trauma (American Psychiatric Association, 2013).

Examples of traumatic events include chronic developmental trauma such as physical, sexual, psychological childhood abuse or neglect; mass interpersonal violence such as wars or mass casualties; natural disasters; accidents; rape and sexual assault; stranger physical assault; intimate partner violence; sex trafficking; torture; witnessing or being confronted with the homicide or suicide of another person; life-threatening medical conditions; and emergency

workers exposed to various traumatic events (Briere & Scott, 2015). Individuals who are at higher risk for developing PTSD are members of marginalized groups such as women, younger or older individuals, African Americans and Hispanics, lower socioeconomic status, those with a personal or family history of a psychological disorder, those will less functional coping skills, individuals from a dysfunctional family, previous history of trauma, hyperactive or dysfunctional nervous system, or have a genetic predisposition (Briere & Scott, 2015, p.27).

A significant predictor of the development of PTSD is distress during or after the trauma including feelings or horror or helplessness during or after the event (Briere & Scott, 2015). Dissociation, which is a feeling of disconnection from surroundings or one's own body, including features of derealization and depersonalization, at the time of trauma and after, is also a significant risk factor for developing PTSD (Briere & Scott, 2015).

It is estimated that 8.3 percent of Americans meet the Diagnostic and Statistical Manual of Mental Disorder's criteria for PTSD (American Psychiatric Association, 2013), at some point in their lifetime (Kilpatrick et al., 2013). PTSD is characterized by experienced or being exposed to a traumatic event and clusters of symptoms including intrusive symptoms associated with the trauma, "persistent avoidance of stimuli associated with the traumatic event(s)," and a shift in mood characterized by "negative alterations in cognitions and mood associated with the traumatic event," (American Psychiatric Association, 2013). An additional feature of PTSD is irritability, emotional reactivity, or emotional arousal, as well as dissociative symptoms including derealization and depersonalization, or feeling outside of the body and a feeling of being disconnected form surroundings (American Psychiatric Association, 2013).

Current evidence-based interventions targeting symptoms of PTSD include prolonged exposure (PE) therapy, eye-movement desensitization and reprocessing (EMDR), and cognitive

processing therapy (CPT) (Acarturk et al., 2016; Briere & Scott, 2015; Farmer, Mitchell, Parker-Guilbert, & Galovski, 2017; McLay, et al., 2016; Zandberg, Porter, & Foa, 2017). Additional emerging interventions for PTSD that are more focused on "bottom-up" processing than evidence-based interventions include sensorimotor psychotherapy, acupuncture, and yoga (Feinstein & Church, 2010; Langmuir, Kirsh, & Classen, 2012; Ogden, Minton, & Pain, 2000). Somatic Experiencing is an emerging "bottom-up" intervention for trauma, which aims to regulate the nervous system's response to trauma, and has been found significantly effective in reducing symptoms of trauma, and has been implicated as a long-term trauma treatment as well (Leitch, 2007; Leitch, Vanslyke & Allen, 2009; Levine, 2010; Parker, Doctor & Selvam, 2008).

The following research paper explores research in the area of trauma intervention, somatic symptoms of trauma, as well as previous studies exploring the efficacy of somatic interventions including Somatic Experiencing. A qualitative study on Somatic Experiencing practitioners in a Midwestern metro area is outlined, including the identified main themes of the interviews, followed by the results and implications of the study.

Literature Review and Research Question

The field of clinical social work is increasingly becoming awakened by the idea that emotions, cognitions, and the physical body cannot be separated when considering the neurological effects of trauma on the body, just as the person cannot be separated from the impact of their social environment. Medical research in the primary care setting has indicated a need for trauma-informed care in order for primary care doctors to have the training to detect the relationship between a patient's somatic symptoms and the possibility of the patient affected by a history of trauma. In the mental health field, practitioners are becoming increasingly aware of the inextricable connection between imprints of trauma on the body and psychological effects of trauma in those diagnosed with PTSD who often have complaints of somatic symptoms and who may need body-centered interventions. In light of countless studies that confirm PTSD's real physiological effects, it has become undeniable that trauma effects the body.

Neurological effects of trauma. Bessel van der Kolk, a psychiatrist who conducted neurological research on trauma, described trauma as an experience of being trapped: "Being traumatized means continuing to organize your life as if the trauma were still going on- unchanged and immutable- as every new encounter or event is contaminated by the past," (van der Kolk, p.53, 2014). Van der Kolk studies the effects of a traumatic event on traumatized individual's brains and contributed to adding the diagnosis of PTSD to the widely used diagnostic manual of psychiatric disorders, the Diagnostic and Statistical Manual (APA, 2013).

Research on the neurobiological effects of trauma on the brain supports the concept that higher functioning areas in the neocortex, the most evolved part of the human brain, are less active when traumatic memories are triggered. One systematic review of neuroimaging findings by Hull (2002) found that Broca's area, a region of the brain responsible for speech, exhibits

decreased activity. Meanwhile, the researchers found that the amygdala, responsible for detecting a threat and responsible for emotional memory, exhibits increased activation, implicating emotional memory as an integral part of a triggered traumatic response (Hull, 2002). Areas of the brain responsible for intense emotion were activated as a response to stimuli that were reminders of the trauma in traumatized individuals (van der Kolk, 2006).

Emotional reactivity, a symptom of post-traumatic stress disorder, (American Psychiatric Association, 2013) is a response activated by stimuli that reminds the traumatized individual of the traumatic event (van der Kolk, 2006). Van der Kolk (2006) found that activation of the central nervous system (CNS) was decreased when traumatized individuals were exposed to traumatic stimuli. Areas of the central nervous system such as those involved in integrating sensory input with motor output, regulating physiological arousal, and the ability to communicate words, were all areas of decreased activation (van der Kolk, 2006). This study implicated a need for trauma interventions which address the individual's ability to tolerate sensations in the body, learn to regulate hyperarousal symptoms, and learn to confront the feeling of physical helplessness found in van der Kolk's study (van der Kolk, 2006).

These findings suggest that when a traumatic memory is triggered in a client, the individual may have difficulty in regions of the brain responsible for speech and their emotional responses and perceived threat is more activated. This suggests that a psychotherapy approach that addresses the activation of the more primitive regions of the brain, the amygdala and brain stem, and the potential decrease in the ability to verbalize their experience, may directly address their symptoms when activated by traumatic memories.

Somatic Experiencing (SE) is an intervention which directly addresses the implications of these neurological research findings as it is a body-based intervention encouraging the client to

tolerate interoception of the body, explore body sensations, and reintegrate motor movements to restore empowerment and trust in the client's body (Levine, 2010).

Peter Levine (2010), the founder of the theoretical basis of Somatic Experiencing, studied animals and noticed their inherent physiological response to threat was adaptive and that animals were able to return to equilibrium even after facing mortal threat. In humans, however, he noticed that human response to trauma sometimes resulted in survivors of trauma becoming "stuck," and their autonomic nervous system response becomes difficult to return to equilibrium, resulting in a variety of somatic and psychological symptoms (Levine, 2010).

Levine, a brain researcher, highlighted polyvagal theory in explaining the brain's emotional subsystem associated with traumatic fight, flight, and freeze responses (Levine, 2010, p.103). The vagus nerve is a large nerve in the brainstem responsible for sending signals to the heart, lungs, digestive track, and autonomic nervous system (Levine, 2010). "Fight or flight" mode is an adaptive response to threat which results in either escaping the immediate threat or fighting it, resulting in the sympathetic nervous system responding by sending information to the limbs to move (Levine, 2010, p.103). However, in individuals with PTSD, they remain in the hypervigilant "fight or flight" mode, which is common among individuals who have experienced acute trauma resulting from a single traumatic event or absence of history of trauma (Levine, 2010, p.102). This sympathetic nervous system also activates increased heart rate, increased respirations, dilations of the blood vessels, sweating, and increased adrenal activity which releases stress hormones such as cortisol into the bloodstream (Levine, 2010, p.100).

When the fight or flight response is not effective and death appears imminent, the human body responds by activating the most primitive, hypovigilant system, resulting in "immobilization, shutdown, and dissociation," which is when the dorsal vagal system sends

signals to the heart to slow the heart rate, lowers the rate of respirations in the bronchi, as well as increases gastrointestinal activity (Levine, 2010, p.103). This immobilization response is common in highly and chronically traumatized and neglected or abused clients (Levine, 2010, p.102). Becoming "stuck" in fight or flight mode, and especially in chronic states of dissociation in the event of developmental, ongoing trauma, is correlated with a number of medical syndromes linked to trauma.

Somatic symptoms and trauma. Several comprehensive medical studies have confirmed an association between somatic medical illnesses and PTSD, implicating a need for increased screening for trauma in the primary care setting and an appropriate intervention targeting the underlying trauma symptoms. A meta-analysis by Afari and colleagues (2014) examining the association of trauma, PTSD and somatic syndromes including chronic widespread pain, chronic fatigue syndrome, fibromyalgia, temporomandibular disorder, and irritable bowel syndrome, found that those exposed to trauma were 2.7 times more likely to have a medical somatic syndrome. Among those who had suffered sexual or physical abuse, the level of association with PTSD was significantly larger (Afari et al., 2014).

An additional study also detected an association with several body-related symptoms and PTSD, however this study did not detect an association with pain and PTSD specifically. In a five-year longitudinal study conducted by Andreski, Chilcoat, and Breslau (1998), individuals diagnosed with PTSD were found to have three times the odds of reporting somatic symptoms compared to those with other psychiatric disorders and those with no disorders. Participants were asked to report levels of somatic symptoms in six symptom groups including: gastrointestinal, pain, cardiopulmonary, conversion or pseudo-neurological, sexual symptoms, and female reproductive symptoms.

In Andreski, Chilcoat, and Breslau's (1998) study, gastrointestinal symptoms included vomiting, abdominal pain, nausea, bloating, diarrhea, and intolerance of several foods; symptoms of pain included pain in the extremities, back, joints, pain during urination, headaches, and other pain; cardiopulmonary symptoms included were shortness of breath, palpitations, chest pain and dizziness; conversion symptoms included were amnesia, difficulty swallowing, loss of voice, deafness, double vision, blurred vision, blindness, fainting or loss of consciousness, seizures or convulsions, trouble walking, paralysis, muscle weakness, and urinary retention or trouble urinating; sexual symptoms included painful menstruation, irregular menstrual periods, excessive menstrual bleeding and vomiting throughout pregnancy (Andreski, Chilcoat, & Breslau, 1998).

Those diagnosed with PTSD reported significantly more symptoms in each somatic symptoms group compared to others, with the exception of pain (Andreski, Chilcoat, & Breslau, 1998).

Medical Effects of Trauma

Many illnesses regularly observed by primary care physicians such as fibromyalgia, chronic lower back pain, diabetes, hypertension, and hormonal imbalances correlate with a history of trauma or a diagnosis of PTSD (Balint et al., 2016; Kempke et al., 2013 & Kempke et al., 2015).

Chronic Fatigue Syndrome. More than half of the patients diagnosed with Chronic Fatigue Syndrome (CFS) had experienced at least one instance of early trauma, and the majority of patients with CFS reported multiple early traumas (Kempke et al., 2013). Individuals who have experienced early developmental trauma in childhood have increased levels of daily fatigue and pain, which are core symptoms of CFS. In a more recent study, researchers identified an

association between CFS and cortisol, a steroid hormone released in response to acute stress, and experiencing emotional abuse during childhood (Kempke et al., 2015).

In patients who experienced early childhood trauma and who have CFS, emotional neglect was connected to lower cortisol reactivity in the Trier Social Stress Test, which measures the reactivity of cortisol (Kempke et al., 2015). This means that in patients with CFS, the neuroendocrine stress response system has lost the ability to adapt to stress, resulting in lower levels of cortisol compared to those who do not have CFS and early trauma. This finding indicates a need for trauma screening in individuals who are diagnosed with CFS, and for appropriate therapeutic interventions in order to adequately address the underlying trauma for this subset of individuals.

Chronic Lower Back Pain. For individuals who experienced lower back pain and depression, researchers found stress to be a mediating factor. In this study, Somatic Experiencing (SE) and Gestalt therapy may have had an effect on aiding clients in coping with levels of stress, which in turn increased their capacity to cope with chronic lower back pain (Ellegaard & Pederson, 2012). An additional study found a strong link specifically between PTSD and low back pain. In an evidence-based structured systematic review examining 19 studies involving veterans diagnosed with PTSD, it was found that 84.2 percent, or 16 of the total 19 studies, found an association of lower back pain with PTSD (Fishbain, Pulikal, Lewis, & Gao, 2016).

Hypertension. Among those diagnosed with PTSD, there are higher rates of hypertension, or elevated blood pressure. A study examining the rates of hypertension among trauma patients in primary care settings implicated a focus on mental health symptoms in addition to medical care in addressing hypertension coinciding with PTSD (Balint et al., 2016).

Hypothalamic-Pituitary Adrenal Axis (HPA) Dysfunction and Hormone Imbalance.

Neurology researchers proposed that the effects of PTSD on the HPA axis and hormones could implicate PTSD as a metabolic disorder (Michopoulos, Vester, & Neigh, 2016). The effect of PTSD on the brain is linked to dysregulation of the hypothalamic-pituitary adrenal axis (HPA), an endocrine system consisting of the hypothalamus, the pituitary gland, and the adrenal gland, which is responsible for the body's reaction to stress and the regulation of digestion and various mood responses (Olff, Guzelcan, Vries, Assies, & Gersons, 2006). In a study examining blood hormone levels in individuals with chronic PTSD, traumatized individual's dysregulation of the HPA axis and hypothalamic-pituitary-thyroid (HPT) axis resulted in an imbalance of a cascade of hormones including lower blood cortisol , prolactin, and thyrotropin (TSH) when compared to individuals not diagnosed with PTSD (Olff, Guzelcan, Vries, Assies, & Gersons, 2006). There was a negative correlation between cortisol levels and severity of PTSD symptoms, meaning as severity of PTSD symptoms increased in individuals, blood cortisol levels decreased (Olff, Guzelcan, Vries, Assies, & Gersons, 2006).

The suppression of cortisol levels in highly symptomatic chronic PTSD sufferers could be due to highly sensitized HPA axis. In the Dexamethasone Suppression Test (DST), it was found that in individuals with chronic PTSD who were administered dexamathasone, intended to suppress corticotropin-releasing hormones (CHR) in normal individuals, instead there was an exaggerated suppression of cortisol release, which suggested that the HPA axis was highly sensitized in chronic PTSD individuals (Scaer, 2001).

Due to the countless medical syndromes associated with PTSD and chronic PTSD in individuals who have suffered from traumatic events, it is imperative that trauma interventions

target not only psychological and mood symptoms of traumatic stress, but also the physiological responses to PTSD manifested in the aforementioned medical syndromes linked to PTSD.

Common Interventions for Trauma

There are several commonly used interventions to treat traumatic stress symptoms, most of which are well researched and evidence-based. These interventions include exposure therapies, cognitive therapies, eye movement desensitization and reprocessing (EMDR) therapy, In a systematic review and meta-analysis consisting of 64 trials which compared effectiveness and adverse effects of common treatments for severe PTSD in adults, it was found that prolonged exposure therapy (PE), cognitive therapy (CT), and cognitive processing therapy (CPT), CBT-mixed therapy modalities, and EMDR were all effective in treating PTSD symptoms (Cusack et al., 2016).

Modern trauma treatment protocol suggests the importance of spending time in the early stages of any trauma intervention to establish coping skills to address acute symptoms as well as build the client's capacity to regulate negative emotional states, including high anxiety and low affect regulation (Briere & Scott, 2015). Among adults who are identified as having complex PTSD (cPTSD) characterized by chronic, multiple-event traumatic events throughout development, a critical review of current trauma-focused treatments emphasized the importance of a "stabilization phase" and a phase-based approach, particularly for these clients in order to learn self-regulation strategies as a foundation before entering into trauma-focused interventions (De Jongh et al., 2016). De Jongh et al. (2016) also found that having comorbidity, or additional diagnoses of disorders such as Borderline Personality Disorder, substance abuse, or ongoing non-acute suicidal ideation, did not have an influence on the effectiveness of a trauma-focused treatment.

“Top-down” Interventions

Prolonged Exposure therapy (PE). Prolonged Exposure (PE) therapy is a commonly utilized therapy for individuals with PTSD and is the most researched form of psychotherapy to date (Zandberg, Porter, & Foa, 2017). Prolonged Exposure therapy is intended to confront and alleviate the avoidance symptoms of PTSD by assisting traumatized individuals to emotionally process their traumatic experiences through re-exposure to traumatic memories. The PTSD sufferers are asked to recount and revisit the traumatic memories repeatedly with the goal of reducing inappropriate or excessive fear and avoidance of reminders of the traumatic event through repeated exposure to the traumatic memory (Zandberg, Porter, & Foa, 2017). This treatment includes 90-minute sessions and typically lasts between ten to fifteen sessions (Zandbger, Porter, & Foa, 2017).

Prolonged Exposure therapy incorporated both "in vivo exposure" and "imaginal exposure." During "in vivo exposure" in the second session of PE therapy, the client is asked to expose themselves to stimuli which are not directly related to the traumatic event but serve as reminders for at least 30 minutes (Zandberg, Porter, & Foa, 2017). During the "imaginal exposure" phase, starting in session three, clients are asked to recall the traumatic event aloud including sensory details, thoughts, and emotions, for 30 to 45 minutes during the session, followed by later sessions focusing on "hot spots" which are the most distressing aspects of the memory. These sessions are then followed by assigned homework in which clients are asked to listen to a recording of the imaginal exposure every day (Zandberg, Porter, & Foa, 2017).

Cognitive therapy. Cognitive therapies aimed at treating symptoms of PTSD center around the reframing of negative cognitions and core beliefs in order to elicit a more adaptive emotional and behavioral response to the traumatic event. Cognitive Processing Therapy (CPT)

is one type of therapy which is evidence-based and has been found to improve symptoms of PTSD when therapists adhered to treatment protocol and showed competence for treatment components (Farmer, Mitchell, Parker-Guilbert, & Galovski, 2017). CPT incorporates Socratic questions, challenges "assimilated stuck points," or inaccurate beliefs about why the trauma occurred (Farmer, Mitchell, Parker-Guilbert, & Galovski, 2017). Examples of negative beliefs, or "assimilated stuck points," as a result of trauma include, "I am broken and will never get better/be loved/get what I want," "I am helpless to avoid additional trauma," and "the future is hopeless," (Briere & Scott, 2015). CPT also addresses "overaccommodated stuck points," which are altered worldview due to the traumatic event, involves out-of-session homework assignments for the client, and promotes the client to express their natural affect or to "feel their feelings," (Farmer, Mitchell, Parker-Guilbert, & Galovski, 2017).

CPT has been effective with survivors of physical and sexual abuse, survivors of child sexual abuse, military veterans and active duty military personnel, and CPT was also found to be effective among non-Western individuals in studies assessing CPT's effect on refugees (Gold, 2017).

Interventions Combining "Top-down" and "Bottom-up" Processing

Several interventions such as eye-movement desensitization and reprocessing (EMDR), along with sensorimotor therapy, somatic experiencing therapy, acupuncture, and yoga, are used as interventions which supplement traditional "talk therapy" while addressing somatic symptoms of trauma that effect the central nervous system (Feinstein & Church, 2010; Kirsh, & Classen, 2012; Langmuir, Kirsh, & Classen, 2012; Ogden, Minton, & Pain, 2000).

Eye movement desensitization and reprocessing (EMDR) therapy. Among interventions typically used as interventions for trauma symptoms, eye movement desensitization

and reprocessing (EMDR) has recently become a widely used evidence-based treatment which incorporates elements of exposure to the traumatic event in the form of reprocessing the memory of the traumatic event (Zandberg, Porter, & Foa, 2017). EMDR was found to be effective in reducing PTSD symptoms among active-duty service members (McLay, et al., 2016), and potentially effective in Syrian refugees (Acarturk et al., 2016).

Adverse effects of evidence-based PTSD interventions. Although evidenced-based interventions for PTSD have been found efficacious in studies, research on the effects of common interventions on individuals with complex developmental trauma such as childhood sexual abuse suggests that further guidelines are needed in order to ensure these interventions are effective for those with complex PTSD (cPTSD). Few studies have explored whether interventions can cause retraumatization in those with cPTSD. Among individuals with cPTSD, De Jongh and colleagues (2016) found that front-line treatment for PTSD had "unacceptable risks" when individuals did not respond to the treatment and recommended a longer stabilization phase and a phase-based approach is needed to ensure the trauma intervention is effective for this population (De Jongh et al., 2016).

"Bottom-up" Interventions

Somatic interventions. A variety of interventions focus on the somatization of trauma in the body by focusing on processing from areas of the most primitive part of the brain up, or "bottom-up," rather than traditional therapies, which focus on "top-down" cognitively focused interventions. Collectively, these therapies are known as somatic therapy. Many somatic therapies are developed to address culturally specific somatization of trauma, as demonstrated in a small case study by Hinton, Pich, Chhean, Safren, and Pollack (2006) utilizing somatic therapy to target neck-focused panic associated with traumatized Cambodian refugees. The somatic

intervention incorporated the use of psycho-education on PTSD and panic disorder, muscle relaxation, culturally appropriate visualization, aspects of cognitive behavioral therapy, and interoceptive awareness of body sensations (Hinton, Pich, Chhean, Safren, & Pollack, 2006). The culturally specific somatic therapy reduced the likelihood that clients would experience neck tension by evoking relaxation imagery surrounding neck sensations (Hinton, Pich, Chhean, Safren, & Pollack, 2006).

There are few research studies that have investigated interventions that are formulated to address the wide variety of somatic symptoms present in those suffering from symptoms of PTSD, as well as the inability for many trauma clients to identify emotions, or alexithymia, and dissociation, which are features of PTSD (American Psychiatric Association, 2013; Powers, Cross, Fani, & Bradley, 2015). Somatic therapy has been the only type of psychotherapy thus far which addresses somatic symptoms from a bottom-up theoretical framework. Somatic therapy's efficacy has been studied across a variety of cultural backgrounds and contexts (Leitch, 2007; Leitch, Vanslyke, & Allen, 2009; Parker, Doctor, & Selvam, 2008).

Sensorimotor psychotherapy. Sensorimotor psychotherapy is a body-based intervention which combined principles of psychotherapy and attachment theory with somatic therapy and uses the body as an initial focal point in addressing trauma, similarly to Somatic Experiencing (SE), in order to facilitate emotional and cognitive processing of the trauma's effect on the body (Ogden & Kekuni, 2000). Pat Ogden, the founder of the sensorimotor psychotherapy method, emphasizes that the sensorimotor method of psychotherapy can address motor retardation, dissociation, flat affect, hyperarousal and frozen states, as these symptoms can be more difficult to address using traditional psychotherapy methods (Ogden & Kekuni, 2000). Sensorimotor is utilized to regulate a clients dysregulated emotional state through orienting the

client to body sensations, which later facilitates the client's ability to process the trauma no the cognitive and emotional level once it is addressed in the body (Ogden & Kekuni, 2000).

Introduction to Somatic Experiencing (SE) Therapy

Somatic Experiencing is a phase-based approach used to treat trauma symptoms. Unlike other trauma approaches, Somatic Experiencing has been effective as an early intervention for social service workers in the aftermath of natural disaster, natural disaster victims internationally, and among ethnic minorities (Leitch, 2007; Leitch, Vanslyke, & Allen, 2009; Parker, Doctor, & Selvam, 2008).

Peter Levine, who observed survival responses in animals and compared it to humans as a comparative brain researcher, founded Somatic Experiencing as a result of his observations of humans becoming stuck in helplessness and fear along with an inability to restore equilibrium of their nervous system's response to traumatic events (Levine, 2010, p. 74). Levine outlined nine steps in Somatic Experiencing. Levine (2010) indicated that the first three steps are important to follow first and sequentially in order to establish a stable foundation for later work with the trauma:

1. *Establish an environment of relative safety.*
2. *Support initial exploration and acceptance of sensation.*
3. *Establish "pendulation" and containment: the innate power of rhythm.*
4. *Use titration to create increasing stability, resilience, and organization. Titration is about carefully touching into the smallest "drop" of survival-based arousal, and other difficult sensations, to prevent retraumatization.*

5. *Provide a corrective experience by supplanting the passive responses of collapse and helplessness with active, empowered, defensive responses.*
6. *Separate or "uncouple" the conditioned association of fear and helplessness from the (normally time-limited but now maladaptive) biological immobility response.*
7. *Resolve hyperarousal states by gently guiding the "discharge" and redistribution of the vast survival energy mobilized for life-preserving action while freeing that energy to support higher-level brain functioning.*
8. *Engage self-regulation to restore "dynamic equilibrium" and relaxed alertness.*
9. *Orient to the here and now, contact the environment and reestablish the capacity for social engagement. (p.74).*

Somatic Experiencing also incorporates the SIBAM Model, which allows the therapist to track the clients processed experience based on this "bottom-up" processing framework. The SIBAM Model stands for Sensation, Image, Behavior, Affect, and Meaning and is intended as a bottom-up model to allow for intimate observations of these five channels of processes (Levine, 2010, p.139). "Sensations" involve tracking physical sensations in the body, or "interoceptive" awareness. Levine observed that these sensations arise from nerve impulses sent from the interior body to the brain stem, the most primitive portion of the brain (Levine, 2010, p.139). "Images" prompts the therapist and client to observe external stimuli including sight, taste, smell, hearing and tactile senses (Levine, 2010, p.142). The "Behavior" component of the SIBAM model involves tracking behavioral responses by observing body language which includes gestures, emotion, posture, autonomic signals such as heart rate and respiration, as well as internal organ sounds such as a stomach gurgling (Levine, 2010, p.144). The "Affect" channel incorporates reading the emotional sensation of the client through facial expressions, posture, as well as subtle

nuances known as "contours of feeling," (Levine, 2010, p.150). The "Meaning" channel include tracking the client's beliefs about what their experience means to them as well as core beliefs, which are also aspects of cognitive therapies (Levine, 2010, p.151). The SIBAM Model is incorporated in Somatic Experiencing's phase-based approach as the therapist tracks the client's behavior during every session and phase in order to track subtle cues and responses to adjust their approach to each individual client.

Literature related to the Somatic Experiencing modality continues to largely exist in theoretical literature, however there are three controlled studies in which researchers have found statistically significant results of Somatic Experiencing in the early intervention treatment of PTSD symptoms as well as reduction in somatic symptoms related to traumatic stress.

Somatic Experiencing therapy has been found to show significant improvement in both reported somatic symptoms of trauma and psychological PTSD symptoms among victims of natural disaster in Thailand. In a study of SE and Trauma First Aid (TFA) in the aftermath of a tsunami in Thailand studied the effects of a month-long administering of SE on 53 adults and children. Among the initial 53 participants, 45 percent reported physical pain, 30 percent reported sleep difficulties, and 10 percent reported headaches (Leitch, 2007). The research team followed up one year after the treatment with 22 of the 53 original participants and found that 90 percent of the participants reported complete or partial improvement in reported symptoms (Leitch, 2007). With regard to observed symptoms, such as flat affect and anxiety or agitation, 95 percent showed immediate improvement, and 96 percent of the participants showed improvement after one year (Leitch, 2007). This study demonstrates the effectiveness of SE cross-culturally as an intervention that also addresses physical manifestations of trauma, addressing and effectively alleviating somatic symptoms of trauma. Few previous studies on

trauma interventions have measured the effect of trauma interventions on reported somatic symptoms in individuals with PTSD.

Somatic Experiencing has also been applied as a brief intervention and has been effective in preventing the development of worsening PTSD symptoms in social service workers involved in post-disaster recovery of Hurricane Katrina and Hurricane Rita (Leitch, Vanslyke, & Allen, 2009). In one study, the Trauma Resiliency Model was used which involved one or two sessions of skills used in Somatic Experiencing (Leitch, Vanslyke, & Allen, 2009). The study used a sample of 142 social service workers involved in service delivery in the aftermath of Hurricane Katrina and Rita in New Orleans and Baton Rouge were treated two or three months after the disaster. Participants were matched with either SE treatment or no treatment, and all received group psycho-education. The study found that the treatment group had statistically significant decreases in posttraumatic stress disorder symptoms as well as increases in resiliency indicators (Leitch, Vanslyke, & Allen, 2009). This study showed a significant reduction in developing PTSD symptoms, however both groups increased in psychological symptoms at a three or four month follow-up. At the follow-up measurement, the group that received TRM/SE had less psychological symptoms than the no treatment group (Leitch, Vanslyke, & Allen, 2009).

In additional to beneficial effects of SE on cross-cultural clients, social service workers exposed to post-disaster trauma, and victims of natural disasters, and in reducing somatic symptoms of trauma, SE has also been implicated as a treatment for the military population. In a recent book describing methods and interventions aimed at treating military sexual trauma, Somatic Experiencing was included as a recommended intervention as it was shown to be effective in treating symptoms of PTSD (Katz, 2016). Somatic Experiencing was described as an intervention, which “teaches traumatized individuals to allow their impulses to complete versus

telling them to override the body's innate responses," (Katz, 2016). It was also indicated in this treatment book that many clients of SE resolve their PTSD symptoms in one or two sessions for single-event incidents of trauma (Katz, 2016).

One case study applied Somatic Experiencing principles to a group psychotherapy setting in a clinical vignette (Taylor & Saint-Laurent, 2017). Therapists leading the group psychotherapy implore the group to engage in "arriving" to the here and now as they orient clients to the room and details in the current experience (Taylor & Saint-Laurent, 2017). The vignette emphasizes ongoing monitoring of the therapist's own self-regulation in order to respond to client's less regulated nervous system responses. The group psychotherapy application of SE incorporates ongoing monitoring of each client's nervous system response using the SIBAM model and suggests that by three months the facilitator should have "a working understanding of each group member's patterns," (Taylor & Saint-Laurent, 2017). The group facilitator's role is also to continually remind group members to be curious about surroundings, interpersonal dynamics, and internal sensations (Taylor & Saint-Laurent, 2017). The implications of SE's application for military sexual assault as well as group psychotherapy settings suggests recent interest and demand in body-centered therapy interventions which aim to improve PTSD symptoms through the bottom-up approach.

Although several studies have found Somatic Experiencing effective as a preventative treatment for single-event trauma such as natural disasters and post-disaster recovery through one or two brief sessions, there are no controlled studies on Somatic Experiencing's efficacy in individuals who have already been suffering from PTSD long after the time of the initial traumatic event and onset of PTSD symptoms, and the aforementioned vignette of group psychotherapy and application of SE for military sexual trauma have yet to be explored through

a controlled study. However, these case studies have allowed researchers and practitioners in the field of trauma an in-depth examination of how Somatic Experiencing addresses the nervous system to effectively treat trauma.

The theory behind SE as an intervention was examined in a case study illustrating the experience of an individual suffering from chronic developmental traumatic stress. In a four-session case study created by Payne, Levine, and Crane-Godreau (2015), SE was described in detail using its approach of increasing proprioceptive, kinesthetic, and interoceptive awareness to repair dysregulation of the core response network (CRN). This study revealed a potential methodology and application of SE for chronic developmental trauma, which could be explored in future research.

Mental health professional's experience in SE has rarely been the subject of a research study, and only one known qualitative study has explored the subject (Olssen, 2013). As SE is a relatively new intervention for trauma, there are only three existing controlled studies on its efficacy (Leitch, 2007; Parker, Doctor & Selvam, 2008; Leitch, Vanslyke & Allen, 2009).

Somatic Experiencing (SE) interventions incorporate mindfulness techniques (and encourage exploration of body sensations and discharge of traumatic imprints on the client's nervous system, which allows the intervention to have potential applications in a variety of contexts. Although research literature on SE is rooted in acute single-event trauma, SE has been implicated as a treatment for clients who have experienced a variety of types of trauma across many different settings and has been found effective in ethnic minorities and non-Western populations, which is unique this trauma intervention. This intervention will be explored through qualitative interviews with experienced practitioners. The researcher will explore the question: Which trauma clients are best suited for somatic experiencing therapy?

Conceptual Model: Bottom-Up Framework

Bessel van der Kolk popularized the application of bottom-up framework for psychotherapy. Using a bottom-up framework suggests that trauma can also be addressed starting from the brain stem, or the most primitive parts of the brain, and working up, in order for trauma to be truly resolved and reintegrated into the body. Peter Levine's theoretical perspective on treating trauma by first processing it in the bottom of the brain working up was inspired by the Triune "Three-Part" Brain Model. The Paul MacLean Triune Brain Model theorizes the brain as evolved in three parts: primate level, limbic, mammalian level, and reptilian level (Levine, 2010, p.256). MacLean theorized that the mammalian brain developed from the bottom up in animals and can be categorized into an "instinctual layering," (Levine, 2010, p.256). These layers consist of thinking, memory, planning and inhibition of impulses, or "higher thinking" on the top level or "primate level" of the brain; emotional responses, motivation, relationships and social interactions on the "limbic, mammalian level;" and sensations, initiation of movement and reflexes, arousal-regulation, and basic functioning at the "reptilian level," (Levine, 2010, p.256).

Bessel van der Kolk, modeling after the bottom-up approach, was a psychiatrist and neurological researcher of the neurobiological effects of trauma on the brain, who theorized that a psychotherapy method beyond "the talking cure," was required in order to address the subcortical imprints of trauma, which he found to have caused traumatic symptoms in clients (van der Kolk, 2002). Van der Kolk's research on the effects of trauma on the brain resulting in fragmented sensory experiences and images led him to believe that a psychotherapy method addressing bottom-up processing and more primitive functions of the reptilian brain would help the body to process trauma and heal from it by involving body-based interventions that incorporate bottom-level brain functions (van der Kolk, 2002).

Methods

Research Design

The researcher conducted a qualitative study of three interviews. The interviews were semi-structured and consisted of questions that were pre-approved by the researcher's chair and committee members. The researcher selected questions that were comprised of open-ended questions (Appendix A). The participants were selected after an online search for "somatic experiencing practitioners" who are licensed practitioners of Somatic Experiencing in the Minneapolis and St. Paul area and contacted by the researcher via message or email. The researcher then engaged in email exchange with the participants using an email template to explain the purpose of the study, answer questions, email the consent form (Appendix B), then arrange a location and time for the interview. The interview lasted 45 minutes and took place at a private location of the participant's choosing in Minneapolis or St. Paul in the winter and spring of 2017.

Sample

The researcher interviewed three participants who read and signed a consent form before agreeing to participate in the interview (Appendix A). All participants were required to have completed advanced training in Somatic Experiencing and were certified as Somatic Experiencing practitioners (SE-P). All participants identified as Caucasian, and one participant also identified having Native American and Caucasian heritage. Two participants were licensed independent clinical social workers (LICSW) and one was a licensed bodyworker. Practitioners had experience ranging from four to eight years. Practitioners worked with clients of a variety of backgrounds, including teens and adults, children with complex trauma, individuals with

substance abuse issues, and individuals with somatic symptoms. Practitioners described having few minority or non-white clients and two of the three practitioners were based in a Midwestern metro area. The practitioners participated in a semi-structured qualitative interview and are experienced mental health clinicians or practitioners in the Midwestern metro area who are trained in Somatic Experiencing therapy and work with clients who have experienced trauma.

Protection of Human Subjects

The IRB at the University of St. Thomas approved of this study. The participants received and reviewed a consent form before agreeing to participate in the interview. The participants were informed via consent form that there is a risk of breach of confidentiality and that there are no benefits to participating in the interview (Appendix A). The data collected via transcription of the interview and the recording of the interview will be destroyed after three years from the completion of the project. To maintain privacy and confidentiality, the transcription and recordings of the interviews were both stored on password-protected devices and in OneDrive, which is an encrypted and secure Outlook application. The identities of the interviewees remained confidential and were known only by the researcher.

Data Collection and Instrument Process

The interviews with the participants were audio recorded. The researcher then transcribed the 45 to 60 minute interviews, then coded the content with guidance from the researcher's chair at the University of St. Thomas. The interviews took place in person at a setting of the participant's choosing, which included a practitioner's office and a public library. The interviews were audio recorded and then transcribed.

Data Analysis Plan

The researcher used a qualitative study design to code the interview and then systematically identify themes using grounded theory (Charmaz, 2006). Grounded theory consists of analyzing the transcribed data in two phases: initial coding and focused coding, which encourages coding that stays close to data to identify "in vivo codes" and fragments which unpack terms for implicit meanings and reveal individuals' fresh perspectives in the first phase of coding (Charmaz, 2006). In the second phase of coding, the codes were then categorized into themes by selecting the most useful codes and testing them against extensive data (Charmaz, 2006, p.18). The researcher used the inductive constant comparative method of coding data from the qualitative interviews (Padgett, 2016). The identified themes compared to existing research on the subject.

Results

The interviews also revealed a main theme of fit between the client and practitioner. An aspect of this included practitioners describing the client trusting the process of Somatic Experiencing in restoring the client's trust of their body, as all participants describe Somatic Experiencing as an approach where the practitioner is non-directive and serves as a guide. The perspectives of practitioners in describing clients who fit well for Somatic Experiencing is a subject which is sparse in formal research and which qualitative format captures more accurately than quantitative format.

Within the main theme of practitioner and client fit, main subthemes identified during coding of the interviews were (1) conceptualization of trauma, (2) psychoeducation of the Somatic Experiencing approach, (3) clients who do not benefit from Somatic Experiencing, and (4) self-awareness, therefore the interview gleaned new knowledge and possible directions for future qualitative research examining practitioner's perspectives.

All of the main themes had a common thread of practitioner and client fit benefitting the client in a number of ways, which fall within each theme. Within each theme, the goodness of fit between the practitioner and the client influenced each categorical area, all which led to identification of factors leading clients to benefit from Somatic Experiencing according to the practitioners interviewed.

Conceptualization of Trauma. Within the four main themes, sub-themes were identified which further addressed the specific factors leading to a client benefitting and therefore being identified as a good fit for Somatic Experiencing. The practitioner's process of theorizing about how trauma manifests in the body was grouped as conceptualization of trauma. Within this theme, practitioners all described trauma as a disconnection between the mind and body which then leads to trauma being held in the body. All practitioners identified the solution of addressing trauma as releasing trauma from the body.

Disconnection between mind and body. Practitioners also frequently described trauma as "unspoken," or a phenomenon that a client is often unable to verbally process as it is held in the body. Within this conceptualization of trauma as a disconnection between the body and mind, the practitioner theorizes that the disconnection must be restored and reintegrated in order for the body to release the trauma and for the client to alleviate their trauma symptoms.

As a response to the Somatic Experiencing practitioner's hypothesis of healing trauma by releasing it from the body, the client then is tasked with restoring trust in their body and understanding the nonverbal component of processing trauma in order to heal their body from the trauma. According to qualitative interviews, the client benefits from Somatic Experiencing if the client's concept of the imprints of trauma on the body aligns with the practitioner's theory that trauma is held in the body and therefore must be processed and released by the body.

One practitioner described their conceptualization of trauma using an example from an experience of guiding a client in identifying his body sensations, which led to a reintegration of a mind and body disconnect:

> *He comes and he says, 'this is so weird. I'm just going to keep coming but I don't really understand what's going on.' And then at the end of the session yesterday he had a sense of, 'there's a chasm.' And what I was encouraging him… to say, even though it felt really sad and he didn't like the feeling and it was uncomfortable… that as soon as people speak about it, it's like there's an acknowledgment of what is. Something shifts. It's just phenomenal… It's the wisdom of the body and the wisdom of, when we're integrated, things can change.*

Another practitioner described Somatic Experiencing as an approach, which addresses trauma stored in the body while addressing components of the brain:

> *I would say it's a body-based modality… and that trauma gets stored in the body and that's the only way you can really get at it… And so most therapies deal with your prefrontal cortex, your thinking brain, and your emotional, your limbic system, your emotional brain. But this really deals with your body-based memories, and to me that's where the real healing lies.*

Psycho-education. Within the second main theme of psycho-education, practitioners described a significant component of their intervention including educating client's and their families on the concepts incorporated in Somatic Experiencing, as the approach is new to many clients as a treatment for trauma. Spending time educating the client on the theory of Somatic Experiencing as an intervention, which is rooted in scientific and medical research and

incorporates neuroscience. This psycho-education phase allowed the practitioner to expose the client to an approach that is unique and foreign to many clients. The practitioners described the beginning of their work with clients as involving a significant amount of psycho-education. When describing psycho-education, the practitioners often described clients, or their families in the cases of child clients, benefitting if they have an interest in deepening their awareness of their body, and are open to a new, non-Western approach which may be foreign to them.

Practitioners described the psycho-education phase of their work with clients as a way to educate the client on their conceptualization of trauma to see whether or not the practitioner and client are a good fit for alleviating trauma symptoms in the client using Somatic Experiencing. Spending time during the psycho-education phase to assess whether the client and practitioner were ready to do somatic, body-awareness work was described by all practitioners as a factor leading to the client benefiting from Somatic Experiencing.

Practitioners interviewed described spending time during psycho-education to explain Somatic Experiencing using neurological terms or phrases they had created on their own which were adapted from principles learned in the three-year Somatic Experiencing training, such as "SIBAM," which is an acronym for Sensation, Image, Behavior, Affect, and Meaning which are components of Somatic Experiencing.

Another practitioner used the word "trim-tabbing," to describe setting parameters for clients who are children so that they do not feel overwhelmed with re-experiencing traumatic symptoms during their work with a Somatic Experiencing practitioner. Going over "threshold," was also referenced in various ways by all practitioners, as "containment," and is an important component of trauma therapy in order to prevent the client from feeling overwhelmed by symptoms which could then lead the client to go into dissociation or not benefit from Somatic

Experiencing. The term "titration," was also mentioned by practitioners to describe the slow, small amounts of trauma that are addressed as the client and practitioner work together to regulate the client's nervous system dysregulation.

When describing psycho-education in the qualitative interview, practitioners often contrasted the Somatic Experiencing perspective with common interventions that their clients had tried before coming to them. One bodyworker practitioner described clients who had previously tried body-based techniques such as massage therapy, acupuncture, dance, shiatsu, chiropractic, yoga, and psychotherapy. She described her clients as "seekers" who are "sophisticated" and allow for a client-centered, non-directive approach to addressing their work.

Therapeutic or traditional talk therapy interventions described by practitioners included EMDR, CBT, biofeedback, exposure therapy, prolonged exposure therapy, play therapy, some of which practitioners described as potentially re-traumatizing or not directly addressing the body-based effects of trauma, compared to Somatic Experiencing.

> *...I had one woman who we worked with, who did exposure therapy. Prolonged exposure therapy. Which I think is cruel and inhumane for treating trauma, because it's sort of like they just keep making them relive [the event], which is what SE does not do. So that's an important thing. When you work with somebody in somatic work, you get a general history from them, but you do not want to make them talk about the thing that happened in any great detail, because it just reactivates all of the symptoms and it makes them worse, cause she was reliving it!*

Comparing Somatic Experiencing to existing interventions that their clients had tried allowed practitioners to differentiate and define Somatic Experiencing for their clients. One

practitioner who was a bodyworker also described a combination of techniques as helpful for clients in addressing the client holistically.

One practitioner who worked with children described psycho-education with parents as a significant component of their introduction to Somatic Experiencing during intake sessions as many parents of children are unfamiliar with the technique. The practitioner described psycho-education as a way of filtering clients who may be interested in or who might not be a good fit for the intervention:

> *So I have at least a half hour, 45 minute conversation to begin with, because we're really actually very full, and we don't want… to waste people's time and we don't want to waste ours either because we've got waiting lists and so, I mean, we try to pre-screen but occasionally… parents think that they get it but they really don't get it…*

Another practitioner described incorporating self-soothing skills at the beginning of their work while providing psycho-education to assist the client in beginning to describe their body sensations:

> *You're trying to teach them skills too. That's another piece. So I'm thinking, you know, maybe in one or two sessions… we're not even addressing the ground zero trauma necessarily… But we're encouraging them to have some skills of self-soothing, settling themselves, becoming aware of their body, becoming aware of what the sensations are that they feel… They can't say, 'I feel happy. I feel this.' No, it's like, 'where do you feel happy? Where is it?' And so sensory words are very important… So if we're going to do SE work I'll kind of give them the shpeal that I gave you.*

Clients who do not benefit from Somatic Experiencing. The third main theme identified consisted of clients who do not benefit from Somatic Experiencing. Practitioners described this as a combination of characteristics of clients who are unfamiliar with the non-Western integrative components of this approach, and who are skeptical of the approach as a result. Practitioners described characteristics of the client such as ongoing trauma and complex trauma, as challenging in general but several practitioners were still able to experience progress even among this population. Clients who were used to top-down approaches such as CBT who were more verbose were also described as clients who might not be a good fit for Somatic Experiencing.

Within this theme, practitioners also described clients as needing to be comfortable with nonverbal components and believe in Somatic Experiencing as an approach in order to benefit from Somatic Experiencing. A client being open to the approach also requires clients to believe and trust the approach in order to have "buy in" from both the practitioner and client, leading to the client benefitting from the intervention.

One practitioner described a client who did not initially feel that Somatic Experiencing was a good fit as the client felt he was not yet ready to explore awareness of his body and be touched by the bodyworker:

> *I had another male client who came in for a session and… he just was like, 'This is way too much for me. I can't deal with being touched.' And so, two years later he came back. He said, 'I think I'm ready now,' and he's been my client since.*

Practitioners also described clients feeling mystified by the Somatic Experiencing technique and thought of awareness of the body as unfamiliar. The practitioner described the

client as being scared of exploring body-awareness and of the non-directive component of Somatic Experiencing:

> *Well one of my recent clients was referred by a friend who was an acupuncturist and she thought it might be useful for him, and I think it could be, but he was totally mystified. He said, 'it's like you're speaking a foreign language and I can't understand it. I don't know what you're talking about.' And what he said was, 'just tell me what to do and I'm fine,'... You know, it was terrifying for him to think that he knows something on a different kind of level.*

One practitioner described the population she works with as "cascading" clients, a term the practitioner described as originated from EMDR, which she used to describe clients who have ongoing traumatic events occurring as they are doing work with the practitioner. The practitioner said this can be a challenging population to work with, though they still often benefit from Somatic Experiencing work with this practitioner because of the non-directive approach taken by the practitioner as well as the parameters set to prevent the client from becoming overwhelmed with symptoms:

> *...And if you have cascading trauma, which is ongoing stuff, it makes it very hard to clear the foundation of your traumatic experience... And so, the way I, so I'm a non-directive person. So sometimes the only thing I'll do is, I call it trim-tabbing. So I'll try to keep it going the way the kid wants, but I'll do a little of this and a little of that so that things don't get too big or over threshold.*

One practitioner described characteristics of clients as not a good fit for the non-verbal, body-based awareness components of Somatic Experiencing:

> *…People who are super self-conscious, people who are resistant to change, resistant to new things. People who are ensconced in talk therapy. They just want to talk. Because it's a little, it's not touchy feely but it's a little like meditation, a little like mindfulness meditation, and so if they're not comfortable doing that, they're just not going to be able.*

Practitioner awareness. The fourth theme identified was practitioner awareness, which practitioners all described as important in the course of Somatic Experiencing benefitting the client. All practitioners had advanced training in Somatic Experiencing, therefore had experienced practicing the technique on other practitioners and themselves during the training, also known as "parallel process," which helped each practitioner to work through their own traumatic experiences and address potential counter-transference issues in their practice. Practitioners also described being aware of their own specialization and the limits of their scope of practice as important in the client benefitting from Somatic Experiencing, as knowing when to refer the client helps the client to find a better fit or a practitioner who specializes in their type of trauma or diagnosis.

One practitioner, a bodyworker, described awareness of her own personal experiences as a component of her work in applying Somatic Experiencing to help clients organize their physical surroundings as well as increasing their body-awareness:

> *… for me, it's awareness work. And I'm just, it's one of those things I do naturally, and part of it was how I survived growing up. I organized my toys growing up instead of playing with them. I tried to control my environment and paid a lot of attention to that and I know that in my own house that if things are ordered then I feel calmer.*

A practitioner described practicing body-awareness of their own body as a practitioner as a method they integrate in their work while tracking the client's response and adjust the environment in response to the client as a part of their use of Somatic Experiencing:

> *So… if a kid's play is headed over threshold, I am intervening and step in. Not in a negative way, not in a shaming way, but I'm tracking in my own body, 'where are we going?' 'It's getting big. It feels like it's getting big.' We might open windows, we might open blinds… we might be moving out of our sensory room…*

Another practitioner described the importance of setting aside the practitioner's personal pride by knowing when to refer a client who is outside the practitioner's scope of knowledge and practice:

> *I don't have any qualms referring. I mean, if SE's not working, it might be me, my style. And maybe they'd do better with a different SE therapist…Because if your heart is in helping the client reduce symptoms, then it doesn't have to be what I'm doing that's helping them, but we have to help them find a way to help themselves.*

Practitioners awareness of their own emotional and body sensations as a result of their work with clients, as well as awareness of their limits in their specialty and doing their own personal work with their trauma, were all described as factors related to work benefitting the client in Somatic Experiencing.

Discussion

Somatic Experiencing is a relatively new intervention that has been shown to be effective in studies across several populations. Therefore, the purpose of this research was to explore the gap in research related to practitioner's perspectives on Somatic Experiencing as it related to the

benefits experienced by clients participating in Somatic Experiencing to treat trauma symptoms. This study explored the research question: which clients are a good fit for Somatic Experiencing?

This qualitative study also explored gaps in research that previously were not explored in studies. Previous studies have not identified factors leading clients to benefit from Somatic Experiencing from the perspective of the practitioner, or investigated clients who are well suited for this intervention. This qualitative study found that, according to practitioners, clients who seemed a good fit for Somatic Experiencing were open to alternative interventions, willing to explore body sensations, less verbal, had tried other trauma interventions before, and were open to a non-directive approach.

This qualitative study found that practitioner's conceptualization of trauma was consistent with literature on neurological effects of trauma (van der Kolk, 2006; Hull, 2002). Practitioners often used similar language when describing psycho-education with clients on neurological imprints of trauma, which affect the body and result in somatic symptoms. Many practitioners spoke using neurological terms or terms described by Peter Levine, which is likely as a result of the training all practitioners received in the method which incorporates education on neurological effects of trauma (Levine, 2010).

Consistent with research findings indicating clients seeing lasting improvement in PTSD symptoms after one or two session after a one year follow-up (Leitch, 2007), eight month follow-up (Parker, Doctor, & Selvam, 2008), practitioners in the qualitative interviews also described seeing immediate effects of Somatic Experiencing in reducing trauma symptoms in clients (Katz, 2016; Leitch, Vanslyke, & Allen, 2009). Practitioners in the study described seeing improvement of symptoms or a "shift" after the first session, even among clients who experienced severe and persistent mental illness (SPMI), among children, and clients who experienced chronic

developmental trauma consisting of multiple traumatic events over time, a population which no previous study on Somatic Experiencing has explored. Practitioner's experience of improvement in symptoms even among complex trauma clients may be due to Somatic Experiencing's phase-based approach and emphasis on a stabilization phase to establish safety, which is a recommendation for current trauma treatment protocol for complex PTSD clients (De Jongh et al., 2016). Further research is needed in order to explore the possibility of Somatic Experiencing's application for chronic developmental trauma or cPTSD clients and children.

Unlike many other trauma interventions researched, studies conducted on Somatic Experiencing found the intervention effective across cultural groups, including tsunami survivors in Thailand (Leitch, 2007), African American and white and "other" social service workers in the aftermath of Hurricane Katrina and Hurricane Rita (Leitch, Vanslyke, & Allen, 2009), as well as tsunami survivors from fishing villages in southern India (Parker, Doctor, & Selvam, 2008). This qualitative study found that Somatic Experiencing's non-Western approach was unfamiliar to white American clients, which at times served as a barrier to them further exploring the therapy, according to practitioners. However, practitioners described the intervention being effective with clients of a variety of backgrounds when clients were open to a body-based approach and expressed interest during intake and psycho-education.

Practitioners described Somatic Experiencing as an intervention that requires more psycho-education as it is unfamiliar to Western American culture as a body-based, "bottom-up" intervention. Because it is rooted in body-based awareness and identification of somatic sensations in lieu of traditional "top-down" talk therapy interventions, it may be applicable for diverse clients and further research is needed to explore its application across cultural groups.

Strengths and Limitations

Some limitations to this research were identified, as only three participants were interviewed, the sample size is too small to generalize interview findings to research and across other practitioners treating trauma in the community. Due to gaps in research on practitioner's perspectives on Somatic Experiencing and which clients would fit well with this trauma intervention, the results of this study are not generalizable to all Somatic Experiencing practitioners.

However, Somatic Experiencing interventions are unique as a body-based approach, which directly addresses trauma's effect on the nervous system and is personalized to each unique individual's nervous system. In existing studies, Somatic Experiencing has been shown to be effective in clients across multiple contexts and cultures and as a preventative trauma treatment. Qualitative interviews revealed deeper and more substantive detail regarding the way that the Somatic Experiencing intervention is applied in order to benefit the client and which clients are well-suited for Somatic Experiencing, which has never been illustrated by a research study.

There continues to be a dearth of research in somatic interventions, particularly Somatic Experiencing interventions, therefore it is important to continue to conduct research on somatic interventions as these approaches uniquely address the underlying neurological imprints of trauma and it's effects on the body, as supported by previous studies on neurology and somatic symptoms in trauma survivors.

Implications for Social Work Practice

The social work ethical principle of "Priority for the Poor and Vulnerable," (National Association of Social Workers, 2008) is important in the pursuit of interventions to treat PTSD

and efforts to prevent retraumatization and worsening of symptoms while in the course of an intervention. It is for the sake of individuals suffering with PTSD that there must be availability and applications of PTSD interventions across all ethnic groups and levels of severity of trauma. The existing studies on Somatic Experiencing have found it to significantly reduce symptoms of PTSD and prevent it from worsening over time compared to control groups, therefore it is important to continue to explore SE as a possible alternative or adjust intervention for individuals experiencing trauma who are less verbal and have tried other evidence-based interventions such as PE, CPT, and EMDR without success. Continued training on the new recommended phase-based approach, which emphasizes establishing safety before moving into the treatment phase, is important when addressing trauma.

Somatic Experiencing was also one of the only trauma interventions found in studies that directly targets somatic symptoms of trauma and has been shown to effectively reduce these physiological expressions, which are some of the most distressing features as they correlate with medical syndromes or severe developmental trauma. It is important to continue to prioritize those suffering from severe and complex PTSD and searching for appropriate interventions for this population in order to advance equality and social justice.

Implications for Policy

Gaps in research related to complex or chronic PTSD could be addressed by advocating for funding of research for these more vulnerable populations, which also are in greater need of adequate and evidence-based treatment for trauma that is generalizable to this population. It is important to advocate for policies affecting mental health research on PTSD interventions that specifically address trauma related to veterans, survivors of childhood abuse and neglect, survivors of intimate partner violence, women, ethnic minorities, and survivors of natural

disasters, as these populations are vulnerable to developing PTSD and require both prevention and adequate research on interventions that are applicable to them.

Funding and advocating for continued health insurance coverage and access to mental health resources for these populations is important in order to continue to allow these populations and those experiencing PTSD to have access to as many interventions as possible in order to help these individuals find the approach that suits them best and to allow them as much choice as others, including access to alternative or more integrative interventions that are body-focused such as acupuncture, dance, theater, chiropractic care, and somatic interventions.

Implications for Research

More research is needed in order to explore the efficacy of Somatic Experiencing in treatment PTSD symptoms for acute traumatic events as well as ongoing complex or developmental trauma. No controlled studies have applied the SE approach to developmental trauma, although some case studies have applied it to group and military populations. However, Somatic Experiencing as a bottom-up approach, was found to reduce somatic symptoms in one study and should be further researched as an intervention for somatic symptoms as few previous studies have measured the severity of somatic symptoms after receiving trauma interventions, therefore future studies on SE could address this gap in research on complex PTSD.

Due to the bottom-up processing approach of this intervention, it would be beneficial to conduct further research on it's effect on somatic symptoms and other symptoms of PTSD in clients experiencing complex PTSD, children, or individuals who are nonverbal or have lower cognitive functioning. Few studies have studied the efficacy of trauma interventions on complex

or co-morbid PTSD in order to generalize evidence-based approach to this population, therefore it would be beneficial to further explore SE's potential application to these populations.

As evidenced by controlled research studies measuring the severity of PTSD symptoms over time, SE could be an approach which is less likely to cause retraumatization during the course of the treatment as it does not focus on reprocessing or recalling traumatic memories repeatedly, like other approaches. Although research does not show that exposure-focused approaches cause retraumatization, it is important to research body-based modalities which can be beneficial across backgrounds and levels of functioning if clients are not well-suited for therapies that are more cognitively focused.

This qualitative study explored the gap in research regarding practitioner's perspectives on Somatic Experiencing as it relates to clients fitting well with the intervention and benefitting from it. Though this was a small study that cannot be generalized to all practitioners of SE and clients, this study identified possible areas to explore in future research, including Somatic Experiencing's apparent immediate beneficial effect on clients, characteristics of clients who benefit from SE, features of practitioners that create a good client-practitioner fit within the SE model, and SE's potential application to clients of diverse backgrounds. Exploring SE in future studies can fill the gap of research on interventions pertinent to clients who need it most, such as those experiencing complex PTSD, and addresses social justice issues related to priority of vulnerable populations such as those who do not benefit from evidence-based PTSD interventions. Finally, this study guides future research as it addresses a dearth of studies on SE as a bottom-up approach that directly addresses somatic symptoms and features of PTSD, which many other interventions miss. This study hopes to guide future research, encourage advocacy of inclusive interventions, and address social justice issues related to treatments for trauma.

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Appendix A

Consent Form

[977193-1] ***The Body Remembers: Practitioner Perspectives on Clients Who Benefit from Somatic Experiencing Therapy***

You are invited to participate in a research study about therapist's experiences with Somatic Experiencing therapy. I invite you to participate in this research. You were selected as a possible participant because in an online search you were listed as a practitioner of Somatic Experiencing therapy, or recommended by the researcher's committee. You are eligible to participate in this study because you are a mental health professional trained in Somatic Experiencing therapy. The following information is provided in order to help you make an informed decision whether or not you would like to participate. Please read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Saoirse McMahon, B.A., under the supervision of Renee Hepperlen, MSW, Ph.D, LICSW, and in collaboration with committee members Mark Olson, MSW, LICSW, SEP, and Joyce Arendt, MSW, LICSW, RPT-S, SEP through the University of St. Thomas and St. Catherine University's Master of Social Work program. This study was approved by the Institutional Review Board at the University of St. Thomas.

Background Information

The purpose of this study is to explore the experience of Somatic Experiencing mental health professionals in Somatic Experiencing therapy treating symptoms of trauma. This study will address the research question: which trauma clients are best suited for somatic experiencing therapy? The researcher will ask a variety of questions addressing Somatic Experiencing therapy, defining it, and describing the mental health professional's experience using it as a treatment for trauma. This research will contribute to the knowledge and awareness of the variety of treatments available to those suffering from symptoms of trauma.

Procedures

If you agree to participate in this study, I will ask you to do the following things: Participate in a 45 minutes to 60 minute interview answering questions related to somatic therapy from the perspective of a therapist. The interview will take place in person at a setting of the participant's choosing and will be audio recorded and transcribed.

Risks and Benefits of Being in the Study

The study has risks. There is a risk of breach of confidentiality if the data collected was compromised. The researcher will take precautions against breach of confidentiality by storing audio recordings on a password-protected device and deleting the recording within 24 hours of the recording. The researcher will also assign a numeric code to participant's interview and store transcriptions of interviews in OneDrive, a secure and encrypted software through Outlook. Notes taken in the interview will be stored in a locked cabinet.

The direct benefits you will receive for participating are: There are no direct benefits for participating in this study.

Compensation

You will not receive any compensation for participating in this study.

Privacy

Your privacy will be protected while you participate in this study. The interview will take place at a location of the participant's choosing to ensure privacy.

Confidentiality

The records of this study will be kept confidential. In any sort of report I publish, I will not include information that will make it possible to identify you. The types of records I will create include an audio recording of the interview will be held on a password protected device. The transcription of

the interview will also be held on a password-protected device. The participant's name will be de-identified. Only the coding partner and course instructor will have access to the transcriptions of the interview. The audio recordings of the interview will be destroyed by June 16, 2018. All signed consent forms will be kept for a minimum of three years upon completion of the study. Institutional Review Board officials at the University of St. Thomas reserve the right to inspect all research records to ensure compliance.

Voluntary Nature of the Study

Your participation in this study is entirely voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of St. Thomas. There are no penalties or consequences if you choose not to participate. If you decide to participate, you are free to withdraw at any time without penalty or loss of any benefits to which you are otherwise entitled. Should you decide to withdraw, data collected about you will not be used. You can withdraw by requesting the researcher or the researcher's chair withdraw the collected data through a verbal request to withdraw. You are also free to skip any questions I may ask.

You are also free to skip any questions I may ask.

Contacts and Questions

My name is Saoirse McMahon. You may ask any questions you have now and any time during or after the research procedures. If you have questions later, you may contact me at 612-849-9124 or through email at mcma2516@stthomas.edu. You may also contact my research chair, Renee Hepperlen, at (PHONE) or through email at hepp1989@stthomas.edu. You may also contact the University of St. Thomas Institutional Review Board at 651-962-6035 or muen0526@stthomas.edu with any questions or concerns.

Statement of Consent

I have had a conversation with the researcher about this study and have read the above information. My questions have been answered to my satisfaction. I consent to participate in the study. I am at least 18 years of age. I give permission to be audio recorded during this study.

You will be given a copy of this form to keep for your records.

_____ _____

Signature of Study Participant **Date**

_____

Print Name of Study Participant

_____ _____

Signature of Researcher **Date**

Appendix B

Qualitative Research Questions

1. Tell me about is your professional experience in treating trauma.
    a. What level of training have you had in Somatic Experiencing (SE)?
    b. How long have you been using Somatic Experiencing as a modality?
2. Can you tell me about, in your own words, what Somatic Experiencing is?
3. How did you decide to specialize in the Somatic Experiencing modality?
    a. What makes you think this is the best way to address trauma?
    b. What is the process that led you to choosing to learn this modality?
4. What other modalities do you use in combination with Somatic Experiencing?
    a. Do you incorporate touch in your practice? If so, how?
5. What are some somatic symptoms that you tend to see in clients that you address using SE?
6. In your usual cases, what specific types of traumas are more challenging to work with?
    a. In your usual cases, what are easier symptoms to work with in SE therapy?
    b. In your usual cases, what are more challenging symptoms to work with?
7. Have you used SE to address cultural or historical trauma?
    a. If so, how did you use the SE approach to address cultural or historical trauma?
8. What other types of methods have the clients usually tried to treat their trauma before they came to you?
    a. When other approaches haven't worked, what indications did clients seem to have before they decided SE would be a better modality?

9. What is a clue or sign that a client might not benefit from SE therapy?
    a. When SE hasn't worked, what is the first thing that you change?
10. How long does it usually take for a client to begin to experience benefits from SE therapy?

Appendix C

Recruitment Message/Email

(SUBJECT) Somatic Experiencing Research Interview Invitation

Hi ___,

I am a graduate student in the Master of Social Work program at St. Kate's - St. Thomas in my final year of the program and I am currently doing a final research project under the guidance of Renee Hepperlen, Ph.D, MSW, LICSW, and two committee members and SE therapists, Mark Olson, MSW, LICSW, SEP and Joyce Arendt, MSW, LICSW, RPT-S, SEP. You are invited to participate in a qualitative research interview on the process of SE therapy for trauma clients.

I found your name and contact information while doing an internet search for Somatic Experiencing practitioners and due to your experience and specialization in SE, I thought you would be a good candidate to interview for my research (OR: Mark/Joyce, my research committee members, informed me that you might be interested in participating in SE interview for my research).

The interview would take place at a location of your choosing, or through Skype, and would last between 45 to 60 minutes. I would audio record the interview so that I can transcribe, code, and identify themes for my research. However, your name would be de-identified and stored on a password protected device to ensure confidentiality.

I've attached a consent form outlining more specifically the process of the interview and pertinent information about the nature of the qualitative research study. If you have any other questions, please feel free to ask! My contact information is below and in the attached consent form.

Thanks!

Saoirse

Saoirse McMahon | Master of Social Work Graduate Student

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