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Application of somatic interventions in clinical practice

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ABSTRACT

This study examined the extent to which and the ways in which somatic interventions are integrated into clinical mental health practice, and the thoughts, feelings and beliefs behind clinicians' decisions to integrate the body into mental health treatment. The study included twelve clinicians prepared at the master's level or higher who self-identified as having utilized at least one somatic intervention in thirty days prior to screening. Participants engaged in a 45-60 minute qualitative, semi-structured interview designed to elicit a greater understanding of how individuals conceptualize their use of the body in treatment based on their individual theoretical orientation, what somatic techniques look like in practice, what specific somatic training they have received, and what thoughts, feelings and beliefs surround their use of somatic interventions.. Participants who identified professionally as social workers endorsed a stronger connection between the values of their field and the use of the body in treatment than did mental health counselors or marriage and family therapists. While all participants identified a connection to research and theoretical literature supporting the use of somatic interventions, personal connection to the idea of mind-body holism and personal witnessing of the effectiveness of somatic interventions were identified as most influential in many participants' articulation of how they came to integrate somatic interventions into their own practice. Participants offered a generally unified definition of somatic interventions, and offered a wide variety of treatment modalities falling into the category of somatic work across interviews.

APPLICATION OF SOMATIC INTERVENTIONS IN CLINICAL PRACTICE

A project based upon an independent investigation,
submitted in partial fulfillment of the requirements
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TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1

Introduction

As you read this, allow your attention to shift from the visual input of these words on the page or the screen to your visual field as a whole. Close your eyes for a moment and open them, allowing yourself to sense the difference in quality of light, colors, stimulation. Bring your full attention to any noises you hear and savor each without reflection on its source or meaning. Close your eyes once again, focusing on the tactile input of your clothing against your skin, the weight of your body on a chair, the deep pressure input of your back against a sofa. Allow your hands to make fists, and then relax. Keeping length in your neck, allow your head to tilt gently forward and backward, then from side to side. Staying seated in your chair, place your feet firmly on the floor and allow your body to shift from side to side, front to back.

Allow your feet to make contact with the floor on their inner and outer edges, on the heel and the ball. Finally, allow your feet to make full contact with the floor, as if they are growing roots into the earth. Invite your next breath in to enter through your nose, and imagine it drawing new life and energy all the way through your body, to the tips of your toes. With your exhale, invite any stuck energy to leave your body through your mouth, as if a tide is rising from your toes to the crown of your head, carrying with it anything that doesn't serve you.

In the past year, this is how I have started many sessions with clients and their families in an outpatient mental health clinic in central New England. In work prior to beginning my clinical education doing mindfulness and yoga activities with older adults as part of my work with a health education non-profit, I quickly came to the hypothesis that a subtle cuing in to the body

and its needs enhanced my relationship and communication with the individuals I worked with through a mutual ability to be present and connected with one another. By participants' own report, these brief activities also appeared to drastically reduce somatic complaints while increasing their confidence and comfort in their bodies. For me, it has been a natural extension to bring the body into my clinical work, and I was delighted when I began to happen upon the rich body of literature that eventually formed the foundation for this empirical study.

The connection between mind and body has long been a topic of interest to many fields seeking to understand the bi-directional impacts of the human mind on the body, from many traditional Eastern systems of medicine to Sigmund Freud's desire to understand somatic symptomology with no identified physical cause. As one dominant paradigm of treating ailments of the body as separate and distinct from the mind emerged within Western medicine, Western psychological fields of inquiry flourished and the idea of the "talking cure" for treatment of psychological symptoms took root.

In recent years, the field of medicine and the field of mental health have begun to explore the concept of body-mind medicine and psychotherapy. Within mental health, the bi-directional impact of mind on body has been a growing field for research and practice. While much research has emerged on specific mind-body schools of thought and body-based treatment modalities, there is little research available exploring the ways in which eclectic practitioners learn about, conceptualize, and incorporate somatic interventions into psychotherapy practice. Available literature outlines the rationale for integration of (or sole focus on, in some cases) the body into mental health treatment, and empirical literature investigating the efficacy of somatic approaches to treatment is available and many more studies likely underway. However, little research has

discussed the matter of how somatic interventions, approaches and modalities are integrated into eclectic mental health practice.

This thesis will focus on the extent to which and the ways in which mental health practitioners incorporate body-based, or somatic, interventions into their work with clients. It will explore the multitude of factors impacting clinicians' decision-making about how they use their bodies and the bodies of their clients in clinical work. As new discoveries in neuroscience and clinical research continue to deepen our understanding of the connection between mind and body, there will be increasing incentive and urgency to understand body-based interventions and their integration into clinical social work practice. In this paper, I seek to contribute to the field of social work through qualitative exploratory inquiry into when and how clinicians use somatic interventions in clinical treatment with their clients.

I seek to increase the understanding of theoretical strands running through the complicated fabrics of clinical practices that seek to include the body in a meaningful way in mental health treatment. Through inquiry into the clinical application of a disparate group of interventions, theories, and practice modalities that are unified by the focus on the connection between body and mind, I am interested in the process by which clinicians come to understand the role of bodies in mental health treatment.

For the purposes of this research, "somatic intervention" will be defined as any experiential intervention that brings attention to or consciously manipulates an individual's physical posture, gestures, gait, or breathing. This is in line with definitions used within the broader fields of Sensorimotor Psychotherapy, Body Psychotherapy, Expressive Movement Therapy and some branches of Gestalt therapy. This may include mindfulness or meditation practices, family sculpting, or the use of safe touch between therapist and client or within a

family system. For the purposes of this study, somatic interventions may also include practices such as EMDR, yoga therapy, or expressive movement therapy.

The research focuses on the extent to which and the ways that mental health clinicians from all fields utilize these interventions in their work with clients of all ages, with a number of presenting concerns that have brought them to therapy. The research also attends to the values, attitudes, thoughts and feelings that surround the use of somatic interventions for clinicians and their clients.

CHAPTER 2

Literature Review

> "Internal milieu, viscera, and musculoskeletal frame produce a continuous representation, dynamic but of narrow range, while the world around us changes dramatically, profoundly, and often unpredictably. Moment by moment, the brain has available a dynamic representation of an entity with a limited range of possible states – the body," (Damasio, 1999, 142).

Introduction

The body can be viewed as both a venue for psychotherapeutic treatment, as well as a lens through which therapists can understand their clients and themselves. With numerous types of somatic interventions available to practitioners and numerous disparate (and often arguably small) schools of though backing various interventions, it becomes important to understand how interventions fit into practitioners' theoretical frameworks.

This study explores the relationship that mental health practitioners have with somatic interventions in clinical practice. In order to situate the study in current research, I will first explore theoretical bases for the use of somatic interventions. I begin by describing how attachment theory, trauma theory, and affective neuroscience have contributed to the development of numerous somatic interventions and modalities. I will then discuss relevant empirical literature supporting the use of several types of somatic interventions with various populations in mental health practice.

Strauss and Northcut (2013) identified and discussed the challenge that theoretical frameworks that separate mind from body are at the foundation of clinical practice in the United States in medicine as well as psychotherapy, despite advances in the literature demonstrating the

importance of mind/body integration. They cite this basis as a cause for reluctance in clinical social work to practice in a way that reflects evolving understanding of the mind / body interaction?

While little literature exists exploring somatic intervention as a general field of study, one can read about neurology's contributions to our understandings of somatic intervention for trauma, about Reichian therapies, about psychotherapeutic yoga interventions, or about Expressive Movement Therapy. Limited empirical literature exists synthesizing these fields of study to better understand their integration into psychotherapy across specializations and disciplines, however existing empirical literature clearly demonstrates the efficacy of various somatic interventions with numerous study populations and supports, in particular, deeper inquiry into how more eclectic practitioners practicing outside of strictly somatic models conceptualize and integrate body-based interventions into their work.

This chapter will address theoretical frameworks used to understand the connection between mind and body in psychotherapy. I will outline theoretical literature in five areas: phenomenology, affective neuroscience perspectives, developmental perspectives, and trauma perspectives. While other perspectives on the use of the body in treatment may exist, particularly in this relatively new and quickly evolving field, review of available literature suggests that these perspectives are the most common frameworks influencing the development and implementation of body-based treatment modalities and interventions. The frameworks discussed have some overlap and do not directly contradict one another, however subtle distinctions are offered in each.

I hypothesize that many clinicians blend theories and frameworks as they conceptualize the use of the body in treatment with clients, and seek to understand how theory influences

clinical practice. To offer further insight into theory- and research-informed practice, I will also review a selection of empirical literature on the efficacy of body-based interventions and methodologies with the consideration that though many modalities exist, it is not within the scope of this project to thoroughly review empirical literature on every specific modality. The selected modalities are in line with the five theoretical orientations for use of the body in treatment, and were selected to assist the reader in understanding the empirical research supporting treatments that fall within the theoretical perspectives outlined.

I conclude with a selection of available literature discussing the use of somatic approaches by clinicians. This has not been widely studied, and has not been studied with specific regard to clinicians' use of somatic interventions. With this in mind, it has been necessary to review a broader selection of literature that seeks to understand how clinicians deliver treatment and how clinicians define their own theoretical orientations.

Phenomenological Foundations

The philosophical field of phenomenology has long discussed the role of the body in meaning-making and the role of body experience in shaping emotion, behavior and consciousness. In his work *Phenomenology of Perception,* Merleau-Ponty (1962) suggests that our bodies are our central points of reference in the world, and that embodied subjectivity is our starting point for making meaning of our experiences. In exploring Merleu-Ponty's phenomenology, Stelter (2010) writes, "perception and cognition are part of the process of interpretation, a process where movement and action are always included," (p. 66). Our physical actions constitute ways of relating with our environment. In this way, our bodily experiences, both active (doing) and inactive (being), are ways of enacting our historical experience and subjective perceptions on the world.

A philosophical foundation of the origin and state of cognitions and perceptions is integral to the work clinicians do in mental health work with clients – a critical foundation for work across psychotherapeutic disciplines (Stelter, 2010). Clinicians' ways of doing therapy are inherently based upon a conceptualization of the fact of being a body living in the world, whether or not this is explicitly stated or conceptualized in an intentional way. Whether it is implicit or explicit in the work, the process of some forms of psychodynamic psychotherapy can be viewed as a method for assisting or supporting clients in putting language to lived experience and making meaning of these experiences. Cognitive and behavioral branches of therapy, similarly, are working to manipulate clients' ways of being in the world (Stelter, 2010).

The attention turns then to the experience of the body. But what pieces of embodied experience are considered significant presents another consideration, and one that is truly at the core of this research in some ways. Does the clinician's approach to understanding the multiple systems (family, education, employment, services) that impact clients' psychosocial functioning include the body system and the body experience, with all of its subjectivities? Is the subtlety of pre-reflective lived experience such as movements, gestures, postures and breathing considered to be critical information? In those cases, is the work of the body to be done inside or outside of the therapy room?

Gendlin's (1997) work on felt sense through a process of focusing emphasizes that felt sense is a complex experience that challenges our ability to apply science to human experience, but serves as a powerful moderator for the behaviors we choose to enact – however in Gendlin's view, without symbols such as language, the felt experience is incomplete. The work of therapy, in that case, "is to evolve ways to transform these bodily experiences into language," (Stelter, 2010, p. 68).

Ambivalence within the psychotherapy community around the use of the body in therapy is evident in review of mental health approaches (Feltham, 2008), and different branches of psychotherapy have varied understandings of the importance of the body in psychotherapy, varied approaches to the use of the body in treatment, and varied conceptualizations of why the body may be important or unimportant to psychotherapeutic work. Feltham cites a prevailing mindset that "rational thought is a more reliable conduit to improvement than the ventilation of feelings or bodywork," (2008, p. 135) and also notes that psychoanalytic taboos around physical touch have influenced the development of the field as a whole.

As such, the issue of integration of the body into mental health treatment can be viewed as an interesting puzzle, as perhaps the way that our bodies are inseparable from our minds mirrors the ways that a clinician's lived experience is inseparable from their clinical judgment and decision-making. Perspectives are shaped by knowledge of research, to be sure, but also by a clinician's lived experience as a body both in and out of the treatment room. With regard to this research, a clinician's experience of embodiment and connection to their body as a human may impact their use of somatic modalities and their ability to connect somatic approaches in theory to practice and integrate them into their work. Likewise, a clinician's theoretical or personal foundation for understanding the connection between mind and body is a critical factor impacting clinicians' decisions to initiate somatic work with their clients.

Within some branches of clinical practice, a phenomenological approach may be considered more explicit or foundational than in others. Body Psychotherapy is a distinct sub-field within psychotherapy, which seeks to address psychological and emotional distress through explicit work with the body. Per the European Association for Body Psychotherapy, "The common underlying assumption is that… there is a functional unity between mind and body…

Many other approaches in psychotherapy touch on this area. Body Psychotherapy considers [the mind-body connection] fundamental," (EABP, 2013). Totton (2005) elucidates the many forms that Body Psychotherapy can take in practice, specifying that all forms emphasize the importance of a holistic understanding of the individual and a sense that emotions become physically stuck within areas of the body (e.g. a sinking feeling in the gut associated with failure; a tension in the shoulders associated with burdens; a pain in the head associated with anger).

Body Psychotherapy's many forms typically utilize movements and gestures to alleviate a sense of emotions being "stuck" in the body. Therapists support clients in identifying physical sensations in the body, and encourage the exaggeration of spontaneous impulses for movement that arise in response to a client's thought. Therapists may also work with metaphors that arise through these impulses. For example, a therapist may invite a client who presents with a headache that arose after a conflict that occurred on the way to session to make physical movements mimicking the sensation of pounding in the head. The therapist might encourage that client to intensify the movement and articulate any words or phrases that come up in this process to promote emotional release. Verbal processing in session then offers the client space to make meaning of the experience.

Affective Neuroscience Perspectives

Understanding the brain's interaction with other body systems lays a further foundation for understanding of somatic interventions and their incorporation into psychotherapeutic practice. Damasio (1999) describes the body as our reference point for existence as well as experience, as "whatever happens in your mind happens in time and in space relative to the instant in time your body is in and to the region of space occupied by your body," (p. 145). As

such, “perspective is continually and irrevocably built by the processing of signals from a variety of sources,” (p. 146).

Damasio (1999) explains that somatosensory experience, or the experience of sensing within the body, is managed by signaling within three central nervous system divisions: the internal milieu and visceral division, the vestibular and musculoskeletal division, and the fine-touch division. The central nervous system uses chemical release as well as electrochemical stimulation of neural pathways to create changes in the brain, impacting both cognition and emotion.

According to Damasio, “the body is the main stage for emotions, either directly or via its representation in somatosensory structures of the brain,” (1999, p. 287) with body input coming from the spinal cord, the blood stream, and nerves such as the vagus nerve. Underlying emotion is the physical tone of our being, what Damasio refers to as “background feelings”. Background feelings are observable to others through “body postures, the speed and design of our movements, and even the tone of our voices and the prosody in our speech as we communicate thoughts that may have little to go with the background emotion,” (1999, p. 286). As such, our regulation of affect, experience of emotions, and interactions with others “represent a complex interplay between our psychological experience and our physiological regulation,” (Porges, 2009, p. 27). The body and emotions are mutually dependent and inseparable in their function.

Porges developed the Polyvagal Theory to explain the role of the vagus nerve, a primary component of the autonomic nervous system, in regulating visceral organs for adaptive functions. The theory views social interactions themselves as biobehavioral processes, with lower parts of the brain regulating affective bodily states that correspond with our ability to engage safely with others, mobilize (fight/flight response), play, and immobilize in the event of

life-threat (freeze response) or as a function of slowing down for metabolic efficiency and self-preservation. The theory affords one way of understanding how the body and brain are implicated in responses to various situations. The role of the vagus nerve becomes particularly intriguing in light of recent research demonstrating that vagal tone of the nerve is stimulated by certain physical activities such as yoga.

Research on affective neuroscience suggests, "emotional bodily dynamics are more intimately intertwined with the basic affects of the brain [than are cognitions]… we can work more directly with emotional feelings through body dynamics than cognitive inputs," (Panksepp, 2009, p.19). Increasingly then, in psychotherapy, researchers have come to understand that the body impacts the brain, just as the brain impacts body. As we are not disembodied brains thinking in the world, the bodily experience is foundational to our experience of the world.

Additionally, an increasing number of individuals are coming to psychotherapy not solely for insight-oriented work, but to change maladaptive behaviors and patterns. Interventions built around cognitive-behavioral theory often use "emotion-cognition-action" as a framework for understanding human behavior. While action is clearly an embodiment of emotions and thoughts, emotions themselves are also embodied.

As an example, consider an intervention targeting aggressive behaviors. A client may identify that when they are angry, their face feels hot, their fists clench and their jaw tightens. Awareness of signs of hyper-arousal and knowledge of available skills for regulating one's arousal can be viewed as critical in allowing individuals to modify ways of thinking and acting in response to stimuli. A client may be able to take deep breaths, apply cool water to the face, and identify soothing sensory stimuli to begin to regulate their affect and avoid physical aggression. Additionally, the knowledge of embodiment of emotion itself may trigger cognitions related to

the impermanence of the physical sensations related to the emotion and allow the client to choose a different action.

Cognitive Behavioral Therapy (CBT), Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), Dialectical Behavioral Therapy (DBT), and other related therapies often target these realms through cognitive intervention. Cognitive-behavioral interventions typically apply the use of psychoeducation around interconnectedness of thoughts, feelings and behavior, and utilize observation of physical sensations to help clients better understand how emotions feel in the body as they apply cognitive shifts. Cognitive-behavioral interventions also often utilize relaxation techniques such as breathing exercises to support clients' abilities to self-regulate affect and arousal.

Developmental Perspectives

Attachment is a foundational theory in many forms of psychotherapy. Among the first theorists discussing the importance of attachment to psychological processes are John Bowlby and Mary Ainsworth, who discussed the impact of child attachment to caregivers, and the consequences of disruptions in these attachments. Ainsworth introduced the idea that infants develop attachment patterns based on infant-caregiver relationships, and later theorists introduced the idea that these attachment patterns have implications for adult relationships far beyond infancy and on individuals' understandings of self in relationship to other.

Attachment with caregivers in childhood can be viewed as an embodied relational experience. Likewise, during infancy and early childhood, children are learning to use their bodies to communicate their needs, and are continuously fine-tuning their ability to communicate through non-verbal two-way engagement with caregivers. Frank and La Barre (2011), creators of a model called Foundational Movement Analysis, have written extensively on observation and

intervention techniques to address patterns of interactions between children and caregivers, between adults, and between clients and therapists. They write, “in the course of interacting with objects, including acting with other people, a baby establishes emotion-infused sensorimotor records of how the actions and interactions took place, and these records also accompany and influence patterns that emerge later in development,” (2011, p. 18). They assert that procedural memory implicated in these records is resistant to decay with time, and cite neuroscience studies (e.g. Damasio, 1990, 2003; Rizzolati & Sinigalia, 2008; Solms & Turnbull, 2000) which confirm that we continue to think with our bodies into adulthood – sensorimotor engagement is not displaced with increases in cognitive or verbal ability.

Frank and La Barre’s model of Foundation Movement Analysis emphasizes that body experiences can and should be seen as a self and relational experience and vice versa. A key concept in this understanding of somatic experience is that attachment takes place through ongoing co-regulation - of the infant by caregiver, but also the caregiver by the infant. Through the use of the body in this particular model, subtle shifts in engagement with children create more attunement between child and caregiver. Because the embodied process is so reciprocal, caregivers experience shifts in their own bodily experience, which then impacts the experience of the child – and on and on (Frank & La Barre, 2011).

Gestalt therapy and Jungian process-oriented psychotherapy address bodily experiences in the present, including increasing awareness of the body and its impulses (Totton, 2003). Frank’s (2001, 2011) work focuses on a developmental understanding of how infants use their bodies to navigate as well as respond to their internal and external worlds, which is informed by Gestalt Therapy as well as by the work of Bonnie Bainbridge-Cohen in the field of movement therapy and developmental and functional anatomy. “When a pattern such as crawling comes

into being, it is always a function of an organism/environment relationship. It is a field event and cannot be separated out as *of* the infant or *of* the environment," (Frank, 2001, p. 43). As adults, this understanding implies that our way of being in our bodies in the world is built upon a foundation of functional somatic experiences in infancy and early childhood (Frank, 2001; Frank & La Barre, 2011).

Interventions in Frank and La Barre's work are designed to acknowledge that the way that infants create new patterns of movement is influenced both by developmental need and by the environment, with caregivers' attunement to the child's needs playing a large role in shaping an infant's somatic patterns and course of somatic development. The way that we sense our bodies in space and relate to our weight and physical presence, our ability to be vulnerable and to be held physically and metaphorically, our strategies for reaching out for and accepting help, and our ability to stand upright in the world are all somatic developmental achievements that occurred in very specific social-emotional contexts - "Every fundamental movement, emerging within context, holds a psychological meaning as well as serves a particular function for the baby and the adult. Each movement in combination… offers essential support in finding and creating changing definitions of self," (Frank & La Barre, 2011, p. 32).

Moving into childhood and adolescence, relational dynamics in the family of origin have shaped and continue to impact physical posturing, gait, and movement. "When an attachment relationship has induced negative emotions and negative cognitions, physical tendencies also ensue, preventing integrated, free-flowing, spontaneous movement," (Ogden, 2009, p. 210). Ogden, Frank, La Barre, and others make a strong case for the physical as well as metaphorical tendencies that demonstrate a client's attachment history, including capacity for interactive

regulation with others, appropriate help-seeking behaviors, and adaptive setting of physical boundaries.

Ogden et al. (2006) take a focused look at self-regulation in infancy: “Born with limited capacities for self-regulation, human infants are dependent on the externally mediated interactive regulation of their primary attachment figures to maintain their arousal within the window of tolerance,” (Ogden, Minton & Pain, 2006, p. 41). Window of tolerance (Siegel, 1999) is a term used across mental health fields to describe tendencies for regulating affect and arousal, two types of physical embodiment. Through interactive dyadic regulation with an attachment figure, caregivers support babies in down-regulating when over-stimulated and up-regulating when under-stimulated (Schore, 1994).

As babies receive attuned sensory input from caregivers, they become more effective at self-regulation, communicating their needs, and tolerating frustration – important developmental achievements and central to the foundation of a functional sense of embodied self (Schore, 1994; Stern, 1985). As such, disruptions in attachment contribute to diminished capacity to modulate arousal, develop healthy relationships and cope with stress (Ogden, Minton & Pain, 2006; Ogden, 2009; Schore, 1994).

Trauma Perspectives

Sigmund Freud entered his study of psychological processes through an interest in what is now called psychosomatic illness – that is, illness manifest in the body with no physiological cause. Such illnesses are categorized within the DSM-IV-TR as somatoform disorders. Then known as “hysteria”, psychosomatic illness had been a well-documented concern for centuries before Freud’s work. In the 19th century, Freud and physician Josef Breuer worked to treat a number of women. The pair went on to publish on the topic, asserting, “we have been led to the

view that hysteria originates through the repression of an incompatible idea from a motive of defense. On this view, the repressed idea would persist as a memory trace that is weak (has little intensity), while the affect that is torn from it would be used for a somatic innervation. (That is, the excitation is 'converted'.)" (1895, p. 285).

At that point, Freud and Breuer hypothesized psychosomatic illness to be a function of repressed memories of "psychical traumas" that became embodied somatically through a process called "conversion". Throughout *Studies on Hysteria* (1895), Freud and Breuer describe the attribution of physical symptoms to psychological distress and trauma, as well as the application of intervention on the physical level to alleviate symptoms through touch as well as sensory-based remembering of experiences. In more recent research on Post-Traumatic Stress, van der Kolk (1994, 2000) and others have made two critical conclusions: that traumatic memories are 1. embodied through real impacts on physiological processes, and 2. stored in affective memory, a portion of memory that often cannot be accessed by language. Ongoing PTSD research demonstrates the impacts of trauma on hormonal stress response, neuroendocrine functioning, and other biological processes that critically impact the body's ability to self-regulate in response to stress (van der Kolk, 1994). Van der Kolk writes, "trauma interferes with declarative memory, i.e. conscious recall of experience, but does not inhibit implicit, or non-declarative memory, the memory system that controls conditioned emotional responses, skills and habits, and sensorimotor sensations related to experience," (1994, p. 260).

Likewise, the procedural memory (the same component of memory used for skills like riding a bike) of an individual's response to the experience of chronic experiences of trauma, for example in repetitive attachment trauma with caregivers or in cases of domestic violence, "is characterized by automatic, reflexive performance, becoming an even more potent influence

because of its relative lack of verbal articulation," (Ogden, 2009, p. 206). The impacts of trauma and of attachment patterns interface closely within the body.

The assertion that trauma is not only stored in an embodied way, but is stored in a way that is resistant to standard 'talk therapy' approaches to treatment has dramatically impacted the way clinicians have come to treat trauma and view the embodiment of traumatic experience. In fact, more than ineffective, talk therapy focusing directly on emotions "may exacerbate dysregulation and/or reinforce maladaptive emotional patterns. Affect might be best regulated, rather, through an exclusive focus on bottom-up or sensorimotor processing interventions," (Ogden, 2009, p. 205).

Peter Levine's (1997) work on Somatic Experiencing has been groundbreaking in the field of trauma treatment, emphasizing that the solution to treating maladaptive traumatic reactions in clients comes "not through confronting it directly, but by working with its reflection, mirrored in our instinctual responses," (1997, p. 65). Somatic Experiencing therapy allows individuals to uncouple fear with functional but maladaptive actions of hyperarousal, constriction, dissociation and freezing. Levine states that "the core of traumatic reaction is ultimately physiological, and it is at this level that healing begins," (1997, p. 111).

Somatic Experiencing (SE) therapy (Levine, 1997) is a trauma-informed system based in the understanding that the nervous systems of individuals who have experienced traumatic events can remain in a state of imbalance and physiological distress that impacts individuals emotionally and mentally as well as physically. As a result, individuals can experience physical symptoms of disturbance of sleep, appetite and motor functioning, and may also become stuck in patterns of responding to traumatic reminders through flight, fight, freeze and collapse responses. As a result, individuals who have experienced trauma may experience challenges with arousal

regulation, becoming frozen or highly activated in response to stress, and have challenges achieving re-regulation following stress or traumatic reminders. SE therapy involves recognizing the ways that humans utilize our rational minds to override natural motor responses to discharge energy (i.e. shaking, trembling, and deep rapid breathing) that occur in any mammal that has experienced a threat to survival once they have found safety.

Rather than verbally processing the trauma through creation of a coherent narrative of the experience, SE seeks bring the nervous system back to a state of balance following trauma through supporting clients in identifying bodily responses to stress and using corrective body experiences to achieve a sense of safety and mastery in response to their arousal level. This is done primarily through the tracking of felt senses, arousal and stress responses in the body, and utilization of physical practices such as deep breathing and exaggerating natural motor responses to support the body in re-regulating. Repeated experience of hyper-arousal (e.g. fight/flight response) or hypo-arousal (e.g. freeze/collapse response) and re-regulation during sessions supports individuals in obtaining mastery over their autonomic nervous system response to stress, increases resilience, and alleviates symptoms of trauma. SE therapy has been used in the treatment of both traumatic shock following a single event (i.e. natural disaster, accident, assault, or combat), as well as developmental/psychological trauma experienced over a period of time (for example, in conditions of sustained abuse or neglect).

In recent years, Pat Ogden (2006, 2009) and colleagues have taken a leading role in the development of the field of Sensorimotor Psychotherapy, which has emerged as one important framework for understanding how somatic interventions can be incorporated into the practice of psychotherapy. The theory integrates attachment theory and neurobiological advances with traditional psychotherapeutic approaches in a way that “approaches the body as central in the

therapeutic field of awareness and includes observational skills, theories, and interventions not usually practiced in psychodynamic psychotherapy," (Ogden, Minton & Pain, 2006, p. xxvii). Whereas Levine's Somatic Experiencing therapy allows clients to identify, track, and discharge traumatic memories through the body, Ogden et al (2006) take Levine's approach a step further, with an additional focus on cognitive and emotional processing of somatic experience.

Trauma therapy has been a critical in-road for the scientific study of the impact of somatic interventions on psychological functioning. Within the field of trauma work, Bessel van der Kolk along with Jonathan Kabat-Zinn have been leaders in research on the psychological impacts of mindfulness and yoga on mental health, utilizing advances in neuroscience research to better understand how trauma is stored somatically in the brain and in the body.

Efficacy of Somatic Approaches

I will preface a discussion of empirical literature regarding somatic intervention with the disclaimer that some authors have questioned the epistemological basis for the valuing of randomized controlled trials (RCTs) over other types of research. Munder et al (2013) have explored the impact of researcher allegiance in psychotherapy outcomes research, demonstrating through analysis of 30 meta-analyses of researcher bias in psychotherapy outcomes research (meta-meta-analysis) that even in randomized-control trials (RCTs) that are typically considered to have high validity and objectivity, researcher allegiance to particular treatment outcomes constitutes a statistically significant risk for bias on outcomes findings in RCTs. The study found that comparative outcomes research appears to be at higher risk for impact of researcher allegiance on outcomes findings, suggesting that head-to-head empirical studies comparing the efficacy of two treatment approaches may have increased limitations with regard to the impact of researcher allegiance and other forms of bias in both their methodology and data analysis.

With that said, this author has found a dearth of comparative studies evaluating the efficacy of somatic treatments versus traditional talk-based treatment, with only one study identified in analysis of available literature. This may indicate that researchers exploring the efficacy of somatic interventions are primarily concerned with objective evaluation of the efficacy of approaches versus control groups at this time. It may also indicate that researchers evaluating the efficacy of somatic interventions are disinclined toward comparative research for any number of reasons. Limited availability of comparative research may impact the prevalence of these techniques in clinical practice, individual clinicians' openness to using somatic interventions, support for techniques in agencies and by supervisors, and clinicians' inclination to participate in research evaluating efficacy of somatic approaches.

In the one available comparative study, Leirvag et al (2010) conducted a non-randomized comparative study of patients with personality disorder diagnoses who attended long-term outpatient Body Awareness Group Therapy (BAGT) versus Psychodynamic Group Therapy (PGT) following discharge from a day treatment program in Norway. BAGT groups included many somatic interventions, such as individual exercises focused on grounding, balance and stability, contact with center of balance, and relaxation and breathing techniques. These groups also utilized group and partner exercises in body awareness, and partner activities that utilized direct physical approach to explore setting and maintaining boundaries. Both groups utilized aspects of talk therapy and group processing.

Leirvag et al (2010) found significant and pervasive benefits for the BAGT groups in GAF score, general symptoms and distress, and interpersonal problems. The PGT groups demonstrated a modest improvement in GAF scores, non-significant improvements in general symptoms and distress, and slight relapse of interpersonal problems. The BAGT groups also

endorsed increased group cohesion, trust and openness in their outpatient group therapy program. The authors identified three possible additional contributors to these outcomes in addition to the difference in treatment model: Patient open-mindedness with regards to the treatment modality, homogenous gender composition for the BAGT versus mixed-gender composition in PGT groups, and length of treatment sessions, with BAGT sessions being 25% longer than PGT sessions.

Leirvag et al's attribution of open-mindedness to positive outcomes for BAGT is particularly relevant to this study. BAGT participants were self-selected from day-treatment graduates who had benefitted from BAGT sessions during day treatment. With regard to this study, this may indicate a possibility that somatic approaches in general will be more effective when a client is open-minded around their use, or has prior experience with somatic approaches being effective for them.

Leirvag et al reported no indication that the PGT group had more severe psychopathology, and reported that in fact, BAGT participants reported higher levels of subjective distress upon day treatment intake, and also self-reported higher incidence of earlier trauma and alcohol abuse prior to entering treatment. They note that these factors are typically viewed in the field as negatively impacting patients' outcomes in treatment. The significant positive outcomes for BAGT in a group with higher incidence of trauma in particular is in line with theoretical groundings for the use of somatic interventions in the treatment of trauma-reactive symptomology (Ogden, Minton & Pain, 2006; Ogden, 2009; van der Kolk, 1994; etc.). The study also addresses the fact that patients with personality disorder diagnoses may have specific somatic areas of growth to address in treatment, such as ability to set effective interpersonal boundaries, depersonalization or dissociation from bodily sensations, and ability to

self-regulate arousal. Overall the findings may suggest that these somatic needs/deficits as they relate to client diagnosis may pervasively impact client functioning, and may be more effectively treated through somatic intervention.

No studies exist examining how clinicians utilizing somatic interventions use available research to guide their use of these interventions in practice. Studies on research-practice links in psychology suggest that clinicians' clinical practice tends to be guided more by discussion with colleagues and experience with clients than on research findings, and that therapists tend to read research less often than researchers. (Boisvert & Faust, 2006). Boisvert & Faust's (2006) study on psychologists' familiarity with research findings found that while participants indicated moderate familiarity with both general psychotherapy and general outcomes literature, perceived familiarity with research did not predict measured familiarity. They suggest that this may be impacted by the absence of standardized guidelines to assist clinicians in interpreting research, and because of differential exposure to research and other sources of information that support clinicians in integrating research findings into their clinical practice.

The study also found that "Participants tended to be incorrect about research that pertained to the relative benefits of common versus specific factors, the differential effects of therapy approaches, and the relationship between therapy durations and outcome," (2006, p. 713). Overall, however, the researchers conclude that familiarity with outcomes research may not be a prerequisite for effective therapy practice. With this in mind, one goal of this research project is to gain a more nuanced understanding of how clinicians utilize outcomes research and theory as they integrate somatic interventions into their practice, and to obtain a general sense of how research may inform practice around somatic approaches to therapy.

To give the reader a sense of some outcomes studies evaluating the efficacy of body-based interventions, I will discuss a selection of available studies on a few modalities – by no means an exhaustive review of outcomes literature. Overall, empirical research affirms the efficacy of approaches, however the outcomes literature discussed has challenges throughout with regard to sample size, and the potential for researcher bias in outcomes research previously discussed continues to apply.

Yoga is an Indian system of healing using physical postures, breathing exercises, and meditation techniques to support practitioners in achieving balance in the body. The practice has become popularized in the West as a form of exercise in recent decades, and the past decade has seen an increase in research around how yoga can be incorporated into mental health practice to support clients in finding relief from many conditions, In the area of somatic interventions utilizing yoga, Varambally and Gangadhar (2012) conducted a broad review of research studies on yoga as a treatment method for depression and affective disorders, anxiety disorders, schizophrenia, alcohol dependence, and psychiatric disorders of childhood, as well as studies on the neurobiological effect of yoga practice. Studies demonstrated an anti-depressant effect comparable to that of pharmacological therapy (Janakiramaiah et al., 2000; Sharma et al., 2006), and low cost and low risk anti-anxiety effect in conjunction with psychopharmacological treatment (Brown & Gerbarg, 2005; da Silva et al., 2009). Similar preliminary beneficial findings are noted for patients with alcohol dependence syndrome (Vedamurthachar et al., 2006), and children with ADHD (Haffner et al., 2006; Jensen & Kenny, 2004). However, the authors note a trend of small sample size in the majority of studies reviewed.

In an analysis of several additional empirical studies reviewing the efficacy of yoga interventions for various populations, studies utilize various sample populations, including older

adults in Taiwan (Fan & Chen, 2011), adults in British prisons (Bilderbeck, 2013), psychiatrically stable adults with schizophrenia in both the US and India (Behere et al., 2011; Visceglia & Lewis, 2011), and youth who have experienced trauma (Spinazzola, 2011; Lee-Kin, 2013). Faucher (2013) demonstrated a relationship between yoga interventions during pregnancy and maternal-fetal attachment, perceived mindfulness, and reduced depression in a small sample of 18 women with mild depression; obviously limited in terms of reliability and generalizability but still offering interesting possibilities for exploring the impact of body-based interventions on not just psychopathology but on the development of healthy attachment.

Within the broader field of movement therapies, Barton (2011) conducted a quantitative study of a body-based program called Movement and Mindfulness that was designed and implemented for use in an outpatient psychosocial rehabilitation facility for people experiencing severe mental illness. Participants who completed a 20-week program incorporating dance/movement therapy, yoga therapy-based techniques, traditional group counseling, and mindfulness practice demonstrated increased pro-social behaviors, stress management skills, and communication skills. Similar outcomes were found in qualitative reviews of case studies published by Douglass (2009) and Strauss et al. (2013) regarding the efficacy of yoga interventions for women with eating disorders and cancer patients respectively.

Several studies also sought to explore the impacts of yoga on mental health among healthy populations. Ross (2013) conducted a cross-sectional anonymous Internet survey of 1045 yoga practitioners, finding predictors of positive health outcomes. Additionally, Yoshihara (2011) focused on the impact of yoga practice on mood for healthy females who had a regular yoga practice versus a control group of healthy females who had not participated in yoga. The

study found lower self-rated mental disturbance, tension-anxiety, anger-hostility and fatigue scores among yoga practitioners.

Randomized controlled experimental studies for populations receiving mental health services involving wait-list control groups appear somewhat common in the review of empirical literature (e.g.Behere et al., 2011; Ross & Thomas, 2010; Visceglia & Lewis, 2011). Kosaza et al. (2008) conducted a preliminary experimental study on the impact of a yoga practice involving only meditation and breathing exercises on a group of 22 volunteers with anxiety complaints. One group received one month of yoga and meditation sessions, and the second group was wait listed for the same intervention. Using scales to assess anxiety, depression, tension and well being, the researchers found a significant reduction in scores on anxiety, depression and tension in the yoga group, as well as an increase in well being in comparison to the control group.

Some studies have also explored the impact of general physical activity on mental health. A community-based randomized quasi-experimental pilot study in the US, Kinser et al. (2013) studied a sample of 18 participants meeting criteria for depressed mood, comparing outcomes of an experimental group receiving a weekly 75-minute group gentle Hatha yoga class and a control group receiving a weekly 75-minute group class covering health and wellness topics such as heart health. While participants in both groups demonstrated decreased depression scores, the yoga group had a greater reduction in rumination behaviors at each time point throughout the study.

A similar study comparing yoga and physical activity was conducted by Noggle et al. (2012) to evaluate the efficacy of yoga on psychosocial well-being within a high school curriculum. The study compared a control group of grade 11 and 12 students receiving a standard physical education class with an experimental group of individuals receiving a yoga class

instead. The study found that total mood disturbance and self-ratings of mood, tension and anxiety improved in yoga students compared with the control group, and that the intervention was generally well received by students.

Two relevant studies evaluate the efficacy of brief (1-2 session) Somatic Experiencing therapy with survivors of ecological disasters. Leitch (2007) studied the effectiveness of brief manualized Somatic Experiencing/Trauma First Aid treatment with tsunami survivors in Thailand in an exploratory study, and was able to draw some preliminary conclusions about efficacy in comparing her findings with simultaneous non-treatment research being done on the general population of untreated Thai survivors in the same province. The researcher found that 96% of participants reported complete or partial improvement at the 1-year follow-up. While this research study had many methodological flaws, particularly around the use of measures that had been normed only on Western populations, the researcher viewed the study as a starting point for future research. Notably, she speculated that the somatic approach may have particular use when clinicians are working cross-culturally, given that some cultures "do not place primacy on psychological symptoms and verbal processing," (2007, p. 18).

Evaluating somatic experiencing therapy's effectiveness with social service workers following Hurricanes Katrina and Rita, Leitch et al. (2009) studied a group of 272 staff responding to these disasters. A treatment group received 1-2 somatic experiencing therapy sessions, and both groups received two 90 minute group psychoeducation sessions on normal responses to disaster and coping strategies. The researchers found significant differences in treatment and comparison groups with regards to PTSD symptoms, psychological distress and resiliency, but not for coping or physical symptoms. Both groups reported worsening symptoms

in follow-up, however worsening was significantly less in the treatment group compared with the control group.

Langmuir et al. (2012) conducted a pilot study on group sensorimotor psychotherapy, drawing on Ogden's sensorimotor psychotherapy principles. The study did not include a control group, and was conducted with a small sample of women recruited from a trauma-based hospital program who received a series of 20 non-manualized weekly group sessions aimed at cultivating mindfulness of somatic experience (e.g. body sensations), completing "actions or movements that encouraged a sense of empowerment and competency" (2012, p. 217) and utilizing somatic awareness to reduce trauma-related symptoms and encourage a return to "window of tolerance," (Siegel, 1999) e.g. optimal arousal. Based on several measures administered pre- and post-intervention, participants demonstrated increased somatic awareness, reduction in dissociative symptomology, and improved capacity to be soothed.

In a small exploratory randomized controlled trial of body psychotherapy in 21 patients with chronic depression, Röhricht et al. (2012) found lower depressive symptoms in a group receiving a manualized Body Psychotherapy (BPT) treatment in addition to treatment as usual, compared with a waiting group. The BPT treatment included exercises, movement strategies and sensory awareness procedures to address self-awareness and psychomotor activity; grounding techniques and other interventions to foster emotional expression and address suppressed impulses; physical strength and ability exercises to address self-perception and reduce somatic depersonalization; and body-oriented psychological work "with a specific focus towards the motor expression of unmet (physical and emotional) needs," (2012, p. 87). Another pilot RTC of the efficacy of BPT was conducted in patients with chronic schizophrenia, finding a reduction of

negative symptoms of schizophrenia, particularly with regards to symptomology around body perception (Röhricht et al., 2009).

Use of Somatic Approaches

The prevalence of somatic interventions in psychotherapy practice has not yet been studied. In an internet study of over 2,000, Cook et al (2010) surveyed clinicians concerning theoretical orientation, client characteristics and the use of specific psychotherapeutic techniques. A large number of respondents identified professionally as social workers (36%), with professional counselors, psychologists and marriage and family therapists following as most common professional orientations. Individual therapy was the primary modality for clinicians surveyed (84%). The majority of respondents identified themselves as eclectic with regards to theoretical orientation (98%), and significant to this study, 79% identified with CBT, 41% with mindfulness and 36% with psychodynamic/analytic.

More than half of participants endorsed using relational and processing-oriented strategies with clients, but techniques utilizing the body were typically less commonly endorsed. The table below is adapted from Cook et al (2010) pages 263-264 to include only the therapeutic techniques included in their survey that utilize an aspect of somatic technique, along with percentage of participants' responses regarding the frequency of their use of techniques:

Table 1

Clinician Use of Therapeutic Techniques Reported by Cook et al (2010) Study

Therapeutic Technique	None/some of the time	Half of the time	All/most of the time
Recommend changes in diet or exercise	67%	16%	17%
Teach mindfulness-based skills (e.g. meditation)	78%	9%	13%
Use relaxation training and/or tapes	75%	12%	13%
Recommend acupuncture, massage, meditation or yoga	83%	9%	8%

Provide dance, art or music therapy, creative writing, psychodrama	89%	5%	6%
Use empty chair or role-playing techniques	90%	5%	4%
Make use of energy therapies (e.g. thought field therapy)	94%	2%	2%
Use EMDR	91%	2%	2%
Provide hypnotherapy	96%	2%	1%
Use body therapy techniques (e.g. Feldenkrais)	97%	1%	1%

While they spoke only generally about the prevalence of use of techniques and not about techniques as they relate to a body-based approach to therapy, Cook et al (2010) note that the least frequently endorsed techniques may require specialization or certification beyond the scope of standard graduate education, and emphasize that their lack of use may reflect this aspect rather than a general lack of popularity. Although self-report of utilized techniques cannot be objective and may not be reflective of what clinicians actually do in practice, their study presents a good starting point from which to begin the exploration of how eclectic practitioners conceive of and utilize the body in clinical practice.

Complementary and Alternative Medicine (CAM) is an emerging field, with support from the National Institutes of Health through the establishment of a National Center for Complementary and Alternative Medicine (NCCAM). Studies (e.g. Astin, 1998; Druss & Rosenheck, 1999; Eisenberg et al., 1993, 1998; Paramore, 1997) suggest that more than one third of Americans use some type of complementary or alternative treatment in any given year, with depression, anxiety, fatigue, insomnia and chronic pain being the most commonly cited uses. While CAM includes non-somatic approaches such as herbal supplements, it also includes things like mindfulness, acupuncture and exercise, which are generally accepted as somatic interventions in treatment.

Elkins et al. (2005) conducted a study, open to all patients at an HMO outpatient mental health clinic, of 262 patients regarding their use of complementary and alternative therapies. The

sample was limited to a primarily Caucasian female population, however of these individuals, 64% reported using at least one complementary and alternative therapy modality in the past 12 months – most frequently, mind-body therapies such as relaxation/mental imagery, meditation, biofeedback and hypnosis (44%). Physical modalities were used by 21% of respondents (2005). This study offers a useful indicator of how open clients may be to a body-based approach in mental health treatment, which may be a factor in predicting positive outcomes in treatment. Clients' familiarity with mind-body therapies may also influence clinicians' decision to integrate therapies into treatment. Alternatively, clients' use of CAM modalities may be influenced by therapists' integration of these modalities into sessions, or recommendations around CAM use to their patients.

Conclusion

In conclusion, ample theoretical and empirical literature supports the incorporation of somatic interventions into mental health treatment, particularly in the fields of attachment, trauma, and neurobiology. Clients may have some awareness of the connection between mind and body from experience with complementary and alternative medicine, and the integration of somatic techniques into clinical practice is a topic that has been unexplored to date. In the next section, I will introduce the methodological approach to this qualitative study and introduce the reader to the process of study design, study recruitment, data collection and data analysis.

CHAPTER 3

Methodology

Formulation

Based on available literature, somatic interventions have a clear purpose within the practice of psychotherapy. This study seeks to investigate to what extent mental health practitioners integrate somatic interventions into their work with clients, with goals of learning how clinicians identify when somatic interventions are indicated, how the specific intervention is selected, how interventions are integrated in practice, and how interventions are received by clients. For example, this may include integration within the treatment plan in in-office and homework based interventions, as well as spontaneously while responding to client emotional and affective regulation or impasses within the therapeutic setting.

The study also seeks to understand how clinicians conceptualize the integration of somatic work into their practice, and whether they integrate or imagine the work differently based on their specialization (e.g., trauma versus primary care), field of study (e.g., social work versus counseling psychology), theoretical orientation (e.g., cognitive-behavioral versus psychodynamic), or other factors.

As a field which emphasizes the centrality of honoring the client's lived experience as well as the intersubjective relationship between client and therapist, somatic interventions have a clear role within social work practice. On the most basic level of observation, somatic experiencing can offer valuable insights for practitioners' countertransference experience with

clients, and mindfulness of somatic experience can be valuable for clients' relationships with their therapist as well as within patterns of interactions with others.

Somatic interventions and somatic theoretical approaches to psychotherapy are emerging fields in the broader field of mental health. Existing research has focused on disparate types of interventions, often with their own specific theoretical underpinnings, and little research exists cohesively discussing approaches and theories. The researcher hopes that this exploratory study will offer a strong starting point for future social work research on somatic approaches, and that the study itself will serve as a resource for social workers interested in integrating somatic approaches into their work with clients.

Secondarily, the research hopes to gather data around what training clinicians receive in somatic interventions. Of particular interest to the field of social work practice and the integration of somatic interventions therein is in what ways are agencies are supportive of clinicians' integration of somatic interventions? Where would individuals like further support? This line of inquiry is in line with social work's dedication to continuing education and theory-grounded practice.

The study offers a unique opportunity for clinicians to think about and discuss their use of somatic interventions with clients. As most clinicians who will participate in the study are unlikely to identify strictly as somatic practitioners, this study may be a rare opportunity to think and speak specifically to the experience of doing body-based work with clients, how it fits into participants' theoretical orientations, and the unique rewards and challenges that body-based interventions offer to clients and practitioners.

Research Methods and Design

This qualitative study utilized an exploratory design with a non-probability snowball sample. The research design was chosen to reflect the fact that while there is ample research on various types of somatic interventions, existing research has focused on the efficacy of disparate interventions and modalities and little research exists exploring clinicians' experience with regard to their theoretical underpinnings and rationale for somatic techniques selected, and the experience of using somatic interventions and modalities in practice.

Before conducting this study, appropriate human subjects approvals were granted by review boards at Smith College School for Social Work as well as Youth Opportunities Upheld, Inc, the researcher's field internship agency from which several participants were recruited. Study participants were recruited with the following eligibility requirements. First, participants are mental health clinicians with academic preparation at at least the master's level. The study allowed participation by practitioners from any mental health discipline, including social work, clinical psychology, counseling psychology, expressive movement therapy, marriage and family therapy, and art therapy. The study allowed for participation of practitioners working outside of the field of social work in order to broaden the available sample, as well as to identify possible differences in orientation based on clinical training.

Secondarily, participants self-identified as having used at least one somatic intervention with at least one client of any age with any presenting concern in the last 30 days prior to study enrollment. This criterion was selected so that participants would be able to speak from recent experience with clients, as well as to solicit participation from individuals who have some level of comfort with the content of the research. For the purposes of this research, "somatic intervention" was defined as any experiential intervention that brings attention to or consciously

manipulates an individual's physical posture, gestures, gait, or breathing. This is in line with definitions used within the broader fields of Sensorimotor Psychotherapy, Body Psychotherapy, Expressive Movement Therapy and some branches of Gestalt therapy. Somatic interventions may include mindfulness or meditation practices, family sculpting, or the use of safe touch between therapist and client or within a family system. For the purposes of this study, somatic interventions may also include practices such as EMDR, yoga therapy, or expressive movement therapy.

Finally, eligible participants self-identified as English-speaking and practicing in the continental US. While a clear limitation of the study, it was necessary to exclude participants who did not feel comfortable participating in a 45-60 minute interview in English, as the researcher does not have sufficient foreign language fluency to conduct interviews in additional languages.

While it may have been possible to draw statistically significant quantitative conclusions about the use of somatic interventions from a quantitative study design, the use of qualitative interviews allowed for a more nuanced and in-depth look at the ways that various practitioners across mental health disciplines conceptualize the use of body-based interventions in their work, and the process by which they have come to understand the role of the body in treatment. A qualitative, exploratory approach allows the researcher to deepen her own understanding of decision-making around these interventions, and contribute to research on the underlying themes, politics of professional identity, ethical issues, and practice considerations of practitioners using or considering various somatic modalities. This approach offers a wealth of inspiration for future research on a very broad and timely theme, which literature suggests is somewhat fractured along discipline lines in clinical practice.

Sample

Based on inclusion criteria, participants in the study are mental health clinicians with academic preparation at the master's level or higher. Participants come from many mental health disciplines, including social work, clinical psychology, counseling psychology, expressive movement therapy, marriage and family therapy, and art therapy. Participants from multiple disciplines were included in the study to allow the researcher to begin to draw comparisons between the use of somatic interventions within different clinical disciplines, and incorporate clinicians' perceptions of how their discipline views the body in treatment. Within the Findings section, participants' professional orientation is noted as relevant to statements made during interviews. Participants self-identified as having used at least one somatic intervention with at least one client in the last 30 days. Participants are English speaking due to limitations in the researcher's foreign language abilities, and practicing in the continental US to afford the researcher easier logistical access to participants to complete interviews.

In initial phases of recruitment, the researcher created an email list of approximately 30 professional contacts in the mental health field. The researcher also obtained permission from her field placement agency to send a study recruitment email to all agency staff – approximately 800 individuals, a portion of whom would be eligible for interview based on inclusionary criteria. The researcher sent a recruitment email to professional contacts working in the mental health field. In the email, interested study candidates were asked to contact the researcher by email or telephone to schedule a brief (5 minute) screening interview by phone. In the screening interview, the researcher answered any questions, confirmed that participants met inclusionary criteria for the study, and scheduled the interviews.

Participants were informed that they might refer others who met inclusion criteria by forwarding recruitment email and flyer to forward to colleagues and other contacts. Professional contacts were informed that the recruitment email and flyer could be forwarded to contacts who might be interested in study participation at their discretion. Many participants provided referrals to other clinicians who are known for their use of somatic interventions. This form of snowball sampling offered a broadened base of participants, however was inherently limited by the small group receiving initial contact. The snowball sample is inherently limited by clinicians' judgments and assumptions about ideal study participants, and referral sources' social networks may be inherently limited to those who are similar to them in terms of race, class, social status, and treatment modality.

Upon screening and within the informed consent, participants were informed that their participation in the study was voluntary, that they were able to refuse to answer any question, and that they might choose to withdraw from the study during or after their interview, up until a deadline by which data cannot be withdrawn from the final study. Participants recruited from the researcher's field placement agency were informed that they could contact the chair of the agency research department with any questions or concerns regarding the study.

The methodology selected involved analyzing and interpreting qualitative information, which inherently involves subjectivity. As such, the personal biases of the researcher posed a potential study limitation. The researcher has a personal interest in learning about and using somatic interventions in treatment, and has additional background in martial arts and yoga instruction that she often uses in treatment with clients. The researcher has addressed this potential bias through guidance from the research advisor in her efforts to code and analyze data in an objective way. While the researcher uses somatic interventions in practice in a way that is

grounded in available research on the topic, the researcher does not subscribe to a particular implementation model or theory at this time, and has sought to maintain a 'beginner's mind' as she gleans insight and new grounding for somatic intervention from more experienced practitioners.

Study participants' knowledge of the researcher's background and interest in somatic interventions may have influenced their responses during interviews, however it may also have provided an assumption of mutual understanding that may have facilitated a deeper and more honest and open discussion of technique and theory.

The use of a non-randomized sample is a significant limitation to the study design. While this limits the applicability of the findings, the researcher has sought a sample that is inclusive of practitioners throughout New England as well as the West coast, and a sample which includes clinicians who have received training and work experience in a variety of settings. Although limited, the research still offers important insights and themes that will offer a basis for future innovations in research and practice.

Data Collection and Methods

The data collection instrument for this study was an interview guide created to elicit narratives from clinicians regarding their theoretical influences, interventions used, client response to interventions, and considerations around professional development.

As described in the recruitment description, participants were recruited via email using a snowball sample methodology. Professional contacts received an emailed letter and flyer describing the study purpose and methodology. Interested individuals were asked to contact the researcher, who followed up with a brief informational call to provide additional informed consent, answer questions, and schedule an interview if interested.

Participants' email addresses, phone numbers and other contact information were stored as a file separate from individual interview documents. The contact information file was stored on the researcher's password-protected Dropbox folder, and was deleted at the conclusion of research. A copy of the final thesis document was sent electronically to any interested study participant upon request, and all participants were made aware that the document will be available electronically through the Smith college library.

Twelve participants were recruited for this study, and twelve in-person interviews were conducted. Ten participants allowed the researcher to audio-record the interviews, and two declined to be audio-recorded.

Data was collected through 45-60 minute interviews, conducted either in person or via telephone. Participants were e-mailed, faxed, or handed a hard copy of informed consent prior to a screening interview. Once accepted to participate by phone interview, participants were given instruction to return original copies of signed consent forms by mail to the researcher at her home address, and were informed that signed consent must be in hand at the time of interview or the interview would need to be rescheduled. Participants were informed that participation was voluntary and that they could terminate their participation in this project at any time before or during the interview, and could remove themselves from the study during a period of time after the interview but before submission of the final thesis. Participants were notified that in the event of termination from the study, all associated electronic files and documents would be destroyed. Participants were informed that they could choose not to answer any interview questions for any reason. No participants interviewed elected to withdraw from the study.

The researcher met with participants for a single interview. The researcher had contact with participants prior to interview to screen participants, discuss informed consent, schedule the

interview, and answer questions. Participants had no obligation to the researcher following completion of the interview. Each participant spent no less than one hour and no more than two hours doing tasks related to this study, including screening, scheduling and participation in an interview.

In-person data collection occurred at a mutually convenient location for participants and researcher, most typically a private office at the researcher's internship. One interview took place at a coffee shop selected by the participant. Telephone data collection took place from a private space in the researcher's home.

Interviews were audio recorded using digital recording on an audio recording device. Interview audio files were coded with numbers and stored on the researcher's password-protected Dropbox folder. The researcher personally completed verbatim transcription of audio recordings into an electronic format using Microsoft word.. Clinicians participating in the study were asked to de-identify any case material that they discussed during interviews, and all clinicians interviewed complied with this request. For the two participants declining audio-recording, the researcher took notes during interviews and wrote up syntheses of responses with relevant quotes noted immediately following the interview. The handwritten notes were shredded following transcription.

All research materials including recordings, transcriptions, analyses and consent/assent documents will be stored in a secure location for three years according to federal regulations. In the event that materials are needed beyond this period, they will be kept secured until no longer needed, and then destroyed. All electronically stored data will be password protected during the storage period.

Data Analysis

Qualitative data from open-ended questions was analyzed by examining verbatim interview transcriptions. Transcriptions were coded using qualitative data analysis to identify significant themes within participants' narratives based on the research question "How do clinicians conceptualize and integrate the use of the body into their clinical work with clients?"

Each interview was coded separately. In the first stage of coding, the researcher labeled and paraphrased interview content with an eye for emerging themes and narratives. This stage of coding was done with a "beginner's mind", a phrase borrowed from Zen philosophy. Verbatim transcriptions were coded in the initial stage without attachment to a particular outcome and without a desire to tie theory or literature to participants' experience.

In the second stage of coding, coded data was sorted by theme or topic. Topics and themes were separated or combined until each theme appeared sufficiently substantiated by data to stand alone in the development of a conceptual schema. Data that appeared unsubstantiated, irrelevant, or disconnected from the research question was omitted. Some discussion of this data is included with regard to suggestions for further research in this area.

In the third stage of coding, the researcher developed a conceptual schema from the data, tying the data together. Major and minor themes were identified and a narrative emerged around the interplay of these themes in participants' clinical experience. The final analysis was written in a way that was guided by the conceptual schema, integrating relevant theory and literature as needed to support the data.

Discussion

While the study did not involve exposure to any new case material for participants, the act of recounting their work with clients posed a small potential risk of raising issues of vicarious

trauma or secondary traumatic stress. It was determined by the Human Subjects Review Board that as study participants are practicing mental health professionals with professional licensure in their field of study, this risk is minimal and does not constitute a significant ethical issue.

The researcher elected to interview participants who are current or past supervisors at research participants' discretion. Participating current or former supervisors were asked to consider power dynamics and conflicts of interest as they determined whether they would like to participate in the study to avoid potential conflicts of interest.

The researcher did not interview individuals who are or have been direct clients of the researcher in order to avoid ethical transgressions. Participating clinicians may consider themselves to have or have had physical or psychiatric disabilities, however they were not recruited on this basis and the researcher did not inquire about participants' personal disability status within the context of the research. The researcher completed the Collaborative Institutional Training Initiative (CITI) on line training course prior to HSR approval and initiation of the study. The certificate of completion is on file at the SSW.

Although this study does not directly deal with the impacts of racism and discrimination, the researcher sought to acknowledge and challenge her own biases and assumptions as a white clinician throughout the research process through open dialogue with colleagues and peers about the impact of power differentials in research and practice. Of particular interest in the context of the topic is whether the application of somatic interventions assumes that both clinician and client are able-bodied. It is the researcher's belief that this need not be the case, and that embodied interventions may be of particular clinical use when client or therapist has a physical disability, but this issue warrants further research and consideration.

CHAPTER 4

Findings

Formulation

Interviews yielded twelve rich narratives around participants' experiences using somatic interventions with clients, as well as the thoughts, feelings and beliefs that surround their use of the body in mental health treatment. The researcher will begin with a discussion of the sample population and the theoretical orientations from which they practice, as well as a discussion of how participants' theoretical orientations conceptualize the use of the body in treatment. Individuals' relationship to somatic interventions will be explored, with a detailed analysis of specific techniques and modalities endorsed during interviews and explanation of what interventions look like in practice. The researcher will then delve into a discussion of themes emerging from the research.

Sample Population

All participants interviewed were female identified and all were masters level clinicians licensed in the state of Massachusetts. Of the sample size of 12, five participants identified professionally as Clinical Social Workers (one licensed independently as an LICSW in Massachusetts); three participants identified as LMHCs; one identified as a clinical psychologist, and three identified as expressive arts or drama therapists, with concurrent LMHC or LMFT licensure.

Participants generally identified that mental health counseling, marriage and family therapy and clinical psychology do not explicitly advocate the use of the body in mental health treatment. Expressive arts or drama therapy were identified as more explicitly advocating the use of the body:

> Interview 5: My training as an MFT, I don't know if that so much affects how I view using the body in treatment… That's more about systems and I don't remember reading anything or learning anything in that literature that advocated incorporating the body… As a drama therapist, I through that part of my training have come to see work with the body as essential to creating change.

> Interview 4: Art speaks through the body.

> Interview 9: Being an expressive arts therapist is really important to me… My main art forms are writing or dance, not visual art… and also to a lesser amount, music and song. To me, all of these pieces are really about connecting with your body and the different parts.

Participants identifying professionally as clinical social workers (n=5) all endorsed a connection between clinical social work values and the use of the body in treatment. Narratives around this centered on the ideas that clinical social workers strive to view the whole person in treatment, avoid addressing challenges narrowly, and empower clients to take ownership over their treatment and healing.

Two participants reported that they work independently in private practice, with the remaining ten participants working as clinicians at a mental health agency. In terms of participants' specializations in particular populations and presenting issues, adolescents were the

most common population (11 participants), followed by children ages 6-12 (10 participants), adults (7 participants), early childhood ages 0-5 (5 participants), and couples (2 participants). All participants working with children and adolescents endorsed engaging families on some level in treatment when possible.

With regard to presenting issues, all participants endorsed addressing multiple mental health needs. The most common specialization was in mood disorders and trauma (10 participants endorsing), followed by anxiety disorders (6 participants), attention and behavioral disorders (6 participants), and autism spectrum disorders (5 participants).

Theoretical Orientations

All participants identified multiple theoretical orientations that they draw from in their clinical work, with two participants noting their orientation as specifically "eclectic." The most common theoretical framework guiding participants, by self-identification, was cognitive-behavioral (6 participants), followed by psychodynamic theories and attachment theory (5 participants each). Four participants identified themselves as trauma-oriented, with some discrepancy around how strongly they identified with the trauma field, which appeared to center around a personal question of whether they had had enough training to identify themselves as trauma clinicians. This is interesting considering that ten clinicians identified that they work with trauma as a dominant presenting issue or specialization.

Additionally, four participants identified that they draw heavily from mindfulness-based theory. Other theoretical orientations identified were narrative therapy (3 participants), humanistic psychology (3 participants), family systems theory (3 participants), somatic psychology (2 participants), expressive arts therapy (2 participants), feminist theory (1 participant), and psychodrama (1 participant). Among clients identifying with psychodrama and

expressive arts therapy, all mentioned that there is a debate within the expressive-arts and drama therapy fields right now regarding whether these fields should be viewed as theoretical orientations or professional identities. These are included in this write-up as both orientations and identities, acknowledging while, as one participant (Interview 9) states, “You can actually do your NPI code to say that you’re not a mental health counselor but a creative arts therapist,” there is a broad base of theoretical and empirical literature linked to specific types of treatment modalities underpinning the field.

Participants were asked to identify whether the theories they draw from explicitly advocate the use of the body in treatment. All participants identified at least one theory that they draw from in clinical work that explicitly advocates the use of the body. There was consensus that trauma theory (n=4), mindfulness-based theory (n=4), somatic psychology (n=2), expressive arts therapy (n=2), psychodrama (n=1) and feminist theory (n=1) advocate a body-based approach.

> Interview 4: I think that being female in the world is a very different experience than being male and I have to be aware of how that might influence families and relationships. Being male in the world is very different, and for me it’s other, and that also influences family dynamics and the sense of who you are in the world. Even in today’s world we’re knowing more that it’s not either or, and as I’ve become more educated and sensitive to that aspect, I think body plays a big factor in understanding who people are as far as gender, as far as sexual orientation, as far as who they perceive themselves as being in the world. So it has grown to be much more important, and it’s bigger than what it was ten years ago.

Participants' narratives around the connection between theoretical orientation and body-based work were rich, but the connections that appeared the most explicit and specific throughout interviews focused on trauma theory and attachment theory:

> Interview 3: [In] my training experience, yes [trauma and attachment theories advocate a body-based approach], although I think it's a bit newer. Maybe not newer in how it was thought of, but newer in us learning how to use interventions to address the body components of it. At the very basic level, I think that all trauma therapies focus on scanning and being aware of a person's body, their body movement, their body language, their energy and arousal level, their emotional expressions, the shifts in any kind of body posture and whatnot. In the field of trauma with the situation being that we base a lot of strategies in helping someone stay grounded and attending to the physicality of that… I think in attachment you're really urged to turn into both parties, whether it's in couples therapy or in parent child psychotherapy. Tuning into both people's body language and what kind of rhythm they have, what kind of call and response do they have in their actions, are they receptive and open, do they withdraw, how engaged are they, do they make eye contact, do they touch, what's the quality of their touch, what's the arousal level of each person, how do they respond to that arousal level… like if a kid's on my yoga ball bouncing up and down is the parent or caregiver ok with it? Do they say "Knock it off, that's really bugging me," so yeah, it's a very important part of attachment work too.

> Interview 6: The trauma theory that I am guided by definitely does advocate body-based work. I think the trauma field mainly knows about mindfulness and yoga as practices that help, so the Aikido piece is something that I think is a little newer but adds a dimension

> that yoga and mindfulness doesn't because you're with a partner and you in action need to deal with a stressor or a relationship – the things that actually trigger trauma responses for people.

Cognitive-behavioral theory and psychodynamic theory were split, with four (n=6) participants endorsing an explicit focus on the body in cognitive-behavioral therapy and two (n=5) endorsing an explicit focus on the body in psychodynamic theory. As participants were not asked to define psychodynamic theory, this discrepancy may be around the incorporation of attachment theory into psychodynamic work – the two participants reporting a body-based focus in psychodynamic theory did not additionally cite attachment theory as a framework guiding their work, however referred to ideas of attachment at various points in their interviews.

Two participants offered an interesting integrative perspective on theoretical orientations:

> Interview 2: We think about CBT and neurobiology and neural pathways and how to change those… it's all very physical in addition to being based on our histories and our psychology. So I guess that's where I think CBT and psychodynamic really complement each other very well in terms of somatic interventions.
>
> Interview 8: I think a lot of trauma work is working with the body and where you store things in the body. Sometimes the way you get that out is cognitively or behaviorally or restoring attachment. I think a lot of times they're connected for me, because I think the way we attach is through behavior. It's very behavioral.

These responses and the overall trend within the sample of drawing from multiple theories, some that integrate the body more than others, speaks to clinicians' ability to make meaning of and integrate multiple theories and modalities into their work. It may also speak to the challenge of categorizing theories that are often interrelated and build upon one another, despite the tendency

among mental health fields (and indeed the tendency of this researcher in this inquiry) to fracture our base of theories into disparate parts. Only one participant endorsed a sense that all the theories that she draws from explicitly advocate integrating the body into treatment – these frameworks are attachment, feminist and expressive-arts theories.

With regard to CBT, one participant discussed using both traditional and trauma-focused CBT modalities. When asked to discuss the similarities and differences between the two in terms of their incorporation of the body into treatment, she stated,

> Interview 8: Because TF-CBT is still being evolved and the founders are continuing to tweak it based on feedback that they get, theirs is probably more body-based [compared to CBT]. But if you think back to basic behavioral therapy and salivating… I guess it depends on how you're conceptualizing using the body.

There was consensus among participants that humanistic psychology (n=3), family systems therapy (n=3) and narrative therapy (n=3) do not explicitly advocate the use of the body, however a few participants discussed that the use of metaphor that is central to narrative therapy can be paralleled by clinician's use of metaphor to support participants in making meaning of somatic experiences in treatment.

Defining and Describing Interventions

All participants were asked to define body-based intervention during the interview, and were encouraged to do so without interviewer prompt. Two participants indicated that they would like the researcher's personal definition, and the working definition used throughout this study was provided following participant response. Ultimately, there was some difference in the way that clinicians interviewed define "body-based intervention" in their work. While all

participants incorporated the idea of using the body in treatment, the methods and goals differed between responses.

Five definitions incorporated the idea of intentionally focusing on the body, and five definitions specified that interventions were related to clients' goals. Additional incorporations included the idea of paying attention to sensation (2 participants), aspects of arousal and regulation (2 participants), learning to integrate body and mind (2 participants), and locating emotions in the body (2 participants). Two participants discussed the idea of utility – one stating that body-based interventions utilize movement and awareness as instruments, and another stating that body-based interventions involve using the body as a coping skill. Other ideas that emerged from this exercise in definition included the idea of a safe space, getting out of the thinking mind, and clinicians instructing or guiding clients (1 participant each).

All participants endorsed some sense that somatic interventions are important to their work, with many participants stating that somatic interventions are integral to their work, if not because of their approach and theoretical basis but because of personal preferences for incorporation of the body into treatment. Many participants noted that they don't use somatic interventions when clients express discomfort, but the majority of participants discussed the use of somatic grounding exercises as being important to creating appropriate openness and containment in a therapeutic setting for most clients. Specific goals of somatic intervention are discussed later in this section.

Two participants noted that there are times when somatic interventions would not be indicated because of client needs and preferences. These participants endorsed a client-centered approach to treatment as well as an emphasis on the importance of client choice in treatment:

Interview 3: It's always about choice

> Interview 10: I think a lot of people just plain don't like it when I talk about [somatic interventions]… and really therapy is about the client, what makes a difference for them, what they want to do… So if I said that it was integral, a lot of my clients wouldn't come back regularly.

While all participants identified as currently practicing as outpatient providers in clinics or in private practice, one participant who had extensive experience working in an educational program with teens with behavioral issues discussed setting as an important factor in determining whether somatic interventions are appropriate:

> Interview 9: "I believe you need a certain amount of personal safety in order to do a lot of the body based interventions and in that environment it didn't feel safe enough. [Program] is a really unstable place. Kids are always behaving and acting out and one of the things that I think is really important... is that you need to open and close the body and I was always afraid I'd be interrupted and leave a kid wide open and they'd get hurt or damaged.

Table 4.1 shows the use of specific modalities or interventions endorsed by study participants. To afford the reader some organization of ideas presented and a clearer understanding of the interventions participants use, interventions have been sorted into ten main categories: mindfulness-based interventions, postural interventions, attachment interventions, sensorimotor interventions (including play), projective interventions (including art and expressive arts interventions), narrative interventions, and behavioral interventions. A “specific skills” category captures interventions used that generally require specific training and certification: EFT and EMDR. One additional category is included that was outside of the researcher’s initial understanding of somatic interventions at the start of this project: interdisciplinary collaboration in support of the body.

Table 2

Somatic Interventions Reported by Participants

Category of intervention	Specific modality/intervention	Participants endorsing (n=12)
Mindfulness	Meditation/mindfulness	7
	Locating emotions	5
	Noticing body sensations	8
	Tension-relaxation	4
	Engaging the senses	9
	Utilizing therapists' body sensations	6
Postural	Postural adjustments	5
	Breathing exercises	11
	Yoga exercises	3
	Physical reflection	7
	Utilizing therapists' body or posture	5
Attachment	Rhythm building exercises	5
	Encouraging touch between clients	5
	Using physical touch	3
	Adventure-based treatment	2
	Clinician use of modeling	1
	Using the physical environment to create safety	4
Sensorimotor	Gross motor skills	2
	Fine motor skills	2
	Occupational therapy	3
	Specific Sensorimotor interventions	5
	Punching	1
	Martial arts	1
	Sand tray work	2
	Play therapy	7
Projective	Making art	5
	Dance	5
	Drawing/tracing the body	3
	Physical sculpting/drama	2
Interdisciplinary	Collaborating with other providers (Doctors, Psychiatrists, OTs)	4
	Helping clients understand body impact of medications	1
Narrative	Use of body metaphors	4
Behavioral	Behavior replacement	4

	Providing psychoeducation on neurobiology using physical gestures	1
Specific skills	EMDR	2
	Tapping/EFT	4

Use of different techniques was tallied from participant reports through analysis of interview transcripts. While all participants were asked specifically about somatic interventions used that are particularly clinically interesting or representative of their work, most participants discussed interventions throughout the interview in response to various questions and entire interview transcripts were analyzed to tally somatic interventions endorsed during interviews.

All participants endorsed the use of breathing exercises during sessions. Several people spoke about the importance of teaching deep breathing skills to promote self-regulation, and participants endorsed using techniques with clients such as counting breaths, utilizing physical movements to correspond with inhales and exhales, encouraging clients to focus on their exhale to support deeper breathing, and guiding awareness of the sensation of breath entering and leaving the body. The second and third most commonly used interventions were engaging the senses through a clinician-guided awareness of tactile, olfactory, audio and visual stimuli (9 participants) and noticing bodily sensations through techniques such as scanning the body for tension, discomfort, hunger, fatigue and specific sensations (8 participants).

Seven participants each endorsed the use of meditation/mindfulness techniques, play therapy interventions (with participants typically noting that these are nearly always physical in nature), and physical reflection by the therapist. Physical reflection is a technique involving the therapist mirroring the client's body language or moving physically to test a hypothesis about how a client may be feeling, rooted in an understanding of the impact of posture on emotion and vice versa (e.g. hunched shoulders may suggest withdrawing or self-preservation - a desire to not be seen or make ones' self small, etc). Participants discussed physical reflection as being used

covertly to provide the therapist with information that may not be articulated to the client in the moment, as well as overtly, for example, with the therapist reflecting, “You are telling me you are not anxious, but your body looks like this [postural shift to reflect tension and psychomotor agitation].” Some participants also reflected that there are times that they unconsciously take on a postural shape either reflecting the client’s posture or in response to a client’s affect and arousal, and that this is also critical information that they use to guide their work.

The least common interventions endorsed (1 participant each endorsing) were providing psychoeducation on neurobiology using physical gestures to incorporate visual as well as auditory learning, punching exercises, martial arts, and clinician use of modeling skills. Additionally, two participants each endorsed the use of Eye Movement Desensitization and Reprocessing (EMDR) therapy, physical sculpting/drama exercises such as family sculpting and role playing, sand tray therapy (a play therapy technique involving the use of a sand tray and figures which inherently engages tactile sensory stimulation), general incorporation of fine and gross motor skills during sessions, and adventure-based therapies such as rock climbing and trust exercises.

It is worth noting that it is unlikely that any participant provided a full description of every type of intervention they utilize in clinical practice, however interviews support the idea that clinicians may take a varied approach to using the body in treatment once they have determined that it is appropriate for them to do so. All participants identified multiple interventions used with clients. The challenge of fully explaining and categorizing these interventions became apparent in the process of coding.

Outcomes and Goals of Body Integration

All participants addressed the concept of utility of somatic interventions and their perceived outcomes of treatment throughout interviews. All participants reported that they feel positive about their use of somatic interventions, and all reported that they believe that other clinicians should be knowledgeable about somatic work and indications for its use, and feel comfortable referring out as indicated if they do not feel comfortable using somatic interventions in their own work.

Although certainly secondary to client outcomes in a field that is client-centered, all participants reported positive outcomes in terms of their personal sense of satisfaction in relation to the use of somatic interventions in their work. When asked what it is like for participants to implement somatic interventions into their work, responses ranged from “good” to “imperative” or “necessary” to “natural”. Some participants stated that the interventions themselves or clinicians’ confidence around them has enhanced their clinical work, and several people discussed that they are always learning new things from their use of somatic interventions. Three participants made mention of the idea that through using somatic interventions in their work, they feel less concerned about whether clients want to talk because they have access to other tools for self-expression and connection. A few participants noted that a somatic approach to treatment is energizing for them, with one participant reporting that she would not continue to be in this field if somatic interventions could not be a large part of her work.

Despite feeling generally very positive and confident about their use of somatic interventions, some participants also discussed concerns about interventions. Another emerging theme from three participants was about the power of somatic interventions. Four participants mentioned the idea that somatic work can be very powerful for clients, and three additional

participants discussed their belief that somatic interventions need to be done more artfully or with more care than talk therapy.

> Interview 9: What I don't think is accepted is how powerful it can be. I think some people think its just another fun trick, but I think it's pretty powerful to the point where if you don't know what you're doing it can be dangerous.

Five participants reported a sense that they need to know their clients very well before using an intervention, including pertinent medical history, in order to know whether somatic interventions can be used safely.

Safety concerns focused around both physical safety (for example, in Aikido therapy groups where children work with partners to do martial arts techniques, or in a sensorimotor intervention which involves parents squishing their kids between couch cushions to provide deep pressure input for the child) as well as emotional safety. In terms of physical safety, participants spoke about a need for increased tools to use during interventions, larger/more appropriate treatment spaces to provide increased physical safety, more training for clinicians in safely using techniques, and access to supervision with supervisors with experience doing somatic work.

Three participants also wondered if their agencies should have more specific informed consent or if there were unexplored liability issues that should be considered. Four participants spoke about the challenges of providing adequate psychoeducation to parents to get buy-in to use somatic interventions, particularly when they may appear risky safety-wise, or cause concerns around their use outside of treatment (for example, adolescent clients in an Aikido group therapy setting, or a child using punching with inflatable fists in therapy to express and discharge feelings of anger). For these 'risky' interventions, clinicians spoke about using a great deal of

preparation before and processing after interventions, discussion of body safety, and engagement of executive functioning skills with the intervention.

Around emotional safety, two participants referred to the concept of the anatomy of a session and taking care to leave time for processing of somatic interventions, and one participant discussed that somatic interventions may not be appropriate in settings where the session can be interrupted by clinical emergencies. A few people mentioned that even with simple exercises like deep breathing or a body scan, clients can become very unsettled or emotionally vulnerable, and clinicians should be prepared for this and allow sufficient time in a session to support clients in returning to a more regulated state before they leave the office. This is particularly relevant as six participants referred to the concept that everyone reacts differently to interventions.

Client outcomes.

Table 4.2 shows stated goals of interventions with numbers and percentages of participants endorsing. The researcher has sorted outcomes within five categories: assessment, relational, insight-oriented, functional, and somatic. While alternative categorization is certainly possible, the goal of categorization is to support the reader in understanding the different areas in which clinicians seek outcomes through somatic work.

Table 3

Stated Goals/Outcomes of Somatic Interventions

Goal category	Stated goal/outcome of intervention	Participants endorsing (n=12)
Assessment	Support assessment	6
Relational	Improve therapeutic relationship	3
	Increase client ability to connect/express	5
	Address impasses in treatment	4
	Prepare client to talk during treatment	7
	Repair attachment/improve outside relationships	5
	Have fun	4
	Support clients in feeling “seen”	2

	Increase clients' ability to be present	7
	Provide client with more control	2
	Release control from client	1
Insight-oriented	Increase client self-awareness	7
	Increase compassion/self compassion	3
	Improve self-image/comfort with body	4
	Increase client insight	8
Functional	Support regulation of affect	6
	Support regulation of arousal	7
	Discharge physical energy	4
	Increase creativity/flexibility	5
	Improve client ability to learn	3
	Engage executive functioning	2
	Increase distress tolerance	1
	Learn/practice skills	8
	Address symptoms	11
	Increase sustainability of clinical gains	4
	Process trauma	4
	Address depersonalization/de-realization symptoms	2
Somatic	Address pain or bodily traumas	4
	Improve sleep	1
	Support psychopharmacological treatment	1
	Get trauma unstuck/unclogged from the body	1

All participants endorsed the use of somatic interventions to reduce client symptoms, and these narratives focused around discussion of anxiety, behavioral/attention issues, and affective symptoms. The second most commonly endorsed goals or outcomes were to increase client insight and to learn and practice skills (8 participants endorsing each), followed by preparing clients to talk during treatment and increasing clients' ability to be present (7 participants each endorsing). The least commonly endorsed goals were around improving sleep, supporting psychopharmacological treatment, getting trauma unstuck or unclogged from the body, increasing distress tolerance, and releasing control from a client (1 participant endorsing each). I will speak broadly to the narratives emerging from these generally categories of goals/outcomes.

Assessment Outcomes.

Many study participants reported that they utilize somatic interventions as a means of assessing a client individually, in relation to the therapist, in a family system, and (in school-based and home-based work) in the client's environment. Even when participants didn't feel somatic interventions were appropriate for a situation or for a client, they endorsed using feedback from client's non-verbal somatic state (e.g. affect, posture, gestures, tone, "energy", physical health, and signifiers of arousal level) to inform their assessment. It should be noted that aspects of physical assessment are typically a component of mental status exams, demonstrating that the use of the body in mental health assessment is broadly accepted within mental health fields including psychiatry. Participants discussed how non-verbal cues can provide critical information about a client's sensory needs, state of health and mental health, learning style, and attachment with caregivers. One theme emerging from this is that styles of relating, learning, interacting with environment and mental health needs may have different physical presentations.

With regard to attachment specifically, one participant beautifully outlined the various aspects of non-verbal expression that she looks at during assessment, giving a broad sense of all of the information that can be obtained about a child and caregiver from non-verbal expression:

> Interview 3: I think in attachment you're really urged to turn into both parties, whether it's in couple's therapy or in parent child psychotherapy. Tuning into both people's body language and what kind of rhythm they have, what kind of call and response do they have in their actions, are they receptive and open, do they withdraw, how engaged are they, do they make eye contact, do they touch, what's the quality of their touch, what's the arousal level of each person, how do they respond to that arousal level… like if a kid's on my yoga ball bouncing up and down is the parent or caregiver ok with it? Do they say

"Knock it off, that's really bugging me," so yeah, it's a very important part of attachment work too.

In a creative use of the body in assessment, another participant described an intervention in which she had to complete outcomes measures at the beginning of treatment with a teenage client who did not want to sit and talk with her. She described capitalizing on the client's strengths and interests in break-dancing to have the client use dance moves as a sort of Likert scale to complete the measures. Other participants described the use of gross motor and other interventions interspersed within treatment to support the assessment and treatment planning phase of client work, particularly with young children and their caregivers.

Relational outcomes.

Two participants discussed the increased trust that can come from having a positive experience together with body-based work, from something very simple like sitting with the anxiety that may come up with a client during a breathing exercise to an adventure-based therapeutic intervention using rock climbing. One participant who practices drama therapy offered an interesting theory of the increased potential for a more deep and meaningful relationship with clients who participate in somatic interventions during treatment:

> Interview 5: The people I do more embodied work with I feel like we have a stronger relationship than people I just sit and talk with more. Something about, when you're physically moving around the room with a person, that somehow develops more of a connection or… maybe there's more risk so you have to trust more, or maybe its just the fact that you've done something together – there's a memory of having done something. Like in art therapy, you create something. You can take that home and you can hang it up. You can put it on the shelf. There's an actual concrete thing. Whereas when you go to

> therapy and you talk. Maybe its just because it's the same all the time… but when you're physically doing something I think the memories are integrated in a different way when you're moving, so your relationship itself is integrated in a different way. This is a person I move through space with, this is a person that is maybe more in real time in my life rather than sitting and talking which can feel like this time outside of time, its time that's "other than" the world, whereas when you're still moving in a session, you're still in the world. You're still embodied.

Two additional participants discussed the possibility for use of somatic work to address impasses in the therapeutic relationship when the work gets stuck. Two participants also noted that an impasse or feeling of being disconnected from a client may influence a clinician's decision to start integrating somatic interventions into their treatment.

The theme of attachment came up throughout analysis of relational outcomes in therapy, and several participants appeared to feel confident that insight into relational dynamics, felt sense reactions to situations, and increased trust in the therapeutic relationship resulting from somatic work has potential to offer a lasting impact on clients' ability to relate in more authentic and/or healthy ways with others in their lives.

Within the concept of both client's relationship with themselves and with others, a small number of participants discussed the idea of utilizing somatic interventions as indicated to provide clients with more or less control in a therapeutic setting. One participant discussed doing this through art therapy, supporting clients in selecting media that are more or less fluid to offer varied levels of control (e.g. finger painting versus drawing with a pen). Another participant discussed the use of punching a wall with inflatable gloves to allow for expression of anger in a contained way. She reported a sense that this activity provides a client with an opportunity to

gain control and mastery over an often difficult-to-control feeling by executing the activity in a planful way (planning the number of punches beforehand) and scaffolding the experience with verbal processing and skill-building around impulse control.

Participants also discussed the utility of supporting clients in feeling "seen" – whether it is seen during the creation of a piece of art, or seen through a therapist's physical reflection of a client's emotional state – for example, a therapist using a movement or sound to reflect back a client's feeling about a situation. In line with self psychological concepts as well as attachment theory, this appears to be another realm of possible positive outcomes from somatic work.

Several interconnected themes involved increasing a client's ability to connect in therapy and to express their feelings, to become more ready to talk during treatment, and to become more present. Responses reflected the idea that using somatic centering, grounding and awareness to help clients to be more in tune with their own bodies has potential to impact clients relationally.

Having fun in treatment is a final relational theme endorsed by four participants. Participants discussed play-based interventions with all ages, which is linked with the functional theme of using somatic interventions to increase creativity and flexibility. Participants reported that having fun in treatment can be an aspect of exploring difficult themes for clients, can be used to help a client re-connect and engage after a difficult week, can support clients in identifying sensory input that helps them to regulate, and can engage clients in using fun coping skills that may be more likely to translate outside of the therapy room. In general, participants across all interviews expressed the view that therapy should not be re-traumatizing to people, and that if clinicians are to engage clients in dealing with difficult issues that need to be addressed, playfulness is a necessity to build the therapeutic relationship and make discussion of hard and scary things more tolerable for clients.

Insight-oriented outcomes.

With regard to insight-oriented outcomes, because insight can be considered a somewhat subjective measure it should be noted that belief in body-mind holism was apparent throughout many interviews. Eight participants explicitly endorsed a sense that the body, mind, and sometimes soul/spirit are all interconnected. This was linked to clinical work to varying degrees, with some participants endorsing a personal sense of body-mind connection and one participant explicitly stating that she works with clients using a holistic approach and assessing all aspects of lifestyle and flexibility. One participant spoke at length about a cultural disconnect in Western culture that she situated in Puritan thinking that elevates the mind as something above body experience, and another participant who had worked on the West Coast earlier in her career discussed that other parts of the United States are more accepting of a holistic mindset.

One participant offered a discussion around the use of verbal processing to get clients to a state of utilizing body sensations, and then using verbal processing to engage with the insights that came from the somatic experience:

> Interview 1: Lots of times the talk stuff is to get us to that point, either to get them to understand why I'd want to do something as horrific as get them to feel all their feelings… The talk stuff is to get them there and then to process after.

Other participants spoke very explicitly to the experience of generating insight from somatic work. Participant three, who utilizes many somatic interventions to support clients in regulating their arousal, eloquently summarized, “Our arousal levels really influence whether or not we can make meaning of or do any thinking about a situation.” This is in line with many of the educational theories that participants discussed, as well as being in line with theories of the impact of trauma on the brain and on general functioning.

For some participants, insight generated was specific insight about their bodies and their ways of being in the world:

> Interview 4: I've had people come in and they draw so lightly on the paper you can barely see it… I think in the art therapy, in the body I use metaphor all the time. What's it like in the art not to feel seen? And then how does it feel for you not to feel seen. So I use the art in that way to reflect on the body.
>
> Interview 2: After we do some of the deep breathing or mindfulness or something like this, [client] will talk about how she feels physically about her pregnancy. And so in some ways she's gotten a lot of insight into her body as a result of this.

Participant 4 provided additional insight around the therapist's role in reflecting and supporting clients in making meaning around somatic experiences in treatment. One participant elucidated the role of mind-body connection in changing behavior for clients:

> Interview 2 continues: I think sometimes people just need to experience that their body impacts their mind and their mind impacts their body. And when they can experience greater connection between those two things, right, its not just about making somebody change, its about… this is why I think psychodynamic and CBT work well together, its not about making somebody change their behavior, its about helping them understand this mind-body connection and experience something positive with it.

Other participants spoke to the usefulness of specific modalities in developing different kinds of insight. One participant [3] discussed the idea of "unplayable" aspects of a client's experience in drama therapy. Within play in a drama therapy setting, clinicians can support clients in finding "the edge", and using the clinical work to "dance on the edge and across it into some unknown new realm" of possibility for the client.

A participant who utilized Aikido in a therapeutic setting with clients discussed the ways that the body can be used to play out metaphors for clients' reactions to stressors and interpersonal relationships.

> Interview 6: I think a main [outcome of using Aikido in treatment] is just teaching and recognizing how relaxation is a stronger place to come from – so relaxing and finding that staying calm and relaxed and not pushing back or fighting ends up being a stronger position with more choices and more positive outcomes for kids and adults.

This participant discussed the use of partner exercises based in Aikido forms and techniques. She explains that through making the metaphors explicit, participants are able to understand their response to a hand strike movement by their partner as a way of being in relation to a stressor, rather than reacting. When participants in these exercises take a deep breath and approach the situation with their bodies relaxed, they are able to see more options. This may include being able to choose to move out of the way and let the stressor pass them by rather than reacting in a combative way or freezing.

Participants also discussed the generation of insight in terms of increased self-awareness, compassion for self and others, and self-image. Participants described increased self-awareness that comes from insights gained during therapy – coming to a place of identifying feelings that emerge in the body, what sensations are connected to, what they mean to someone, and how clients can come to feel an increased sense of peace around these things as they impact their sense of self, both alone and with others.

Participants' responses on the theme of self-image reflected the impact of increased comfort in a client's body, and the idea of bodies as containers that may not feel comfortable for our clients, particularly when they have experienced trauma or when they struggle with body-

image issues. Participant 4 spoke eloquently about the dissociation that can result, as, “it might feel frightening to be in this container and so somebody leaves. [The work can be] to try to get them to be okay in this container.”

Around self-acceptance and compassion, participants’ thoughts about impact of somatic work ranged from very personal to very broad. A participant [1] who utilizes inner child work discussed the function of feeling sensations and locating emotions in that work as being about generalizing these sensations to others who have experienced similar hurt in their lives to cultivate a sense of compassion for self. Another participant discussed the use of *metta* (Buddhist loving kindness meditation) in her treatment of clients, which involves sending love and kindness to the self, to those we love, to those who have harmed us, and to the world as a whole. On a similarly global scale, another participant linked social work values to relational Aikido interventions, stating, “its about developing more peace and harmony in the world, in almost a social justice activist mindset.”

Functional outcomes.

Participants’ discussions of functional outcomes endorsed the use of somatic interventions to help to alleviate symptoms. Arguably, all of the functional outcomes discussed fall within the broader category of symptom alleviation. Most commonly, participants discussed learning and practicing skills (8 participants), which may involve supporting regulation of affect (6 participants) and arousal (7 participants).

Arousal encompasses factors like ability to engage and maintain engagement and focus, from the therapy session itself to relationships with others to engagement in school and in the community. Improving clients’ ability to learn was discussed by three participants, in line with participant values that people may have different styles of learning and integrating information.

Along the same lines of learning, two participants discussed the engagement of executive functioning during somatic interventions by offering clients opportunities to make choices and do some planning during interventions. Participants also discussed the use of somatic interventions to discharge physical energy during a session.

Several functional outcomes were linked to trauma work, including increasing distress tolerance, processing trauma, and addressing symptoms of depersonalization and derealization associated with traumatic stress. In line with trauma theory, these participants expressed that somatic work is essential to working with symptoms of depersonalization. Participant 3 stated,

> Interview 3: I can't imagine working with dissociative disorders without looking to the body. I don't think it would be possible. I can't think of an effective strategy without helping people to consider how to stay grounded in their body.

One of the most interesting and compelling themes with regard to functional outcomes was around the use of somatic interventions to increase the sustainability of clinical gains. One participant utilized a common idea in yoga practice of "taking your yoga practice off the mat" (referring to the intention to use self-awareness and compassion outside of one's yoga practice) to draw a parallel to clinical work:

> Interview 10: Just like in yoga, its what we do off the mat. In therapy, its what we do outside of therapy. If we spend an hour every week or every two weeks in here and we feel good but it doesn't spill over into the rest of our lives, what good is it? So its what we do outside of therapy.

Another participant used the metaphor of the body as a vessel to carry therapeutic gains outside of treatment:

> Interview 8: I do think that there are other treatments that you might achieve the same end result. But I think its more about the journey and not the destination, and so while yes

> you might be able to achieve that goal, I want it to be sustainable. Long after you see me, you're still going to have your body and so that's a very easily transportable vessel that holds our therapeutic work.

An additional participant expressed hope that clients can use therapeutic tools they learn in therapy to support their self-care, and that these tools may not always have to be connected with a mental health setting for our clients.

> Interview 6: My ideal is that someone learns something… whether is Aikido in a mental health setting or some other body-based intervention that's out there in the mainstream… that they find their in-road in treatment and then when they're stabilized they can seek it out in the mainstream and be able to have it as a sustaining practice in their life that doesn't have to be connected with mental health for them… but just becomes part of their self care.

This is particularly compelling considering that mental health treatment carries a stigma for many clients. For this particular participant, somatic interventions using Aikido (or other somatic interventions that clients can use in the mainstream such as yoga or meditation) can be integrated as positive pieces of that person's identity – when they use Aikido techniques to support their mental health, they need not think of themselves as a mental health patient, creating potential for a sense of personal empowerment and positive identity.

Somatic outcomes.

Outcomes that directly impact an individual's body or physiology were the smallest component of outcomes discussed. One participant endorsed somatic outcomes in terms of improved sleep through yoga and exercise-based interventions.

One participant discussed somatic outcomes of getting trauma unstuck or unclogged from the body, which can arguably be discussed as a functional outcome for trauma treatment, but is discussed here as a somatic outcome due to the participant's use of language and attention to the somatic piece of how trauma is stored in the body and how certain body parts may be linked to trauma for an individual.

Four participants endorsed the possibility that their work with the body in treatment can be used to address pain or bodily traumas. Responses centered on the use of mindfulness-based exercises to alleviate chronic physical pain. Participants discussing this outcome made reference to literature citing the efficacy of yoga and/or mindfulness based treatment to support clients in accepting pain and finding various levels of relief, and noted that literature was their inspiration for mentioning this particular outcome in treatment.

Ten participants reported that clients enjoy their clinicians' use of somatic interventions and request them during sessions, though some participants can be reluctant at first. Two participants expressed that their clients are resistant to or hesitant to use their bodies in treatment, and speculated that this is because of a general lack of comfort for clients in using their bodies, moving, or accessing playfulness or creativity. Four participants spoke about parents' reservations about their children participating in somatic therapeutic work, and one participant reported that she feels parents are on board with the use of somatic techniques in sessions however reported concern that many parents aren't able to integrate it at home because of home or neighborhood concerns about safety, or financial constraints around buying necessary supplies:

Interview 7: We do try to give [parents] a list of financially cost efficient ways to do things, just so they have those options available. I think that's a big influence on whether or not they'll do it – how realistic it is to get a yoga ball, thera-putty, that kind of thing.

Participants also spoke about increasing buy-in in the therapy office with clients and parents, and endorsed the use of ample psychoeducation to create an intellectual understanding of why a somatic approach might work – taking an expert standpoint in a way. They noted that in order for interventions to work, like in talk therapy, the clinician and client must both have confidence in the approach and its' ability to create meaningful change for the client.

Seven participants endorsed the idea that seeing small gains from somatic interventions supports clients in being more open-minded about this approach. Five participants reported that it is useful to take a gentle approach in speaking with clients about the client's comfort level using their body in treatment, normalize discomfort, and offering small steps to integrate somatic interventions. Other ideas for increasing buy-in included making the intervention into a game, using handouts, using the term "stress management" and taking a standpoint of experimentation – "we're going to try this out and it might help or it might not – its like an experiment."

Support and Acceptance of Body-based Approaches

The majority of clinicians participating in this study work at the same outpatient mental health clinic and those interviewed represent a large proportion of full-time clinicians working in the clinic. As such, interview questions around training and support of interventions in the agency environment offered a unique opportunity to look at multiple perspectives of how this agency supports staff in using body-based interventions.

Participants at the agency discussed (9, n=12) reported that the agency is supportive of somatic interventions and open to new ideas. Seven of these participants endorsed that the

agency has resources to support them in doing this work, however did report that they would like to have additional supervision, training, tools, and space (such as larger group therapy rooms, a padded OT office, or open spaces clinicians can take clients to do interventions that require more space). Participants referred to many agency resources, including the agency Occupational Therapist, Adventure Challenge Experience (ACE) program opportunities for clients/families, and access to the YWCA down the street to bring clients during sessions.

One participant expressed a wish for a culture of somatic interventions at the agency:

> Interview 3: I'd love if we just completely adapted a culture of body-based interventions, including having mindful exercise or yoga breaks in the hallway at the clinic.

This participant also expressed a wish for clinicians to connect around their use of interventions and share research and practice experience with colleagues.

Several participants discussed insurance companies during their interviews, and the question of whether or not somatic approaches are accepted by insurance providers. Three participants reported that they are either not sure about or believe that insurance providers would not be supportive of somatic interventions. One participant referred to the fact that even though she feels confident about her approach, she is unsure of how those authorizing treatment view somatic interventions. Another participant referred to her belief that insurance companies want clinicians to be practicing CBT modalities, and did not feel that they would support somatic work. Yet another participant expressed some ambivalence: "I put it all in my notes, so I guess the insurance companies could monitor it if they wanted to read my notes, but I don't think they do so probably not."

Three participants endorsed integrating specific language about somatic interventions into their treatment plans with clients, and one participant referred specifically to the fact that insurance companies are supportive of the use of somatic interventions for some conditions:

> Interview 3: I haven't really encountered any problems with insurances when I do that, but for some of the younger kids it seems like when you have to do an insurance authorization review for a young kid that's under the age of 5, when I have issues with dissociation, the reviewers have known that body-based interventions are the way to address that. So they actually help me shape the wording of a treatment goal, which kind of seems strange but 'tis the business, but I can incorporate the body-based intervention language along with those goals. So they're starting to get aware of it and I think most people are excited by the possibilities of it.

Training

Participants endorsed having taken various trainings, including training in Playmakers techniques, EMDR, occupational therapy interventions, yoga, mindfulness-based therapy, Acceptance and Commitment Therapy, Gestalt therapy, TF-CBT, CBT, emotional freedom technique, Child Parent Psychotherapy, psychological first aid, neurobiology, and trauma, among others.

There were no broad themes identified among training. Participants generally seemed to endorse that colleagues, lectures/trainings, and their own clinical practice are very influential to them, however few participants made reference to evidence-based studies. While several participants appeared aware of outcomes literature about somatic interventions, this awareness appeared to center around literature coming from the trauma field and neurobiology.

While two participants reported that their clinical education explicitly advocated the use of the body in treatment, four reported that somatic interventions were not mentioned in their graduate school readings or coursework, and three reported a wish for greater focus in coursework, particularly as research evolves that increasingly supports a somatic approach. One

participant whose clinical education had focused on somatic techniques reported that her graduate training had prepared her to be able to advocate for the use of somatic interventions at agencies that may have less of a body-based focus.

Factors Influencing Use

Participants discussed many factors influencing their use of somatic interventions in practice, and many participants discussed the origins of their use of body-based work during their interviews. Although there were several references, particularly among those who endorsed being trained in trauma work, to theoretical and empirical literature supporting somatic intervention and all participants endorsed having training that explicitly or implicitly advocated the use of the body in treatment, participants reflected values and personal experiences throughout their interviews.

Three participants discussed that they first realized somatic interventions were an effective tool for mental health practice during their own therapy, and six participants endorsed personal practice of physical activity as being critical to their own understanding of their mental health. Among personal experiences that cultivated this interest/understanding were dance, yoga, swimming and martial arts. Eight participants reported that other clinicians or participation in mental health work before or during their clinical training had influenced them to use somatic interventions in clinical practice. All participants endorsed a sense that personal experience of being embodied influences them to use the body in treatment. As one participant states, “There’s a need for movement, and I have value now both in my work and in my personal life that that’s the first way to go when I need to get a release – I need to move,” (Interview 3).

Participants also reflected on factors such as personality and their comfort with their own bodies, and speculated that personality may contribute to someone’s decision to integrate

somatic interventions into their work. For clinicians who are more embodied in the world, it may be a more natural fit to seek out training in expressive arts therapy, drama therapy, or integrate this sense of embodiment into more traditional therapy practice.

Interestingly, five participants used the term “intuition” or “intuitive” to describe how they use somatic interventions in treatment, suggesting that while participants may have a solid theoretical or empirical basis for their use of somatic interventions, the integration of these interventions into practice may be rooted in a personal feeling of ease for these participants.

Finally, some participants expressed beliefs that everything done in therapy, including talk therapy, is body-based as humans are embodied. These participants suggested that any clinician sitting in a room with a client should be aware of their own body and the client’s body in the room, whether or not they consciously influence change on somatic states. One participant offered that talk treatment is not at odds with somatic work, and suggested that talk treatment and somatic work complement each other well. This idea is supported by discussion among all other participants that they feel prepared and comfortable using talk-based interventions, and would not utilize somatic interventions with clients who are not open to and comfortable with trying a body-based approach to therapy.

Conclusion

Interviews with twelve participants regarding their use of somatic interventions in clinical mental health treatment offered many interesting findings around how, when and why participants utilize somatic interventions. The study also generated some interesting themes related to thoughts/feelings/values surrounding clinicians’ use of interventions, and implications for new clinicians using somatic interventions in practice with their clients.

In the next and final section, the researcher will provide a discussion and conclusion to this research study, integrating the findings with relevant research and providing ideas and recommendations for future research studies that may further support the body of knowledge around the use of the body in mental health treatment.

CHAPTER 5

Discussion

Formulation

The purpose of this qualitative study is to explore the relationship that mental health practitioners have with somatic interventions in clinical practice. The researcher conducted 45-60 minute interviews with twelve clinicians prepared at Master's level or higher from various clinical mental health disciplines (e.g. social work, clinical psychology and mental health counseling), discussing many factors surrounding the ways that clinicians utilize the body in mental health treatment.

This section will introduce a discussion of the most pertinent research findings in the context of available literature. The researcher will offer insights around how this study can be situated within the broader field of mental health, and will provide a discussion of implications of this study for social work practice. The researcher will introduce a discussion of strengths and limitations of the study and methodological approach, and recommendations for future research will conclude this report.

Summary of Findings

One key finding identified across interviews was the fact that participants' personal experiences, thoughts and feelings about their own use of their body was a large factor in their choice to integrate somatic techniques into their work. This was discussed as experience in their own therapy, or personal knowledge of the connection between mind and body in their own lived

experience. Based on participant responses, most participants cited a theoretical basis for their use of somatic interventions or were able to justify their use of these interventions through theories such as trauma theory or theoretical underpinnings of art or expressive therapies.

In the majority of interviews it appeared that the use of somatic technique represented a way that clinicians use personal style to speak to the strengths and needs of their clients as well as their own interests and strengths as clinicians. In that way, the integration of somatic interventions appeared very stylistic and personally meaningful to participants – rather than specifically integrating approaches based on research and theory, participants appeared to use research and theory to support their personal inclinations and preferences for clinical practice.

All participants identified a personal connection with the idea that the body and mind are connected that they brought with them to their clinical training and experience - from personal yoga or martial arts practice, somatic work in their own therapy, spiritual beliefs about body-mind-spirit holism, memories of teaching swimming lessons, or recognition of a boost in mood from dancing around the house. Integration of somatic technique into clinical practice for participants appeared to be, at the root, a way that they could more authentically be with clients as clinicians.

Participants' discussion of the connection between theory and clinical practice regarding the use of somatic interventions is in line with research around trauma and neurobiology (Damasio, 1999; Panksepp, 2009; Porges, 2009), and participants identifying strongly with the trauma field were able to articulate the importance of using the body in treatment most clearly. Several participants articulated theoretical connections to attachment, however it is important to consider that attachment theory (particularly around the organizing influence of attachment on our ability to regulate and co-regulate affect and arousal) is a critical underpinning of many

trauma theories (e.g. Ogden, 2009; Ogden et al., 2006; Schore, 1994; Siegel, 1999; van der Kolk, 1994, 2000). No participants spoke of the attachment theory outside of this trauma context. However, the reader will remember that all but one participant endorsed working with trauma as a specialization, so it makes good sense that trauma theory strongly influences participants' integration of somatic techniques.

Despite the strong theoretical connection to trauma theory and practice connection to trauma work, most goals or outcomes of somatic work discussed were not explicitly linked to trauma. Trauma-related goals such as discharging energy, removing "blocks" created by trauma in the body, learning self-regulation skills, and increasing distress tolerance are supported by available literature (e.g. Levine, 1997; Ogden, 2009; Ogden et al., 2006; Siegel, 1999; van der Kolk, 1994, 2000) and were evident in the findings, however many goals/outcomes centered around relational and insight related factors which are less prominent in theoretical research.

In this vein, an unexpected finding related to the relationship between or interfacing of somatic interventions and a relational or intersubjective theoretical framework was not discussed explicitly by participants, however many participants made implicit references to the idea that somatic approaches lend themselves to relational outcomes (e.g. increased presence and connection with therapist) and the idea that the clinician's lived experience in the room (e.g. sensations in the body, body posture, arousal level) can bring something important to the clinical relationship.

There were no large surprises in findings regarding modalities used by clinicians, and clinicians used modalities across many categories: mindfulness-based, postural, attachment-based, sensorimotor, projective, narrative, behavioral and interdisciplinary. Interdisciplinary approaches were somewhat surprising, and the researcher had not considered this category of

intervention, which encompasses collaborating with providers that provide more directly somatic treatment such as MDs, psychiatrists, and OTs. This makes good sense in terms of clinical care, and it is likely that it is something that more participants do than was reported.

Among unexpected emergent themes was the idea that somatic learning and somatic experiences in the therapy room may be more easily transported out of the therapy room than can insight generated through verbal processing – as one participant beautifully put it, "Long after you see me, you're still going to have your body and so that's a very easily transportable vessel that holds our therapeutic work." Somatic interventions can involve the development of coping skills and cultivation of alternative ways of being in the world, for example, ways of being informed by mindfulness practice. Participants suggested that using somatic approaches might support clients in carrying clinical gains out of treatment and into their lives. There is the implication here that bodily experiences may be more portable and easily transferable than more compartmentalized gains made through talking. The phrase, "All talk, no action," comes to mind, although it is important to note that insight (whether generated from somatic experience or verbal processing) does not always translate to change for any person, for any number of reasons.

While participants in this study may have been biased toward the use of somatic interventions, there may be a tendency to generalize to the concept that it may be easier for some individuals to remember to take a deep breath when they feel upset than it is to remember their unhealthy relationship patterns stemming from childhood, and being able to authentically express feelings verbally is predicated on an ability to truly feel those feelings in the body. More important, however, seems to be the shift in perspective for clients to understanding that their bodies have critical information to offer – the mind need not be elevated above the body as more

complex and involved to understand. Indeed, somatic interventions described throughout this study are not simple – they are complicated, powerful, nuanced and often intuitive.

Implications for Social Work Practice

As a study designed to explore how clinicians utilize a specific subset of interventions in their work, this research has many practice implications for the social work field. This is especially relevant given that all participants who identified professionally as clinical social workers explicitly stated that they felt somatic interventions to be in line with social work values and ethics. Improving our understanding of specific somatic tools or modalities that can be used with clients, as well as areas in which clinicians view their somatic work having the largest outcome are important factors in continuing to grow the empirical base of support for somatic interventions.

Findings related to training emphasized that while participants who identified professionally as social workers (n=5) all endorsed a strong connection between somatic technique and social work values in terms of viewing a person holistically and understanding the person in environment, only one of these participants endorsed having had specific somatic training in her clinical social work education.

Many participants also endorsed a sense that somatic techniques are powerful and require skill and precision in their implementation. Participants endorsed receiving specific somatic training as part of agency in-service, learning from clinical mentors, or seeking specialized training through continuing education following their clinical training, however participants across fields who reported limited training on somatic work in graduate school suggested that it would be useful to have had training within their graduate education about the body-mind

connection and how this can influence practice. All participants endorsed a sense that it is important to talk about somatic approaches as a component of clinical graduate education.

With regard to social work education, these research findings suggest that increasing knowledge about the prevalence of somatic techniques in clinical practice is important information that schools of social work education can use in designing curricula and elective courses that will be most clinically useful for students in the field as well as in their professional careers after graduation. It has been this researcher's experience that discussion of somatic interventions in a psychodynamically oriented graduate school for social work is minimal, and marginalized within discussion of psychodynamic theory, however this is only one experience of only one school.

As shown in the research, participants' experiences of their social work education (and, more broadly, clinical education) varied widely. Further research in this area may support schools of graduate education preparing clinicians shift curricula and courses available to be more in line with developments in the fields of attachment, trauma and neurobiology, all of which advocate the importance of the body in clinical treatment.

Study Strengths and Limitations

The qualitative design of this study offered both strengths in terms of ability to more deeply explore the phenomenon of somatic approaches to psychotherapy, as well as limitations around the generalizability of findings. Considering the limited base of literature around how clinicians integrate the body into mental health treatment, an exploratory qualitative approach was the most appropriate methodology for this study. Narratives that unfolded during these interviews were rich and compelling, and the study offers a substantial starting point for future research around somatic interventions in clinical practice.

The study was strong in its conceptualization, seeking to unify voices from various clinical disciplines around their use of somatic interventions in practice. As existing literature tends to situate the use of somatic interventions within specific modalities in specific branches of specific theories, a qualitative study of 'eclectic' practitioners using these interventions has more clear implications for the broad field of clinical social work practice than might a study focusing specifically on, for example, Somatic Experiencing Therapists or Body Psychotherapists.

In terms of limitations, the methodology was quite limited by the use of snowball sampling, and the relative homogeneity of participants in terms of gender and clinical setting. As the majority of participants worked at the same mental health agency, the study afforded the researcher a more nuanced understanding of this particular setting, however offered limited perspectives around agency dynamics contribution to clinicians' use of somatic interventions. The lack of a standardized tool to allow participants to identify modalities they use in clinical practice and frequency of use is certainly a shortcoming of this study, however the general themes generated offer a good starting point for future systematic and precise quantitative research in this area.

Additionally, the fact that the researcher practiced as a social work intern at the agency in question presents an interesting dilemma with regard to potential bias or impact on how participants interacted with the researcher, participant openness in responding to questions, and any assumptions the researcher may have had with regard to their clinical work that could have impacted data analysis or use of the data collection instrument.

If repeating this study, the researcher would have added a quantitative component in the form of an internet survey designed for all licensed clinicians to solicit feedback around whether or not they use somatic interventions, what attitudes and beliefs exist around the use of the body

in treatment, and what factors influence their integration (or decision to not integrate) somatic interventions. The survey may have also served as a tool for recruitment of a smaller qualitative sample to administer the data collection instrument used for this study.

Another amendment to this study, were it to be repeated, would be a brief survey for qualitative interviewees asking about clinicians' demographic information, number of years practicing in the field, and estimation of how often they utilize various somatic interventions. A measure to allow participants to systematically report the types of interventions they use in clinical practice may have generated more meaningful data.

Based on research findings, further research around the topic of integration of somatic interventions into social work practice would be quite timely and useful. It appears that clinicians believe that others are broadly aware of interventions, and future research may choose to explore factors that contribute to clinicians' self-conceptualization as somatic practitioners, or factors that influence clinicians to avoid the use of somatic interventions in their work. Future research allowing participants to quantify their use of interventions and the proportion of time spent using the body in treatment would be useful.

Additionally, a quantitative large-scale study of clinicians around the implementation of somatic interventions would be useful for future research and practice, particularly if these studies were able to contextualize clinician's use of specific and general interventions in clinician's theoretical and professional orientations and amount of time practicing as a clinician.

Conclusion

Based on the body of available literature and research findings presented in this report, somatic interventions can be considered a compelling tool that many clinicians utilize to support clients in making meaningful gains in mental health treatment. While further research is

indicated to claim the efficacy of somatic interventions in achieving particular clinical outcomes, the wide range of goals clinicians consider as they integrate somatic interventions into their work with clients offers an interesting point of reference for future research. The ease and intuitiveness that clinicians utilizing these interventions express, as well as the broad base of general (and growing) support they endorse are encouraging and offer a fascinating basis for further research.

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Appendix A
HSR Approval Letter

School for Social Work
Smith College
Northampton, Massachusetts 01063
T (413) 585-7950 F (413) 585-7994

December 26, 2013

Becky Rothberg

Dear Becky,

You did a very nice job on your revisions. Your project is now approved by the Human Subjects Review Committee.

Please note the following requirements:

Consent Forms: All subjects should be given a copy of the consent form.

Maintaining Data: You must retain all data and other documents for at least three (3) years past completion of the research activity.

In addition, these requirements may also be applicable:

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

Renewal: You are required to apply for renewal of approval every year for as long as the study is active.

Completion: You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

Congratulations and our best wishes on your interesting study.

Sincerely,

Elaine Kersten, Ed.D.

Co-Chair, Human Subjects Review Committee

CC: Claudia Bepko, Research Advisor

Appendix B
Approved Interview Questions

How do you define somatic intervention?

What is the theoretical orientation of your clinical work (ex. CBT, DBT, psychodynamic, trauma, attachment, expressive movement therapy)?

- Does your theoretical orientation explicitly advocate a body-based approach to treatment?
- Do you consider somatic interventions to be philosophically or theoretically in line with your orientation? Please explain.

Do you identify with a particular specialization (client population, presenting issue, etc.)?

Do you identify with a particular clinical field (social work, MFT, expressive movement therapy, mental health counseling, clinical psychology)?

Can you describe some somatic interventions you have used in your work that you find particularly clinically interesting?

- What was the context of the use of intervention in treatment?
    - Integrated as a component of treatment planning?
    - Spontaneously responding to client regulation or impasses?
- How were interventions integrated into the treatment?
    - What was done?
        - One time? How often?
    - In the office, as a homework assignment between sessions?
    - How was the intervention selected?
- How did the client respond to the intervention?
- What was the intervention like for you to implement as a practitioner?

Have you received training in any specific types of somatic intervention? Please explain. Where have you learned about interventions?

Is your agency supportive of your integration of somatic intervention into your work?

- What types of support have you received?
- Where would you like further support?

What is your experience of the effectiveness of the somatic interventions you have tried.

Would your treatment have been more or less effective without them or about the same?

Appendix C.1
Informed Consent for Y.O.U. Inc Employees

Consent to Participate in a Research Study for Y.O.U. Inc. Employees
Smith College School for Social Work ● Northampton, MA

…….

Title of Study: Applications of Somatic Interventions in Clinical Practice

Investigator(s): Becky Rothberg, Smith School for Social Work

…….

Introduction

- You are being asked to be in a research study of somatic interventions in clinical mental health practice.
- You were selected as a possible participant because you are a practicing clinician prepared at minimum at the Master's level in a mental health discipline who identifies as having utilized a body-based intervention with at least one client of any age and with any presenting concern in the past 30 days.
- We ask that you read this form and ask any questions that you may have before agreeing to be in the study.

Purpose of Study

- The purpose of the study is to understand the ways practitioners utilize body-based interventions with clients, the impact of their theoretical orientation on the way that they implement interventions, support and training they have received around implementing these interventions, and the impact of using body-based interventions for clients and practitioners.
- This study is being conducted as a research requirement for my master's in social work (MSW) degree.
- Ultimately, this research may be published or presented at professional conferences.

Description of the Study Procedures

- If you agree to be in this study, you will be asked to do the following things:
  - Participate in a five minute screening interview with the researcher
  - Participate in a single 45-60 minute interview in person, by telephone, or by Skype
    - You will be asked questions regarding your work with clients, and will be asked to maintain confidentiality and not disclose any identifying information about clients.

Risks/Discomforts of Being in this Study

- The study has the following risks: There is a small possibility that discussing case information may cause psychological distress or discomfort in the form of raising issues of vicarious or secondary trauma. You will be encouraged to consider your own comfort level with discussing case information and only disclose what feels safe and comfortable for you. You are encouraged to seek clinical supervision and/or mental health support as needed to cope with any psychological impact of discussing case information as part of this study. You will be provided with a resource sheet on vicarious and secondary trauma following the interview.
- In the case of distress or questions, you may contact the researcher directly at. You are also welcome to contact Jocelyn Thomann, chair of the Y.O.U. Inc Research Committee, at with any questions or concerns.

Benefits of Being in the Study

- The benefits of participation are having an opportunity to speak and gain insight about clinical interventions that are often not the sole focus of your work as a clinician.
- The benefits to social work/society are expanding the base of knowledge about body-based interventions, their theoretical bases, and their applications in clinical practice.

Confidentiality

- Your participation will be kept confidential. Interviews will be conducted in private at a mutually agreed upon location that offers sufficient privacy for participants' comfort level. Participants can share their participation in the study with others, however identifying information will not be shared with any other parties. Contact information will be stored in a password-protected file on the researcher's computer which will be destroyed along with other research materials after three years according to federal regulations. *In addition, t*he records of this study will be kept strictly confidential. Audio recordings of interviews will be stored in a locked filing cabinet, with a key in the sole possession of the researcher, or as digital files in a password-protected folder on the researcher's computer. Audio recordings will be transcribed solely be the researcher, and identifying information will be removed from transcriptions, which will be stored in a password-protected folder on the researcher's computer.
- In the event that you wish to terminate participation in the study, all files related to study participation will be deleted with no back-up copies stored.
- All research materials including recordings, transcriptions, analyses and consent/assent documents will be stored in a secure location for three years according to federal regulations. In the event that materials are needed beyond this period, they will be kept secured until no longer needed, and then destroyed. All electronically stored data will be password protected during the storage period. We will not include any information in any report we may publish that would make it possible to identify you.

Payments/gift

- You will not receive any financial payment for your participation.

Right to Refuse or Withdraw

- The decision to participate in this study is entirely up to you. You may refuse to take part in the study *at any time* (up to the date noted below) without affecting your relationship with the

researchers of this study or Smith College. Your decision to refuse will not result in any loss of benefits (including access to services) to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw completely up to the point noted below. If you choose to withdraw, I will not use any of your information collected for this study. You must notify me of your decision to withdraw by email or phone by April 1, 2014. After that date, your information will be part of the thesis.

- You will not suffer any consequences from Y.O.U. Inc. related to your decision to participate or withdraw from the study.

Right to Ask Questions and Report Concerns

- You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact me, Becky Rothberg at or by telephone at. If you would like a summary of the study results, one will be sent to you once the study is completed. If you have any other concerns about your rights as a research participant, or if you have any problems as a result of your participation, you may contact the Chair of the Smith College School for Social Work Human Subjects Committee at (413) 585-7974 or the chair of the Y.O.U. Inc. Research Committee, Jocelyn Thomann, at phone number

Consent

- Your signature below indicates that you have decided to volunteer as a research participant for this study, and that you have read and understood the information provided above. You will be given a signed and dated copy of this form to keep. You will also be given a list of referrals and access information if you experience emotional issues related to your participation in this study.

…….

Name of Participant (print): _____

Signature of Participant: _____ Date: _____

Signature of Researcher(s): _____ Date: _____

…….

[if using audio or video recording, use next section for signatures:]

1. I agree to be [audio or video] **taped for this interview:**

Name of Participant (print): _____

Signature of Participant: _____ Date: _____

Signature of Researcher(s): _____ Date: _____

2. I agree to be interviewed, but I do not want the interview to be taped:

Name of Participant (print): _____

Signature of Participant: _____ Date: _____

Signature of Researcher(s): _____ Date: _____

Appendix C.2
Informed Consent for Independent Clinicians

Consent to Participate in a Research Study
Smith College School for Social Work ● Northampton, MA

…….

Title of Study: Applications of Somatic Interventions in Clinical Practice

Investigator(s): Becky Rothberg, Smith School for Social Work, phone number

…….

Introduction

- You are being asked to be in a research study of somatic interventions in clinical mental health practice.
- You were selected as a possible participant because you are a practicing clinician prepared at minimum at the Master's level in a mental health discipline who identifies as having utilized a body-based intervention with at least one client of any age and with any presenting concern in the past 30 days.
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Purpose of Study

- The purpose of the study is to understand the ways practitioners utilize body-based interventions with clients, the impact of their theoretical orientation on the way that they implement interventions, support and training they have received around implementing these interventions, and the impact of using body-based interventions for clients and practitioners.
- This study is being conducted as a research requirement for my master's in social work (MSW) degree.
- Ultimately, this research may be published or presented at professional conferences.

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- The benefits to social work/society are expanding the base of knowledge about body-based interventions, their theoretical bases, and their applications in clinical practice.

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- Your participation will be kept confidential. Interviews will be conducted in private at a mutually agreed upon location that offers sufficient privacy for participants' comfort level. Participants can share their participation in the study with others, however I will not share identifying information with any other parties. Contact information will be stored in a password-protected file on my computer, which will be destroyed at the conclusion of the study. *In addition, t*he records of this study will be kept strictly confidential. Audio recordings of interviews will be stored in a locked filing cabinet, with a key in my sole possession, or as digital files in a password-protected folder on my computer. Audio recordings will be transcribed solely by me, and identifying information will be removed from transcriptions, which will be stored in a password-protected folder on my computer.
- In the event that you wish to withdraw your participation in the study, all files related to study participation will be deleted with no back-up copies stored.
- All research materials including recordings, transcriptions, analyses and consent/assent documents will be stored in a secure location for three years according to federal regulations. In the event that materials are needed beyond this period, they will be kept secured until no longer needed, and then destroyed. All electronically stored data will be password protected during the storage period. We will not include any information in any report we may publish that would make it possible to identify you.

Payments/gift

- You will not receive any financial payment for your participation.

Right to Refuse or Withdraw

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Right to Ask Questions and Report Concerns

- You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact me, Becky Rothberg at brothberg@smith.edu or by telephone at phone number. If you would like a summary of the study results, one will be sent to you once the study is completed. If you have any other concerns about your rights as a research participant, or if you have any problems as a result of your participation, you may contact the Chair of the Smith College School for Social Work Human Subjects Committee at (413) 585-7974.

Consent

- Your signature below indicates that you have decided to volunteer as a research participant for this study, and that you have read and understood the information provided above. You will be given a signed and dated copy of this form to keep. You will also be given a list of referrals and access information if you experience emotional issues related to your participation in this study.

…….

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Signature of Participant: _____ Date: _____

Signature of Researcher(s): _____ Date: _____

…….

[if using audio or video recording, use next section for signatures:]

1. I agree to be [audio or video] **taped for this interview:**

Name of Participant (print): _____

Signature of Participant: _____ Date: _____

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2. I agree to be interviewed, but I do not want the interview to be taped:

Name of Participant (print): _____

Signature of Participant: _____ Date: _____

Signature of Researcher(s): _____ Date: _____