

**STORIES OF YOGA AND RECOVERY TOLD BY SURVIVORS OF INTERPERSONAL  
TRAUMA: EXPLORING BODY, SELF AND RELATIONSHIPS**

By

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## Abstract

A complex systems view of the mind describes *self-regulation* as the ability of the mind to dynamically organize itself in a way that integrates the flow of physiological, affective, cognitive and relational experience as a guide to meaning making and adaptive action. Increasing recognition of the complex effects of interpersonal trauma has challenged clinicians to expand therapeutic work to address the self-regulatory challenges of traumatized clients. In addition to disruptions in memory, survivors of interpersonal trauma experience profound disruption in their sense of body, self, and relationships. Working directly with the body through the practice of yoga is believed to address these self-regulatory disruptions, but little research has explored the meaning of this experience for participants in a real-world setting. This study uses an interview-based, narrative method to explore the stories of survivors of interpersonal trauma who participate in yoga classes as part of their recovery process. Specifically, it explores how participants describe and understand their experience of body, self and relationships within the practice of yoga, and in relation to their process of healing from trauma. Four unique narrative accounts were constructed from in-depth interviews with four participants, and analysis utilizing the Listening Guide Method (Gilligan, 2015) focused on themes related to body, self and relationships. A cross-narrative analysis identified themes of *teacher as frame of trust and knowledge, reconnection to self through body, restoration of self as agent, and contact with suffering*. Findings are discussed in light of existing literature on yoga, mindfulness and traumatic stress studies, and novel findings are framed within an attachment-based, developmental, and complex-systems lens.

## **Preface**

This thesis is the realization of an idea conceived by the author, Nicole Brand-Cousy, who completed all work, including design, participant recruitment, data collection, transcription, analysis, and manuscript write-up. As research supervisor, Dr. Marla Buchanan provided methodological and editorial guidance and review.

This research received ethics approval from the University of British Columbia's Behavioural Research Ethics Board. The certificate number of the ethics certification obtained for this study was H15-02198, using the project title "Exploring the stories of yoga told by survivors of interpersonal trauma".

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## **Chapter 1: Introduction**

### **Research Problem**

The complicated nature of recovery from traumatic stress is exemplified in the high rates of co-morbidity associated with the diagnostic category of PTSD. For example, a national survey of Americans found that of people with lifetime PTSD, 84% had at least one other lifetime diagnosis (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). The complexity of difficulties related to traumatic stress tends to increase if the trauma was interpersonal (e.g., rape, childhood abuse and neglect), occurred earlier in life, or was of a prolonged nature (van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). Common comorbid conditions include depression, anxiety, and substance abuse, as well as dissociative and somatoform disorders (Brady, Killeen, Brewerton, & Lucerini, 2000; Kessler et al., 1995; van der Kolk et al., 2005). That these comorbidity rates may partially be attributable to overlapping diagnostic criteria (Brady et al., 2000) does not clarify how best to help clients who have PTSD but also suffer from an additional constellation of symptoms. While efficacious approaches exist for processing traumatic memories in cases of PTSD resulting from a single traumatic incident (e.g. prolonged exposure, cognitive processing, eye movement and desensitization), the generalizability of these findings for clients with more complex forms of PTSD remains unclear (Bradley, Greene, Russ, Dutra, & Westen, 2005; Spinazzola, Blaustein, & van der Kolk, 2005). One area of research supports the creation of new diagnoses for complex forms of PTSD, as a way of guiding treatment and research that captures the full array of difficulties experienced by trauma survivors (Herman, 1997; van der Kolk et al., 2005).

Issues of psychiatric diagnosis may be of less concern to the field of counselling psychology; however, the complexity of possible adaptations to traumatic stress suggests a need

for treatment programs that are holistic, comprehensive, and specifically designed to address the range of problems the client experiences. In addition to those included under the umbrella of PTSD (American Psychiatric Association, 2013), dysregulating adaptations suffered by people exposed to complex forms of trauma may include affect dysregulation, alterations in self-perception, dissociation, interpersonal problems, problems of attention, alterations in systems of meaning, and somatization (van der Kolk et al., 2005).

This array of symptoms can be conceptualized as a breakdown in the human organism's regulatory capacity. More than just a mechanism to control distressing emotions, *self-regulation* indicates the ability to integrate the flow of arising physiological, emotional, cognitive and even spiritual experience as a guide to meaning making and action. As such, it is an essential process to building a coherent sense of self in relation to the world. Clients suffering from the effects of trauma often struggle to attend to and organize their arising internal experience - a skill needed to meet the body's needs for internal homeostasis *and* to live in community with others. Therefore, therapeutic approaches that help trauma survivors to organize and integrate the spectrum of physiological, emotional, cognitive, and interpersonal experience, without being overwhelmed by that experience, will help to build self-regulatory capacity (Cozolino, 2010; Ogden, Minton, & Pain, 2006; Siegel, 2012; van der Kolk, Bessel A., 2006).

As the foundational marker of our arising sense of self (Damasio, 1999), working with and through the body can play an essential role in restoring self-regulatory capacity following an experience of trauma (Ogden et al., 2006; Rothschild, 2000; van der Kolk, Bessel A., 2006). Neuroscience research suggests that during a traumatic experience, higher cognitive processes responsible for the creation of explicit memories are inhibited, leaving the memory of the traumatic event to be encoded implicitly at subcortical levels but disintegrated from cortical

regions that produce conscious awareness and focal attention (van der Kolk, Bessel A., 2006). Subsequently, environmental triggers in the present may activate implicit physiological and emotional stress responses associated with the previous traumatic event, outside the cognitive control of the individual. In such cases, trauma survivors lose their capacity to regulate their arousal or trust their body's signals, leaving them unable to respond flexibly and appropriately to their current needs and circumstance. Rather than serving as a guide for action and meaning, the body becomes a source of danger and distress.

Most established therapies for PTSD and other psychological disorders rely heavily on verbal processes that depend on cognitive capabilities – the very capabilities that seem cut-off during the experience of trauma-related physiological and emotional arousal. The ability to regulate arousal within a *window of tolerance*, an optimal level of arousal where both implicit (subcortical) and explicit (hippocampus and prefrontal cortex) memory systems remain activated and flexibly communicating, may be necessary for building the therapeutic relationship, processing emotional content of traumatic memories, and making meaning from experience - all important processes to talk-based therapies (Cozolino, 2010; Ogden et al., 2006; Siegel, 2012). Therefore, van der Kolk (2006) argues for the importance of exploring treatments that teach trauma survivors how to monitor and tolerate the feelings and sensations of stress response arousal, modulate that arousal, and take effective action to meet their needs despite the feelings of helplessness that this arousal evokes.

An important node in human self-regulatory systems is the social world. Pro-social behaviors accompany well-regulated autonomic and visceral states, of which the subjective feeling state is generated through right brain interoceptive processes. Our bodies respond to the social expressions of others, semi-replicating the experience of these expressions within one's

own body. This mirrored behavioral expression and interoceptive experience between people help create subjective states of emotional resonance (Schoore, 2002; 2009a). The ability to read and communicate emotional expression as a means of regulating the self first develops through infant/caretaker relationships, and subsequently plays a central role in the formation of social bonds, interpersonal regulation, and the development of the therapeutic relationship. Traumatic stress, especially when prolonged or occurring earlier in life, fundamentally disrupts these systems of arousal regulation and emotional resonance that give rise to our sense of self in relation to the world.

Yoga has gained popularity within North American culture as an adjunct treatment for PTSD and other trauma related problems. From a trauma-informed approach to yoga, meditative observation, movement and breathing help repair a survivor's relationship with her body so that it can become a source of regulation, rather than a source of distress (Emerson & Hopper, 2011). From the perspective of neurobiology, yoga may help build self-regulatory capacity by coordinating mindfulness (a process relying on top down neurobiological mechanisms; Arch & Craske, 2006; Follette, Palm, & Pearson, 2006; Gard et al., 2012a; Hölzel et al., 2011a; Shelov, Suchday, & Friedberg, 2009) with breath and movement that directly alter the body's physiological stress response (a bottom-up process; Berrol, 1992; R. P. Brown & Gerbarg, 2009; Sarang & Telles, 2006; Streeter, Gerbarg, Saper, Ciraulo, & Brown, 2012; van der Kolk, 2006).

The relational nature of yoga for the treatment of trauma is an area of research yet to be fully explored. New advances in affective neuroscience describe how the arousal level of the autonomic nervous system affects the ability to express oneself socially, and to understand the minds of others (Porges, 2011). This research points to the bidirectional neural circuits between

the heart and lungs and areas of the brain that control small motor muscles of the head and neck. States of extremely high or low arousal appear to shut down certain pro-social capacities in order to fuel survival-based action in the body (e.g., fighting or fleeing). As an autonomic regulating practice, yoga may make certain types of social experiences more available to a survivor of trauma. Mindfulness may also be a key process required to navigate complex social relationships (Siegel, 2012). How the practice of yoga affects a person's sense of self in relation presents an interesting area of research.

### **Rationale for the Study**

Narratives are constructed in relationship, link self-states across time, and direct the activities of the body based on memory, present experience and expectations for the future (D. Polkinghorne, 1988; Sarbin, 1986; Siegel, 2012). Coherence of self-narratives may be indicative of the integrated flow of energy and information through the self-system and in relationships (Oppenheim, Nir, Warren, & Emde, 1997; Siegel, 2012). Research that asks people to reflect upon their experience of embodiment through yoga may offer new insights into the process of change behind contemplative and movement based therapeutic practices. Participant narratives provide the structure from which to better understand the flow of energy and information that link experiences of body, self and relationship. Through a narrative representation of experience, the complexity of yoga, a multi-layered system of practices and philosophy, can be reflected upon through a holistic lens; this perspective complements quantitative research, which tends to break yoga up into measurable parts and has thus far dominated the field of psychological research into contemplative practices. Finally, in the field of narrative studies, none have examined the stories of people who found yoga to be helpful in healing from trauma.

## **Purpose and Research Question**

The purpose of this study is to explore the stories of yoga practitioners who are survivors of relational trauma. How do participants describe and understand their experience of body, self and relationships within the practice of yoga, and in relation to their process of healing from trauma?

This study contributes an important qualitative, narrative perspective in understanding how people with histories of relational trauma make sense of their experience of yoga within their healing process, and in doing so privileges the stories of participants as important sources of knowledge. In addition, participants were recruited through the real-world setting of a local, non-profit organization, adding to the body of applied research surrounding the therapeutic practice of yoga. This research setting contributes to understanding the experiences of people from a socially marginalized cohort who may not otherwise have the space and opportunity to tell their stories or reflect interpersonally on experiences of yoga. Finally, this study intends to bring an interdisciplinary body of theoretical and research literature on self-regulation, trauma, and yoga (reviewed below), into conversation with the stories of lived experience of yoga practitioners. My hope is that these integrative perspectives will be helpful in supporting counsellors whose clients are seeking out the practice of yoga for therapeutic purposes.

## **Chapter 2: Literature Review**

In this chapter, I will review literature on the psychology and neurobiology of self-regulation, the breakdown of the regulated self that sometimes follows traumatic experiences, and how the systemic practice of yoga can help reintegrate the self following trauma. Within each of these three review areas, I have focused on theory and research most pertinent to understanding the linkage of body, self and relationships.

### **Literature on Self-Regulation**

**Integration of a complex system.** To understand the effects of interpersonal trauma, it is helpful to conceptualize the mind as an emergent process of a complex dynamic system (Siegel, 2012; Vallacher, Read, & Nowak, 2002). A complex system is self-organizing, meaning that the system as a whole emerges from dynamic linkages of differentiated parts within and across multiple layers of the system. Emergent outputs of interaction at lower levels contribute to higher levels of complexity within a system, and these changes at higher levels feedback as inputs influencing further self-organizing interaction at lower levels. This self-organizing property moves the system toward the greatest possible complexity in linkage of differentiated parts (i.e. integration), resulting in a system that is both stable and flexible.

An integrated mind, marked by health and well-being, emerges in this way from the complex interaction of distributed areas within and between the nervous system (brain & body) and the relational world (Siegel, 2012). Emotion is the integrative fabric that links distributed brain systems internally as well as between minds, allowing us to connect relationally. Shifts in emotion represent changes in the integrative state of differentiated subsystems of the brain, body and relationships. When integrated, the human mind is able to maintain homeostasis by organizing the ongoing flow of energy and information from our internal and external

environment in a way that promotes flexible adaptation to the demands of that environment. Therefore, an integrated mind/body/brain system is also a well-regulated system (Siegel, 2012). Additionally, brain, body and relationship are seen as integrated parts of one system, challenging the conceptual categories that traditionally have divided one from the other. Neuroscientific evidence suggests that midline structures of the limbic and prefrontal regions of the brain play an important role in this organization of energy and information across hierarchical and bilateral regions of the brain, and between minds and bodies in relationship (Siegel, 2012; van der Kolk, 2006).

**Feedback loops - Top down and bottom up regulation.** The hierarchical organization of the human brain facilitates the integration of emotion and meaning across somatic, affective and cognitive levels of processing (MacLean, 1990; Wilber, 2000). Sensory signals from the body's afferent nervous system are carried to the brain through the spinal cord, and provide information about the internal and external environment necessary for self-regulation. These somatosensory signals are projected to distributed networks throughout the brain (including the brain stem, limbic and prefrontal somatosensory and motor cortices). Higher level representations of sensory information about the state of the body appear to be lateralized to the right hemisphere (Craig, 2002; Schore, 2009a). The evolutionarily oldest portion of the brain, the brain stem (sometimes referred to as the reptilian brain), regulates autonomic functioning of the body, including heart rate, respiration and temperature, and plays a major role in arousal and activation of the body's threat and attachment-oriented survival systems (Porges, 2011). The midbrain limbic regions are central nodes involved in appraisal and generation of affective and motivational states, and also modulate the neurohormonal stress response system (Craig, 2002; LeDoux, 1996). Brain-stem and limbic mediated processes are implicit and tend to react to

environmental stimulus, including the physiological condition of the body, in automatic, stereotypical ways (LeDoux, 1996). These implicit processes facilitate the ongoing regulation of the body's homeostatic systems, and trigger automatic, adaptive action tendencies to aid this endeavor (Ogden et al., 2006; Panksepp, 2009; van der Kolk, 2006).

These implicit, bottom-up processes are also regulated through the top-down influence of the neocortex, the evolutionarily newest portion of the human brain, responsible for a number of integrative and executive processes that construct the experience of consciousness, sense-making and complex, goal-directed behavior unique to human beings (Siegel, 2012). As information about the physiological and affective state of the mind/body is linked to higher level cortical regions, these regions interpret and organize somatic and afferent energies through increasingly complex and symbolic forms of appraisal and meaning making. Both explicit and implicit appraisal of meaning by paralimbic and frontal cortical regions then direct completion of action necessary to meet the homeostatic needs demanded by a given environment. "Actions" facilitated by these regions, and in particular the prefrontal cortex and frontoparietal regions, include the direction of attention and inhibition of distractions, activation of volitional movement in relation to objects of attention and intended goals, symbolic organization of somatic and affective information to derive meaning in reference to self and others, taking one's own mind in mind (i.e. self-reflection), and inhibition of limbic and physiological arousal to promote self-soothing, volitional control of attention, and pro-social engagement.

In this way, top-down and bottom-up processes create bidirectional feedback loops where internal and external environmental stimulus influence experience of the self, and conscious self-experience in turn organizes and regulates our interaction with our internal and external environment, contributing to further shifts in self-experience. Central midline structures of the

prefrontal cortex, with extensive connections to both the neocortex and limbic system, likely play an important role in facilitating this vertical integration of energy and information between lower and higher cortical regions (Northoff et al., 2006; Siegel, 2012; van der Kolk, 2006)

Despite the organizational clarity provided by this hierarchical model of brain functioning these are not linear processes. The way that energy and information travels through structural layers of the brain in order to integrate multiple layers of experience, occurs in a non-linear, self-organizing fashion made up of coordinated patterns of neural firing across distributed systems within the brain and body (Siegel, 2012). The locus of our lived experience cannot be reduced to any single structure of the brain, although there may be structures that are consistently linked to various types of experiences and functions. In addition, regulation can occur with or without awareness, and both within and between sensorimotor, affective, and cognitive layers of processing.

**Multiple systems for sensory perception and appraisal of meaning.** Sensory perception and appraisal processes organize the retrieval of past learning and directs the encoding of new learning. Sensory cues trigger the retrieval of associated explicit and implicit memories, which aid in the appraisal of sensory information and its relevancy for the future. This ongoing process of retrieval, and comparison of memory to present moment information, shaped by attention, perception, and appraisal processes, facilitates adaptive action in the present (Ogden et al., 2006; Siegel, 2012).

Le Doux (1996) proposes that there are multiple sub-systems within the brain that govern the perception and appraisal of our internal and external environment, and in particular, facilitate the organization of survival responses. Limbic level appraisal processes occur outside conscious awareness, and rapidly relay emotionally relevant information to autonomic regulatory systems

in the most efficient manner possible. The predictive capacity of this rapid appraisal system estimates the needs of the body for the future by evaluating the affective relevance of generalized perceptual cues based on comparisons with past experience. This appraisal then activates contingent arousal of the body's autonomic nervous system for efficient, immediate action.

Slower processes of perception and appraisal of meaning are more deliberate, mediated by the hippocampus and neocortex, and are supported by the executive direction of focal attention. This slower circuit is sensitive to context and modifies the stereotypical appraisals of faster, implicit systems in part through comparison with memory systems organized around autobiographical time and space and contextualized episodic memory. The output of this appraisal process directs the regulation of the autonomic nervous system as well, albeit more slowly, by providing a more detailed evaluation of environmental context that serves to correct the prediction error and biases of the limbic appraisal system. Thus, adaptive action within our world relies on the flexible integration of implicit and explicit memory and attentional systems.

**Homeostasis, the body, and the autonomic nervous system.** Our autonomic nervous system, in conjunction with sensory and somatic nervous systems, links the brain to the rest of the body and regulates bodily functions, such as heart rate, respiration, and digestion, towards homeostatic balance (Porges, 2011). A balanced mind/body system exerts the optimal amount of activity necessary to serve the basic needs of the human organism, without exhausting the system's energetic resources. This balanced state of regulation is called homeostasis. The autonomic nervous system contains nerve pathways that carry efferent information from the brain's central nervous system (CNS) to the body, as well as afferent information from the body to the CNS. This two way flow of information creates a dynamic feedback loop that maintains homeostasis. Afferent flow from the body to the CNS transmits information about the current

environmental demands, and efferent flow from the CNS enlivens the body to action in meeting those environmental demands.

Allostasis is the process of adapting to changes in the environment in order to maintain the homeostatic stability of the system (McEwen, 1998). Allostatic load is the *cost* to the system in maintaining this state of homeostasis. As the demands of the environment on the human organismic system increase to highly taxing levels, such as in cases of extreme or prolonged stress, allostatic load increases. If a system's allostatic resources are exhausted, such as in the cases of physical illness or extreme threat to life, the organism needs periods of restoration to balance this massive output of energy. In humans, restorative states include not only periods of bodily rest, but also of attuned, pleasurable social interaction that evokes and restores, vital emotional energy associated with attachment and exploration (Panksepp, 2009; Trevarthen, 2009). Chronic taxation to the system may lead to the emergence of the dis-ease that we see in a wide variety of chronic health and mental health conditions, as the allostatic process itself breaks down in the face of overwhelming demands on the system (McEwen, 1998). Thus, theoretically, reducing allostatic load will help in the treatment of these diseases of chronic stress (Kabat-Zinn, 2013).

**Polyvagal theory.** Stephen Porges's poly vagal theory (2011) expands on this view of the adaptive nature of the autonomic nervous system in describing the intimate connection between the adaptive functioning of the body and its role in shaping the subjective quality of our relationships. From this evolutionary perspective, the neurobiology of mammals has evolved to promote the formation of social bonds, which ensures the protection and nurturance of caregivers and wider community, and thus mitigates environmental threats to survival. Safe and pleasurable social connection produces positive emotions and facilitates co-regulated, restorative

states of autonomic arousal that reduce allostatic load on the human psychobiological system (Schoore, 2009a; Trevarthen, 2009).

Historically, the parasympathetic and sympathetic branches of the autonomic nervous system have been conceptualized as operating in bipolar, antagonistic manner (Langley, 1921). Polyvagal theory describes a hierarchical, rather than antagonistic, system for regulation of autonomic states (Porges, 2011). The evolutionarily newest branch of parasympathetic nervous system, the ventral vagal complex (VVC), regulates autonomic arousal and behaviors that promote social engagement in safe environments. The VVC operates as an inhibitory brake of the heart, that flexibly titrates sympathetic arousal, enervating the body for engaging movement and expression, without activating the full neurohormonal flood that fuels a fight/flight reaction.

Porges (2011) uses the term *neuroception* to describe the rapid implicit appraisal of environmental threat important for regulation of autonomic arousal. A neuroception of safety is required for socially engaged and exploratory behaviors and functions of the body to flourish. Socially engaged people both communicate and perceive safety in relationships through the prosodic, contingent interchange of vocal signals and fine motor movements of the face, head, and neck. Direct neural pathways connect the heart and lungs (regulated by the autonomic nervous system) to motor cortices responsible for expressive facial movements and vocal prosody. VVC regulation of autonomic arousal allows for rapid engagement and disengagement of sympathetic arousal of the heart and lungs, which subsequently facilitates prosocial engagement behaviors of the head, face and voice. This relationship between parasympathetic regulation and socially engaging behavior is described in poly-vagal theory as the *social engagement system*.

In moderately threatening environments, the social engagement system represents the body's first line of defense. For example, a person might respond to an angry relative or friend by first withdrawing socially engaging behaviors as she evaluates the level of threat represented by her companion's anger. She may subsequently use her facial expression and vocal prosody in an attempt to re-establish resonance, convey safety or contrition, or sooth her companion's angry state of arousal in order to negotiate a viable solution.

When environmental or social threat overwhelms the capacity of the social engagement system to alleviate danger, the amygdala signals the need for activation of the sympathetic nervous system. The hypothalamus initiates the release of neurohormones that mobilizes the body for fight or flight (i.e. activation of the hypothalamic-pituitary-adrenal [HPA] axis). In this state of high arousal, social engagement behaviors that facilitate social bonding shut down and massive amounts of energy are expended in navigation of the threatening stimulus. In an individual with a well regulated nervous system (indicated by high vagal tone), once the threat subsides, the body returns to a more restorative, parasympathetic state of arousal. Successful alleviation of the threatening stimulus through adaptive action particularly aids in the body's ability to return to homeostasis (LeDoux, 1996; van der Kolk, 2006). However, when the sympathetic response is ineffective and exhausts the body's resources needed to protect itself, the organism begins to shut down. Immobilization behaviors of the body are the most evolutionarily ancient response to threat, facilitated by the unmyelinated branch of the vagus nerve. This type of parasympathetic response shuts down the body's metabolic systems and affective arousal, conserving energy, and relieving the pain of potentially impending death or bodily harm.

Charles Darwin (1872) noted the bidirectional circuit between the brain and the body, so that mental or psychological processes can affect the physiological state of the body, and the

physiological state of the body can affect higher level mental processes. While the neuroception of threat will likely activate the sympathetic nervous system, a hyperaroused nervous system will also influence the perception of threat in the environment (Porges, 2011). Extending this idea to how we connect with others, the physiological state of the body will limit the range of prosocial and restorative behaviors and emotions experientially available within the intersubjective space between two people in a given moment. This is one way that the body, relationships, and self-experience are intimately connected.

**Role of primary emotional experience as motivation for action.** Findings from affective neuroscience highlight the primacy of genetically inherent, embodied emotional energies in motivating the self to seek actions that promote survival and social connection. Jaak Panksepp (2009) describes seven primary affective systems that can be identified in all mammalian species, which function to enervate the body toward seeking resources necessary for survival, protective action in the presence of threat, and seeking proximity, social bonding and negotiating conflict in communion with others. Neural correlates of these “ancient, inherited tools for living” are centered heavily in the midline structures of the brain stem and limbic structures, as well as *paralimbic* prefrontal regions associated with the translation of affective information into motivated action and consciousness awareness (Panskepp, 2009, p. 5). Importantly, a major experiential component of these affective energies is the corresponding physiological state generated by the autonomic nervous system in the service of motivated action. In this sense, primary affect is *embodied* affect.

While all mammals display these basic, bottom-up affective drives, learning and development of the human neocortex establishes the object relations and social constructions that regulate these primary affective energies. More complex, second order emotions, such as shame

and guilt, are built from the integration of the primary affects with social constructions.

Panskepp questions psychotherapy's historical focus on cognitive, top down approaches with an overemphasis on passive information processing to the neglect of these embodied, primary affects that vitalize humans as active agents. He argues that therapeutic work to regulate these primary energies should include attending directly to body dynamics, work that can complement verbal language-based therapeutic processes.

**Body awareness and interoception.** This exchange between embodied, primary affective motivational drives and the organizing and regulating properties of the neocortex is dependent on the ability to sense the physiological condition of the body, a process known as interoception (Craig, 2002). In other words, in order to take care of ourselves through adaptive action in line with physiological and emotional needs, we must be aware of the signals of the embodied self that communicates how one feels (van der Kolk, 2006). Early psychologists such as Charles Sherrington (1906) and William James (1890) identified the subjective sense of the physical sensations that arise from the body in response to environmental stimulus as the foundation for emotional experience and self-awareness.

Antonio Damasio's somatic marker hypothesis identifies how representation of the physiological state of the body support homeostatic processes, decision making and intentional action, by creating a somatic map that links past experience to the anticipated future of the self (Damasio, 1999). The mental representation of one's physical state generated by the body's affective arousal in response to stimulus creates a bodily signal of the potential outcome of future action, based on somatic memory (i.e. a *gut feeling*). This somatic mapping of the phenomenological self across space and time helps guide the motivated action of the agentic self (Craig, 2002). Craig notes how activation of the right insular cortex, suggested as a key

node in brain networks producing interoceptive awareness, frequently correlates with activation of limbic and middle prefrontal structures important for motivational and hedonic evaluation of feeling states. This sense of the physiological state of the body also provides immediate feedback about results of our action in reference to the self, allowing for further corrective action necessary to narrow the gap between our present phenomenological experience and intentional, future self.

Much of this processing of the meaning of body states and subsequent regulation occurs outside of conscious awareness. However, harnessing top-down attentional processes to observe the fluctuations in body state bring the sensations of the body into consciousness where they can be integrated into narrative processes of self-construction, building self-awareness and emotional insight (Siegel, 2012; van der Kolk, 2006). Specific practices such as meditation, yoga, and contemplative prayer, likely help to train attention and bring the conscious mind into contact with the wisdom of the body (Walsh & Shapiro, 2006).

**Right brain affect, interpersonal attunement, and attachment.** Regulation of the affective energies of the self relies not only on internal states of integration, but also intersubjective integration between self and others. Neuroscientific evidence suggests that attuned relationships rely heavily on integrated right brain to right brain affective communication (Schoore, 2009b). Right brain processes perceive and organize the expression of non-verbal communicative activities of the body, such as facial expression, vocal prosody, posture, gesture, and the rhythmic timing of social exchanges. Evidence from neuroscience also suggests that embodied affective representations are incorporated into an autobiographical representation of self (*autonoetic consciousness*) primarily within right hemispheric structures of the middle prefrontal cortex (Siegel, 2012). As noted above, the mapping and representation of

physiological states over time through interoceptive processes is essential for self-awareness, the generation of meaning and the ability to take adaptive action.

That the capacity for self-awareness and regulation first evolves in infant relationships with primary caregivers, is a concept with a long history in the study of psychological development and attachment (eg. Bowlby, 1969; Winnicott, 1965), and which continues to evolve with the contribution of neuroscientific and developmental research. In the early phases of development, the primary mode of communication and action available to an infant is through her body, and primary learning involves right brain, affective process (Schore, 1994). Infants learn to self-regulate through the contingent mirroring and regulation of their affective expressions by primary caregivers. Neuroscientific evidence points to mirror networks within frontoparietal brain regions, wherein the same neuronal firing patterns are observed in an individual whether that person is engaged in intentional action, or witnessing the intentional action of another (Gallese, Keysers, & Rizzolatti, 2004; Iacoboni, 2009; Uddin, Iacoboni, Lange, & Keenan, 2007). Similar mirror mechanisms within midline cortical structures appear to exist for the representation and understanding of emotional states of self and other (Gallese et al., 2004). Uddin and colleagues (2007) propose that an integrated network involving both midline cortical structures responsible for abstract representations of self and other, and mirror neurons of the frontoparietal cortex that represent the physiological self and other, contribute to the experience of emotional resonance essential to the intersubjective shaping of the self in infant development.

Throughout infancy and childhood, states of misattunement between child and caregiver are signaled by shifts in sensation and expression in both parent and infant bodies (Schore, 1994). In securely attached relationships the caregiver is able to internally sense changes in their

own body that correspond with the affective expression of the infant, and use those signals as a guide for reattunement. This pattern of misattunement followed by reattunement provides a titrated exposure to distressing affect coupled with an experience of regulation, and likely helps the infant build distress tolerance and auto-regulatory capacity.

Researchers interested in infant development have observed the rhythmic nature of these early attuned developmental exchanges between infants and caregivers, wherein “caregiver and infant learn the rhythmic structure of the other and modify their behavior to fit that structure, thereby cocreating a specifically fitted interaction” (Schoore, 2009b, p. 117). The rhythmic exchange of the body holds symbolic meaning that eventually evolves into verbal language as left hemispheric development later in infancy catches up with that of the right hemisphere, adding new levels of representational complexity to the communicative, musical exchange of meaning between self and others (Trevarthen, 2009).

Learning to recognize and self-regulate states of arousal also gives infants the confidence and sense of efficacy necessary to explore their world. Infant research demonstrates how the infant learns to be an agent through intersubjective states, exploring the action of their bodies within the safe environment created by an attuned caregiver (Bateman & Fonagy, 2004; Fogel, 2011). This caregiver not only mirrors and helps the infant regulate her emotions, but also acts as a companion as infants initiate intentional exploratory states of learning about objects in their environment. Infants observe how the actions of their body produce contingent responses in the bodies of their caregivers, as well as upon object in their environment. This experience of contingency between self, other and environment is likely inherently pleasurable for the infant, and contributes to further organization of affective self-states and constructions of self-efficacy.

Through secure, attuned relationships, humans learn to understand and regulate their emotional states, as well as to use their body to take effective action (Bowlby, 1979). Throughout our lives, we continue to regulate the self in relational ways, as our brain and body are wired for seeking secure, attuned relationships (Cozolino, 2010; Siegel, 2012). The development of the self through relationships also links awareness of self with awareness of the selves of others. An attuned response by a primary caregiver demonstrates an understanding of the infant's mind, and from this intersubjective exchange an infant learns to understand and differentiate his own mind and its intentions, desires and motivations, from the minds of others (Bateman & Fonagy, 2004). Therefore, embodied self-awareness is vital to the differentiation of the self from other, which paradoxically is necessary for the linkage of self and other in states of emotional resonance (Schorer, 2009b; Trevarthen, 2009). The brain's mirror systems facilitate states of synchrony between people, constructing a sense of differentiated, yet intersubjective, self.

**Narrative integration.** Our verbal and nonverbal language helps symbolize and express the meanings of our body, and also constructs worlds of symbolic meaning that directs the activities of our body. Narrative theory will be discussed in a later section, but in reference to the focus of this review on the psychology and neurobiology of self-regulation, embodiment and relationship, it is important to note that coherent narratives are constructed through the interhemispheric integration of left and right brain sub-systems within and between minds (Siegel, 2012). The narrative drive to make sense of the world through establishing cause and effect relationships emerges from left-brain processes, but coherent narratives of cause and effect require the participation of the embodied, non-verbal and autobiographical representation of the right brain self. As noted above, the languageing of the self into being begins in infancy through

the non-verbal, yet symbolic forms of embodied language exchange with caregivers, described as *protoconversations* by developmental psychologist Colwyn Trevarthen (2009). As children develop the capacity for verbal language, these symbolic representations of self become ever more complex. Coherent narratives represent a system operating at high levels of complexity, where the continual process of languaging the self into being connects the “sensorimotor integration of the self across space and time” with cause and effect interpretative functions to guide meaning making and adaptive action (Siegel, 2012, p. 371).

**Understanding the self.** Leary and Tagney (2011) define the self as “a mental capacity that allows an animal to take itself as the object of its own attention and to think consciously about itself”, and highlight three common uses of the word self that fall within their definition of this reflexive self: 1) self as experiencing subject, 2) self as beliefs about oneself and 3) self as executive agent (p. 6). The first two uses of *self* originate in William James’s (1890) distinction between the subjective experience of self (self as knower) and self as object (self as known). Self as executive agent refers to the agentic nature of self that drives selection of behavior and intentional action. This definition of the reflexive self emphasizes a cognitive understanding of the self as an explicit, rational entity, and treats affective and relational processes as closely related but separate from definitions of self. Other theories of self, however, acknowledge the integration of both rational and intuitive processes, and how self-definition is intertwined with the drive to be a self-in-relation.

Allan Schore (1994) identifies a right-brain dominant implicit self, the modern day equivalent to psychoanalytic concepts of the unconscious. Knowledge of the implicit self is available to the conscious mind, but brought to awareness through intuitive, non-verbal processes. He describes how the right brain contains more dense connections with lower level

brain regions responsible for embodied affect, the expression of which drives the non-verbal communicative behavior underlying experiences of interpersonal resonance. In addition, the right-brain implicit self directs the regulation of primary process, embodied affect, the implication being that dysregulated emotion needs to be addressed through right-brain, intuitive processes, in addition to modifications of left brain mediated irrational thinking.

It may be that we can best understand the self as a dynamic, integrative meaning-making system that organizes both left-brain sense-making and right-brain affective processes toward the completion of motivated action, the construction and output of which occurs “primarily in interpersonal contexts” (Morf & Mischel, 2011). The capacity for this type of organized, self-related processing appears to rely on middle prefrontal regions of the brain that integrate into consciousness the ongoing flow of somatic and affective phenomena from the body and implicit regions of the brain (Leary & Tangney, 2011; Uddin et al., 2007; Craig, 2002; Siegel, 2012).

These same regions of the brain implicated in the integration of the implicit and explicit self-understanding seem to play an important role in social cognitions and representations of the minds and emotions of others (Uddin et al., 2007). In this way, the development of the capacity to be connected in relationship, and to define the autonomous self, is intricately connected (Blatt, 2008). The integrated flow of energy and information through and between the self and others requires the ability to conceptualize one’s own mind and the minds of others, a capacity represented in theories of *mindsight* (Siegel, 2012) and *mentalization* (Bateman & Fonagy, 2004). Both body and relationships are intertwined in understanding the self.

Finally, an understanding of the self as a dynamic, meaning making system contradicts any understanding of the self as static, and recognizes the possibility for multiple self-states, depending on the environmental and social context and the state of mind that emerges within that

context (Siegel, 2012). Coherent narratives are an emergent output of the ability to link the many experiences of self across space and time, but this coherence, while contributing to stability in the self-system, only creates an illusion of a singular self. A complex systems perspectives helps highlight the dynamic nature of body, self, and relationships:

When we reflect on the notion of mind as an emergent process of energy and information flow in our bodies and in our relationships, we come to sense that our personal experience is a ‘node’ in which energy and information flows through us, connects us to other nodes of flow, and makes us part of a larger ‘mindweb’ of interconnected individuals now, and across time. Within that interconnected whole rests the many ways we can experience our ‘selves’ in the world (Siegel, 2012, p. 387).

### **Trauma – Disintegration of the Self.**

Traumatic experiences overwhelm the capacity to flexibly adapt to physical or psychological threats in our environment and relationships, and so are profoundly disintegrating. As a result, these experiences can lead to the breakdown of self-regulatory capacity. Many of the mental health problems associated with traumatic stress, including disruptions in affect, memory, attention, consciousness (e.g. dissociation), interpersonal relationships, somatic experience, and sense of self, are representative of a dysregulated self-system. Long after the traumatic event or events are over, traumatized individuals continue to interact with the world in stereotypical ways, as if still under threat of attack or abandonment (Herman, 1997; van der Kolk, 2006). However, these automatic responses to what is perceived as a threatening or rejecting environment only serve to deepen a traumatized person’s fear, isolation, and shame. Judith Herman (1997) describes well the disintegration of self that can follow traumatic experiences:

Traumatic reactions occur when action is of no avail. When neither resistance nor escape is possible, the human system of self-defense becomes overwhelmed and disorganized. Each component of the ordinary response to danger, having lost its utility, tends to persist in an altered and exaggerated state long after the actual danger is over. Traumatic events produce profound and lasting changes in physiological arousal, emotion, cognition, and memory. Moreover, traumatic events may sever these normally integrated functions from one another...Traumatic symptoms have a tendency to become disconnected from their source and to take on a life of their own (p. 34).

The diagnostic criteria for posttraumatic stress disorder (PTSD), the diagnostic disorder most commonly associated with traumatic stress, reveals symptoms indicative of a dysregulated system. The Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> edition (American Psychiatric Association, 2013) requires the occurrence of a life threatening event followed by a specific constellation of symptoms from the following four categories: intrusion, avoidance, negative alterations to cognition and mood, and alterations in arousal (i.e. hyperarousal). In addition, the 5<sup>th</sup> edition criteria recognizes a dissociative subtype marked by the subjective experience of detachment from or unreality of the body, self, or one's surroundings, which arise in response to a stressor associated with past traumatic events.

In healthy individuals, appraisal and regulatory response to emotional stimulus has been conceptualized as a three stage (although non-linear) process within the brain's emotional processing system involving appraisal, generation of affective states within the body and arising consciousness, and regulation of those affective states (Phillips, Drevets, Rauch, & Lane, 2003). As reviewed previously, this process involves the ability to assess emotional valence of stimuli based on past experiences, and with that information organize a response appropriate for

anticipated future outcome (Damasio, 1999; LeDoux, 1996; van der Kolk, B. A., 2006). In PTSD and other disorders related to traumatic stress, the flow of information that helps us to (i) derive coherent meaning from our environment (embedded in emotional appraisal and awareness processes as well as narrative construction) and (ii) respond to that meaning in effective ways (through executive regulation), seems to be severely disrupted (van der Kolk, B. A., 2006).

**Long-term effects of chronic traumatic stress.** Chronic exposure to traumatic stress contributes to the breakdown of self-regulatory systems in ways not fully captured by the diagnostic criteria of PTSD alone. Trauma researchers have called for an expanded understanding of the high rates of comorbidity of PTSD with other DSM defined disorders (Anda et al., 2006; Herman, 1997; van der Kolk et al., 2005). They argue that the concept of diagnostically distinct but co-morbid conditions represents an artificial division of post-traumatic symptoms that fail to recognize the linkage of these symptoms to dysregulation of the same underlying brain/body systems.

Proposals for a diagnoses of Complex PTSD or Disorders of Extreme Stress Not Otherwise Specified (DESNOS), although not adopted into the new DSM V, may better capture the range of difficulties experienced by survivors of complex traumatic stress, including affect dysregulation, disruptions to memory and attention, shame-based perceptions of self, interpersonal problems, somatization, and disruptions to systems of meaning (Herman, 1997; van der Kolk et al., 2005). The likelihood of this broader, more complex constellation of difficulties occurring for people diagnosed with PTSD increases if the trauma is of a prolonged nature, occurred early in childhood, and occurred within interpersonal relationships (van der Kolk et al., 2005). Large scale, epidemiological studies have also demonstrated a positive, graded relationship between the number of occurrences of adverse childhood experiences, such as abuse

and household dysfunction, and the range and breadth of mental and physical health conditions suffered later in life, the latter including some of the leading causes of chronic disease and death in North America (Felitti et al., 1998).

**Dysregulated affect and the window of tolerance.** Disruptions to psychophysiological systems of autonomic arousal appear to play a role in many of the difficulties experienced by survivors of traumatic stress, and likely contribute to disruptions of higher order systems of meaning, self and relationships experienced by survivors (Porges, 2011). In order to facilitate optimal functioning within safe environments, a person's autonomic nervous system must be sufficiently aroused to focus attention and engage with other people and the world in active ways, but not so activated that sympathetic fight/flight activation overrides executive regulatory functions and exhausts allostatic resources. The concept of a *window of tolerance* demonstrates the extent to which an individual is able to regulate their levels of physiological arousal in the face of environmental and relational stressors within a window that maintains integration of information processing at somatic, affective and cognitive levels (Ogden et al., 2006; Siegel, 2012). A person with a wide window of tolerance would be able to cope with the majority of potentially threatening situations in their world using the resources made physiologically available by activation of the social engagement system (Porges, 2011). Maintaining physiological and affective arousal within a window of tolerance keeps executive functions online, and allows for the integrative processing of emotion and associated physical action tendencies through all levels of a person's experience. Only in truly life-threatening situations would the extremes of hyper and hypoarousal activate for self-protection.

Although influenced by genetic factors, a person's window of tolerance can be profoundly reduced by traumatic experiences (Ogden et al., 2006). The difficulties in affect

regulation experienced by survivors of traumatic stress represent this collapse of the body's ability to adaptively respond to non-life threatening environmental stressors (Porges, 2011). People experiencing this type of bodily dysregulation of the autonomic nervous system struggle to down regulate states of sympathetic hyperarousal associated with emotions such as fear and anger, and up-regulate states of parasympathetic hypoarousal associated with low mood, emotional numbing, physical immobilization, and dissociative states such as depersonalization or derealization. At the neurophysiological level, FMRI studies that measure neural response to script-driven traumatic imagery in people with PTSD have demonstrated that neural patterns associated with hypoarousal are preceded by brief peaks in patterns associated with hyperarousal (Frewen & Lanius, 2006). This pattern fits with the proposed hierarchical nature of the autonomic nervous system described by polyvagal theory, and suggests that extreme or chronic traumatic stress weakens the ventral vagal complex that facilitates autonomic regulation, particularly flexible parasympathetic control of heart rate, respiration, and pro-social communicative movement (Porges, 2011).

This collapse of the window of tolerance evidenced by hyper-aroused and dissociative symptomology experienced by some trauma survivors points to a neuroceptive hypersensitivity to threat-related stimuli and interpretative bias toward appraisals of the environment as dangerous. This includes an appraisal of the social environment as potentially rejecting and harmful to self and body. While hypersensitive to threatening stimulus (Bremner et al., 2003), survivors may lack sensory acuity for non-threatening stimuli, characteristic of emotional numbing and depressive states of mind, making pleasurable, restorative experiences less accessible (Frewen & Lanius, 2006). Conversely, survivors whose mind states are dominated by parasympathetic collapse may be *less* sensitive to environmental threat and therefore more

vulnerable to re-victimization. This also makes sense in the context of a childhood environment in which trauma was inescapable, and resistance dangerous; when threat is chronic and unavoidable, numbing and disconnection from painful internal experience aid survival. In the context of chronic traumatic stress, this pattern of sympathetic arousal and parasympathetic collapse can be viewed as a highly adaptive and appropriate response to an environment marked by repeated yet unpredictable danger and rejection (Ogden et al., 2006). However, the chronic activation of these defensive systems not only exhausts the body, but also conditions a nervous system that fails to return to restorative states, continues to appraise potentially safe environments as threatening, or conversely leaves the self more vulnerable to further traumatic violation.

**Alterations in consciousness.** Sympathetic mobilization and parasympathetic immobilization outside the window of tolerance create physiological states activated to serve the protection of the body, while shutting down higher cortical areas of the brain important for the production of language, inhibition of affect, self-reflection and meaning making, and the integration of procedural memory into declarative memory (Frewen & Lanius, 2006; van der Kolk, 2006). Following traumatic events, survivors may experience flashbacks and intrusive affective and body memories when confronted with trauma-related environmental cues, and continued affect dysregulation prevents further integration of these memories. Never integrated into declarative memory storage that places experience into the context of time and space, these intrusive memories are experienced not as memories of the past, but in sensory fragments as if the traumatic event was re-occurring in the present (Brewin, 2001).

Other alterations in consciousness include the numbing and dissociative effects of parasympathetic immobilization, seen in the sense of detachment from the body, and its pain,

that survivors of sexual abuse might describe as having occurred at the time of the assault and subsequently when triggered by trauma-related environmental cues (Herman, 1997; Ogden et al., 2006). Following traumatic exposure, experiences of depersonalization, or a feeling of detachment from mental and bodily experience and derealization, the perception of one's surroundings as distorted, unreal, or "dreamlike" may continue to occur when presented with traumatic reminders (American Psychiatric Association, 2013). While this reaction is adaptive when under threat of annihilation, these altered states of consciousness that persist following the event or events (similarly to intrusive flashbacks and hyperarousal symptoms) "keep the traumatic experience walled off from ordinary consciousness" and thus "prevent the integration necessary for healing" (Herman, 1992, P. 45).

**Traumatic action tendencies.** As described above, primary affect is embodied, as it serves to mobilize the body into adaptive action to meet the needs of the self (Panksepp, 2009). At the time of trauma exposure, this adaptive action of the body associated with survival-related affective states is often frustrated and ineffective. The dysregulation of affect and memory described above are often accompanied by unintegrated and unfinished action tendencies in the bodies of survivors that tend to persist despite cessation of environmental threat (Ogden et al., 2006; van der Kolk, 2006). Rather than respond with congruent adaptive action to present moment contexts, trauma survivors continue to respond to environmental stimulus through activation of the body associated with fight, flight, and immobilization behaviors. They may experience increased muscle tension, shallowness of breath, and the muscular urge to abruptly flee overwhelming social contexts, associated with sympathetic arousal, or conversely muscular flaccidity, skeletal collapse (slumped shoulders and caved in chest), and submissive social behaviors associated with parasympathetic shut down. Again, these automatic physical action

tendencies represent the survivor's best attempt at regulating their overwhelmingly negative affect. However, these physical holding patterns keep survivors trapped in the pain of the past, and influence survivors' interpretations of present moment experience and subjective sense of self (Ogden et al., 2006).

**Further effects on the body.** Often accompanying affect dysregulation and alterations to consciousness are physical complaints to which there is no obvious biological cause (van der Kolk, Pelcovitz, Roth, & Mandel, 1996). The somatization of dysregulated affect can be seen as a compartmentalization of experiential states and a lack of conscious awareness of how the distress of the body relates to the distress of the mind. That their physical pain is in part related to negative affect does not in any way deny the reality of that pain. In fact, brain imaging studies implicate partially shared neural networks, involving the insula and anterior cingulate cortex, in the conscious experience of both social-emotional and physical pain (Eisenberger, Lieberman, & Williams, 2003; Kross, Berman, Mischel, Smith, & Wager, 2011). High rates of co-morbid PTSD and chronic pain have been found in veteran and general clinical samples, especially when co-morbidity includes a depressive diagnosis (Goldberg, 1999; Otis, Keane, & Kerns, 2003; Roy-Byrne, Smith, Goldberg, Afari, & Buchwald, 2004). Similar to conceptualization of traumatic stress related disorders, current chronic pain theory suggests that complex biopsychosocial factors contribute to a dysregulation of the body's homeostatic processes for the perception and appraisal of pain (Turk & Gatchel, 2002). In addition, much like a trauma survivor's hypersensitivity to and avoidance of painful trauma-related phenomena, chronic pain patients may exacerbate their experience of pain by the expectation and psychological avoidance of that very pain.

Survivors of complex relational trauma are also more likely to engage in behaviors that damage the health and safety of the body, such as substance abuse, self-mutilation, disordered eating and attempts at suicide (Felitti et al., 1998; van der Kolk, Perry, & Herman, 1991). These attacks on the body may be the survivor's best attempt to regulate the physiological state of the self, either calming overactive hyperarousal, or stimulating the system out of numbness and collapse of parasympathetic immobilization (Ogden et al., 2006).

**Disorganization of the relational self – childhood trauma and attachment.** Childhood relational trauma may be particularly damaging because it disrupts the developmental process in which children build a sense of safety and control in the world *and* learn to understand the minds of self and other (Schoore, 2009a; Siegel, 2012). Abuse or neglect by a primary caregiver means that the “child’s source of safety is also a source of danger”, a circumstance that has profound developmental effects on a child’s ability to regulate affect within the self and with others (Charuvastra & Cloitre, 2008). When a caregiver fails to respond to a child’s affective dysregulation or attempts at proximity seeking with congruent affective expression, this sends the child’s autonomic state into further dysregulation (Schoore, 2009a). Over time, their sense of self reflects the overwhelmingly negative affect expressed by their parent and experienced in their own bodies. Childhood abuse and neglect deprives children of the pleasurable experience of having one’s own affective expression empathically mirrored in the body of another person, disrupting development of the self as an agent, and the ability to create intentional states of mind (Bateman & Fonagy, 2004). Congruent affect mirroring of primary caregivers is not just about a reassurance of safety, but “is a principal means by which we acquire an understanding of our own internal states, which is an intermediate step in the acquisition of an understanding of others as psychological entities” (Bateman & Fonagy, 2004). The co-occurring difficulties in

interpersonal and affect regulation experienced by survivors of complex traumatic stress may be partly due to this inability to mentalize, or create coherent mental representations of the internal mind of self and others.

These early disorganized attachment experiences impact how trauma survivors experience themselves in relationship into adulthood, and many trauma survivors struggle with interpersonal problems that significantly impair their lives. For example, in a sample of women survivors of childhood sexual and/or physical abuse, emotional regulation and interpersonal problems predicted functional impairment beyond the effect of severe PTSD symptoms (Cloitre, Miranda, Stovall-McClough, & Han, 2005). Relational violations of self and safety seem to have particularly negative impacts on survivors of relational trauma, who are more likely to develop PTSD than survivors of other kinds of traumatic events (Charuvastra & Cloitre, 2008), and are also more likely to develop a wider range of difficulties, especially if the abuse occurred in childhood (van der Kolk et al., 2005).

The body of a survivor may brace against a social world in which she does not feel safe. People with PTSD tend to have low evaluations of social support (Cloitre, Stovall-McClough, Zorbas, & Charuvastra, 2008). From the perspective of polyvagal theory, this may be in part due to a nervous system that is hypersensitive to threats in the environment, and often dominated by states of hyperarousal or hypoarousal. In this way, the state of the body would restrict both the perception and expression of non-verbal, pro-social communicative behaviors, normally modulated by a robust ventral vagal (i.e. social engagement) system (Porges, 2011). Trauma survivors are held captive by their body's dysregulated affective systems, and may oscillate between seeking the safety of attachment and withdrawing out of mistrust and fear – a disruptive pattern inhibiting the formation of stable, meaningful relationships (Herman, 1997). Operating

within a system dominated by perceptions of their social world as dangerous and rejecting, trauma survivors experience overwhelmingly negative primary affect, and lose access to positive affective energies that motivate positive social experiences of play, nurturance, and sexuality (Panksepp, 2009). Abuse survivors may develop excessive caretaking behavior to prevent social rejection and they may describe the development of a public false self, designed to be more acceptable to others than what is perceived as a defective inner self (Dorahy, Duthie, Vertue, & Harvey, 2012; Herman, 1997).

**Disruption of regulatory brain networks.** The brain stem mediated neurophysiological dysregulation of the autonomic nervous system described above appears to correspond with dysregulated neural activation of limbic and middle prefrontal brain regions important for self-awareness, social cognition, integration of procedural and episodic memory, and the flexible regulation of emotion (Lanius, Bluhm, & Frewen, 2011).

The amygdala, a key brain structure implicated in rapid appraisal processes that assign emotional meaning to stimuli through retrieval of implicit memory networks, has been shown to be hypersensitive to threatening stimulus in people suffering from PTSD (Cavanagh et al., 2005; Rauch et al., 2000). Conversely, people with PTSD also may have reduced hippocampal volume, another limbic structure important for focal attention, short term memory, fear extinction and the integration of implicit, procedural memory (retrieved by the amygdala) with contextualizing information of explicit, declarative memory (Shin, Rauch, & Pitman, 2006). It remains unclear whether traumatic exposure leads to reduced hippocampal volume, or small hippocampal volumes increase vulnerability to developing PTSD following trauma exposure (Lasko et al., 2002; Smith, 2005). The stereotypical arousal and action tendencies displayed by survivors in reaction to reminders of past trauma may in part be due to a failure of the

hippocampus to integrate contextual information about the present environment towards the inhibition of automatic fear reactions to trauma-related cues, initiated by a hypersensitive amygdala-mediated appraisal system (Cozolino, 2010).

Chronic exposure to traumatic stress also appears to affect middle prefrontal structures, particularly those of the right hemisphere, important for top down regulation of primary affect, as well as the integration of embodied primary affect (interoceptive data) with higher order executive functions. For example, fMRI studies have shown reduced middle prefrontal activation in people with PTSD who are in states of hyperarousal, and overactivation of the same region during hypoaroused, dissociative states (Frewen & Lanius, 2006). In the former condition, the physiological and affective response overwhelms the meaning making and inhibitory structures of the executive brain, and in the latter, the executive brain inhibits the flow of affective information, rendering it inaccessible. Therefore, in both hyperaroused and hypoaroused states of mind, trauma survivors struggle to use the signals of their body as material for the construction of meaning that guides adaptive action.

In addition, script driven recall of traumatic events has been shown to activate right lateralized limbic and middle prefrontal structures important for the conscious experience of somatic and motivational states, with a lack of activation in left-hemisphere language areas normally involved in explicit memory recall (Hull, 2002; van der Kolk, B. A., 2006). These patterns of activation mirror the experience of traumatic recall as activating overwhelming, somatic and affective memory fragments, and in the difficulty trauma survivors have in describing somatic feeling states with words. Alexithymia is a psychological construct used to describe the inability to identify, describe and discriminate emotions from bodily sensation, and has been associated with having a history of childhood trauma (both abuse and neglect) as well

as a number of disorders and symptoms of emotion dysregulation including PTSD and complex PTSD, borderline personality disorder, eating disorders, somatization, and self-harming behaviors (Evren & Evren, 2005; Evren, Cinar, & Evren, 2012; Frewen, Dozois, Neufeld, & Lanius, 2008; Mattila et al., 2008; Speranza, Loas, Wallier, & Corcos, 2007). This inability to make sense of feeling states likely interferes with the ability to self-reflect and build coherent self-narratives (Siegel, 2012).

In addition to impacting autoregulatory capacity, dysregulated processing throughout key limbic and prefrontal structures appear to be related to the interpersonal difficulties experienced by complex trauma survivors. Lanius, Bluhm and Frewen (2011) propose a social cognitive and affective neuroscience (SCAN) approach to understanding complex PTSD. They highlight shared brain circuits for social emotional processing, emotional/self-awareness, emotion regulation, and self-referential processing, all functions that may be disrupted by complex trauma exposure.

The altered activation of prefrontal cortical regions and the hippocampus, along with associated dysregulated nervous system arousal, likely contributes to the problems of attention experienced by trauma survivors (Vasterling, Brailey, Constans, & Sutker, 1998). With the loss of executive control of attention, trauma survivors reactively orient toward reminders of trauma, distressing somatic and affective experience, and elements of their internal and external environment that confirm trauma related beliefs about the self (Ogden et al., 2006). Distracted by traumatic reminders towards which they are hypersensitized, or conversely unable to disengage from negative cognitive and affective experience, they lose the flexibility of attention needed to navigate complex environments and sustain intentional states of mind. Difficulties with sustained concentration observed in people with PTSD may be related to a general

deficiency in evaluating contextual information to discriminate relevant from irrelevant environmental stimulus (McFarlane, Lee Weber, & Clark, 1993). In addition, focal attention, or attention with awareness, appears to be necessary for the encoding of explicit memories (Siegel, 2012). The attentional difficulties experienced by survivors of complex trauma may make the integration of traumatic memory more difficult, as this process requires survivors to maintain focused awareness on distressing elements of experience, without being overwhelmed by that experience.

Ford (2009) distinguishes between neural networks that support self-awareness, learning, and exploration (i.e., approach) of novel stimulus (*learning brain*) and neural networks aimed at self-protection, survival and avoidance of dangerous stimuli (*survival brain*). Exposure to traumatic events and neglectful caregiving in early childhood “may reduce the brain’s ability to create neural networks to support reflective self-awareness [i.e. *learning brain*], because the neural networks that enable the child to prepare for and survive danger [i.e. *survival brain*] become overdeveloped” (Ford, 2009, p 41). These children grow into adults whose experience of self reflects stabilized neural patterns fixated on detection of negative affect, environmental threats to self, and avoidance of distress, and who experience difficulty shifting the mind toward self-expansive states of exploration, curiosity and reflection on one’s life story. It is important to note that both *learning brain* states and *survival brain* states involve activation of complex neural network patterns distributed throughout the hierarchically organized brain and body. The shift between protective mind states and exploratory mind states therefore will be accompanied by shifts in physiological arousal, primary affective and motivational impulse, and higher order construction of meaning and intention.

**A fragmented self.** The term dissociation describes a fragmentation of the self and represents a disintegration of the ongoing flow of energy and information through somatic, affective, and cognitive experience. According to Nijenhuis and van der Hart (2011), early trauma researcher and clinician Pierre Janet attributed the dissociative experience of trauma survivors as “a lowering or limitation of integrative capacity, leading to an inability to integrate experiences, to develop an awareness of reality as is, accepting it, and then reflectively and creatively adapting to it” (p. 417). In other words, dissociative adaptations to traumatic stress, although functional at the time of trauma exposure, ultimately disconnect a person from present experience, make meaning from that experience, and take adaptive action based on that flow of meaning.

Dysregulated primary affect leaves trauma survivors unable to derive meaningful direction from their emotional world. Even when in safe environments, their bodies continue to behave as if under attack, driven by self-protective action tendencies. Dissociative responses to reminders of traumatic stress are maintained by this inability to regulate affect within a window of tolerance, as survivors utilize the only tools they know to cope with overwhelming experience. As their body’s signals indicate danger and rejection in otherwise innocuous circumstances, the body becomes a vessel of pain, fear, and shame, rather than as a guide to wise action. Allan Schore describes how dissociation “reflects the inability of the vertical axis of the right brain cortical-subcortical implicit self-system to recognize and process external stimuli (exteroceptive information coming from the relational environment) and on a moment-to-moment basis integrate them with internal stimuli (interoceptive information from the body, somatic markers, the ‘felt experience’)” (2009b, p. 126).

This fragmentation of subjective experience and subsequent struggle to remain safe and feel effective in meeting one's needs, combined with an invalidation and denigration of self by important others severely effects overall systems of meaning and constructions of Self. Unable to control the dysregulation of their bodies or quality of their relationships, survivors may be left with profound feelings of powerlessness (Browne & Finkelhor, 1986; Herman, 1997). Shame-based self-constructions leave them with a stigmatized sense of disconnection, reinforced by avoidance of relationship or conversely involvement in re-traumatizing abusive adult relationships (Haskell, 2003). Without an integrated self-system to guide adaptive action and social connection, complex trauma survivors "lose their way in the world" (van der Kolk, B. A., 2006, p. 280).

## **Yoga**

*Yoga* is a Sanskrit word that literally means *to yoke*, and which signifies union or communion of the self with the divine (Iyengar, 1995). As a cultural practice, the system of yoga originated in the Vedic tradition of India and was first described in spiritual texts dating back to 1700 BC. Physical postures or *asana*, perhaps the most recognizable aspect of yoga in North America, are only one limb of a system of practices and philosophies intended to guide the practitioner to liberation from suffering through the realization of non-duality (Satchidananda, 2012). Modern yoga was brought to Europe and North America in the late 1800's, where the yogic understanding of the mind influenced enlightenment thinkers such as Henry David Thoreau (1906). Since that time, yoga has been adapted within popular western culture as a spiritual practice, mental health treatment, corporate industry, self-help psychology and a good workout. Despite the ongoing evolution of yoga as its global popularity spreads, many teachings and practices from its Indian origins can be found in an average modern yoga class, including a

system of moral and interpersonal ethics (*yamas* and *niyamas*), breath practices (*pranayama*), physical postures (*asana*), meditation (*pratyahara*, *dhharana*, *dhyana*, *samadhi*), rhythmic chanting of scripture, and Hindu iconography and mythology.

Preliminary outcome research points to the physical and mental health benefits offered by yoga (Khalsa, 2007). Although results remain tentative due to a variety of methodological limitations, the growing body of research points to the efficacy of yoga as an adjunct treatment for a number of mental health conditions associated with traumatic stress, including depression (Pilkington, Kirkwood, Rampes, & Richardson, 2005; Uebelacker et al., 2010), anxiety (Kirkwood, Rampes, Tuffrey, Richardson, & Pilkington, 2005; Michalsen et al., 2005; C. Smith, Hancock, Blake-Mortimer, & Eckert, 2007), chronic pain and acute stress reactions following natural disaster (Descilo et al., 2010; Gerbarg & Brown, 2005). Yoga may help reduce hyperarousal symptoms and improve quality of sleep in veterans with a diagnosis of PTSD (Staples, Hamilton, & Uddo, 2013). One pilot RCT found that a six week yoga program for military veterans significantly reduced CAPS scores (a common measure of PTSD severity) compared to a waitlist control group (Carter et al., 2013). Mindfulness-based Stress Reduction (MBSR), which includes gentle yoga postures and breathing as a principal mindfulness practice offered to students, has a large body of research supporting its use as an adjunct treatment for dysregulated emotion and chronic pain (Grossman, Niemann, Schmidt, & Walach, 2004; R.A. Baer, 2003; Salmon et al., 2004), and helps to reduce PTSD symptoms in military veterans (Kearney, McDermott, Malte, Martinez, & Simpson, 2012) and adult survivors of childhood sexual abuse (Kimbrough, Magyari, Langenberg, Chesney, & Berman, 2010).

North Americans practice a range of styles of yoga, and the environment and teaching method found in an average yoga studio may not be amenable to the particular needs of trauma

survivors. A team of clinicians and yoga teachers have developed a *trauma-sensitive* approach to yoga instruction, which emphasizes students' safety, choice, and control over their experience (Emerson, Sharma, Chaudhry, & Turner, 2009; Spinazzola, Rhodes, Emerson, Earle, & Monroe, 2011; van der Kolk et al., 2014). Trauma-sensitive yoga teachers pay special attention to the environment in which the yoga practice takes place. Potential traumatic triggers are minimized in classroom space (avoiding mirrors, harsh lighting, and exposed windows). When first working with inexperienced students teachers modify sequencing to avoid particularly exposing poses, such as prone hip-openers. The intention is not to eliminate these more exposing poses, but to introduce them once students have built confidence in their ability to maintain safety during class. They also limit the use of hands-on assists until safe, long-term relationships are established with students. Teacher qualities such as openness, approachability, and acceptance cultivate safety and choice, and their use of simple, clear language invites students to explore their sensory experience at their own pace, with an attitude of friendliness and acceptance of their bodies. *Invitatory language*, which incorporates phrases such as *when you are ready, in your own time*, and *if you would like* into the instructional narrative, invite students to exercise internally motivated choice and control over their practice, rather than striving to meet the demands of the teacher. Students are provided with multiple options and variations within each pose, providing opportunity for them to modify their own practice based on their internal bodily signals and encouraging self-guided exploration and risk taking.

Over time, this trauma sensitive model of yoga teaching supports survivors in becoming re-acquainted with the internal and proprioceptive milieu of their bodies (*having a body*), developing a more compassionate relationship with their body (*befriending the body*) and learning to use the *body as a resource* for self-regulation (Emerson & Hopper, 2011). A recent

randomized controlled trial of trauma-sensitive yoga for women with chronic, treatment-resistant PTSD supports the efficacy of using this approach as an adjunct treatment for the most entrenched effects of traumatic stress (van der Kolk et al., 2014). Following a 10 week treatment period, 52% of yoga participant scores on the Clinician Administered PTSD Scale fell below the clinical threshold for diagnosis of PTSD, compared to 21% in the control group (who received group-based women's health education). A corresponding qualitative study highlighted participants' experiences of positive affect cultivated through yoga practice; a thematic analysis of participant interviews identified themes of gratitude, compassion, relatedness, acceptance, centeredness and empowerment (West, 2011).

**Yoga and self-regulation.** Proposed mechanisms of change associated with yoga suggest that yogic practices may help restore the organized, regulatory capacity of the self after trauma through an integration of top-down and bottom up psychobiological processes (Gard, Noggle, Park, Vago, & Wilson, 2014). In other words, yoga may harness the bidirectional circuits of the body/mind system towards a reintegration of dissociated layers of experience and dysregulated primary affect. Yogic breathing, movement and posture practices may directly alter the body's physiological stress response from the bottom-up, soothing dysregulated stress response activation and reducing allostatic load (Salmon, Lush, Jablonski, & Sephton, 2009; Streeter et al., 2012). Through the combination of voluntary top-down attentional focus on present moment somatosensory signals without elaborating on those signals through language (i.e. non-judgement), yoga practitioners cultivate mindfulness of their somatic experience (Kabat-Zinn, 2013; van der Kolk, 2006). The ability to observe the mind and body in a friendly, non-reactive way supports the deconstruction of trauma-based self-representations, and creates space for new, more flexible constructions of self.

**Asana.** Yogic scripture describes how the cultivation of equanimity within the body contributes to a calm and peaceful mind. Yoga's physical postures (*asana*) are practiced with attention to maintaining a balance of alertness (*sthira*) and ease (*sukha*) in the body (Satchidananda, 2012). Within a single yoga class, students practice a series of poses that both activate and calm the body, a process thought to bring about nervous system equilibrium. They learn to pay close attention to posture and alignment, creating certain shapes with their bodies thought to have unique effects on mind/body systems (Iyengar, 1995). They may become aware that particular feeling states accompany particular postures of the body and discover how to change their experience of self by altering posture (Emerson & Hopper, 2011). For example, to cultivate a feeling of grounded confidence, a person might observe the connection of her feet on the floor while at the same time lift the center of her chest, relax her shoulders away from her ears, and lengthen the crown of the head toward the ceiling. Forward folds such as child's pose, a commonly practiced yoga posture in which the practitioner kneels on the floor and drapes his upper torso over the tops of his thighs, resting his forehead on the floor, provides a soothing experience of containment in which the heart and visceral center of the body is protected from physical exposure.

Charles Darwin explored the connection between emotional state and body posture (1872), and more recent scientific research supports the link between emotional experience, perceptual processes and whole-body postural dynamics (Atkinson, Tunstall, & Dittrich, 2007; Dael, Mortillaro, & Scherer, 2012; Riskind & Gotay, 1982). Attention to and reorganization of posture and movement is a core element of many body-oriented psychotherapeutic practices (Aposhyan, 2004; Kurtz, 1990; Levine, 1997; Ogden et al., 2006). Frequently observed body postures of trauma survivors (e.g. collapsed or rigid spinal organization) represent procedurally

learned, defensive action tendencies and play a role in maintaining implicit beliefs of self and others that influence subjective perception (Ogden et al., 2006). Through practicing yoga, trauma survivors learn the subtle practice of recognizing and altering postural alignment and muscular activation previously sustained by trauma related action tendencies. Aided by the bidirectional circuits of the central and peripheral nervous system, in which inputs at the physiological level influence mind state overall, students practice new ways of being in the world (Darwin, 1872; Ogden & Minton, 2000).

**Pranayama.** According to yogic philosophy, *Prana* is the life force that enlivens the body toward connection and agency (Desikachar, 1999; Satchidananda, 2012). Recognizing the essential role of breath to our vitality, in yoga the word *prana* also colloquially refers to the breath. Breathing practices in yoga are called *pranayama*, translated in various ways, including control or extension of the life force energies, or removal of the obstacles that inhibit life force (Remski, 2012; Satchidananda, 2012). The practice of pranayama, which manipulate the depth, speed, pattern, and rhythm of breath, is believed to bring about well-regulated states of mind and body. The power of the breath to affect mental states may be tied to the breath's essential, life giving function in the human organism, a point duly noted by ancient yogis.

Parallel scientific evidence is emerging to support this intimate connection between state of breath and state of mind. Experimental research demonstrates that variations in breathing patterns accompany shifts in emotion, and that voluntarily alterations of breathing patterns are associated with subsequent alterations in emotional states (Blairy, Chapelle, & Philippot, 2002). Brown and Gerbarg (2009) note the high number of afferent nerve receptors throughout the respiratory system that provide rapid afferent sensory feedback to the brain stem, via the vagus nerve, so that changes to the pattern of breathing alter autonomic nervous system arousal.

Streeter and colleagues (2012) hypothesize that, via stimulation of the myelinated vagus nerve, yogic breathing practices may increase heart rate variability, a measure of parasympathetic tone, and re-balance activation of the neurohormonal stress response often implicated in disorders of emotion regulation. They propose that this bottom-up regulation of the body's homeostatic systems and reduction of allostatic load have wide-ranging effects for integrative capacity at higher levels of the brain's regulatory systems.

At an experiential level, poly vagal theory describes how autonomic arousal can have profound effects on how people perceive and interpret their physical and social environment (Porges, 2011). If slow, relaxed breathing generally accompanies perception of environmental safety, then voluntary manipulation of breath to a slower, deeper rate may trigger limbic level brain systems to perceive safety and generate associated primary emotional states (Streeter et al., 2012). Over time, voluntary manipulation of the speed, depth, and pattern of breathing may help a trauma survivor widen their window of tolerance for distressing environmental and social contexts and, increase the integrative capacity of emotional regulatory systems, and facilitate states of mind associated with social engagement.

**Reintegrating rhythm, movement, action.** All natural phenomena carry an inherent rhythmicity, a patterned linking of movements and change within time and space (Berrol, 1992). Trevarthen (2009) notes the importance of neurobiological rhythmicity in the ability to adapt to the demands of any given environment:

All adaptive actions – that is, the “movements of life” – operating at different time scales and through different periods of felt, imagined, and remembered experience, depend upon activity in innate neural networks that generate body-related space and time in motor

actions, and that regulate them via sensitivity to the pace of events within and outside the body (p. 62).

In the case of complex childhood abuse and neglect, the rhythmic motor impulses of a child seeking attunement and a sense of agency are met with disjointed and often terrifying responses by their parent (Ogden et al., 2006; Schore, 2009a). These children grow into adults who have difficulty regulating the movements of their body based on the coordination of internal somatic and proprioceptive signals with feedback from their environment. Even when a traumatic experience occurs in relative isolation (i.e. not part of a wider pattern of abuse or neglect), the adaptive actions of the body to protect itself are often thwarted and futile (van der Kolk, 2006).

Yogic practices, such as the linking of breath and movement and repeated motor patterns, may help reorganize the body's inherent rhythms necessary for taking adaptive action, rhythms which have been frustrated and disorganized by traumatic experiences. Breath itself contains a rhythmic quality, but trauma survivors often come to yoga unable to deepen and regulate their breath pattern. They exhibit the short, shallow breathing and tightness of the chest cavity indicative of a body under attack (Ogden et al., 2006). Yogic breathing practices not only initiate the positive autonomic effects described above, but they help to restore a deeper, more rhythmic pattern of breathing that invites a matched cadence of movement in action (Emerson et al., 2009).

A common element of yogic *asana* practice is the use of breath to guide the body in and out of poses, and to deepen comfort and opening within poses. This practice of linking the mind to synchronous patterns of breath and movement may further help restore the biological rhythmicity disrupted in the bodies of survivors of traumatic stress (Spinazzola et al., 2011).

Repetitive motion patterns are soothing to hyperaroused bodies, activating for hypoaroused bodies, and provide an engaging and manageable “source of present-moment interoceptive cues” to guide feedback and control mechanisms involved in the regulation of rhythmic movement (Salmon et al, 2009, p. 61). Within the safe container of a trauma-sensitive yoga class, survivors begin to retrain the ability to coordinate the guiding signals of internal sensation with actions that meet the needs of the body and intentions of the mind (van der Kolk, 2006). Rhythmic movement and breath becomes a medium through which a trauma survivor begins to “organize and/or reorganize the neurologic underpinnings of cognitive, physical and emotional function” (Berrol, 1992, p. 28). From an even more expansive perspective, the rhythmic qualities of yogic practice situate the practitioner within a wider web of connectivity to the universe; as described by BKS Iyengar, a founding father of the modern yoga movement, “in the beating of his pulse and the rhythm of his respiration [the yogi] recognizes the flow of the seasons and the throbbing of universal life” (Iyengar, 1995, p. 41).

**Mindfulness.** One of the theorized mechanisms behind yoga’s mental health benefits is the cultivation of mindfulness (Salmon et al., 2009). The practice of yoga postures is a core component of mindfulness-based stress reduction (Kabat-Zinn, 2013), and empirical research has pointed to the cultivation of mindfulness as an outcome of yogic practice (Shelov et al., 2009) and as a mediating factor associated with improvements in quality of life following a yoga intervention (Gard et al., 2012b). Common definitions in psychological literature identify mindfulness as both a process and state of intentional awareness in which attention is focused on present moment experience, combined with an orientation toward that experience marked by acceptance, non-judgement, and openness (Bishop et al., 2004; Brown & Ryan, 2003; Kabat-Zinn, 2013; Baer, 2003). While mindfulness is an inherent human capacity (Kabat-Zinn, 2003),

both eastern and western contemplative traditions, including yoga, have developed specific practices to enhance the mind's ability to generate this form of awareness.

Mindfulness practice cultivates an intentional, rather than reactive, state of mind that supports present-centered, focused attention (Bishop et al., 2004; Walsh & Shapiro, 2006). In order to sustain this intentional state of mind, meditative practices in yoga and other eastern contemplative traditions begin with concentration exercises (*dharana*) that train attention toward a single point of focus, such as the breath or a mantra. As yoga practitioners build their capacity for agentive control of attention, they then expand their field of consciousness from a single point toward open monitoring of the entire ongoing flow of present moment experience within the internal milieu, including body sensations, emotions, and thoughts (*dhyana*; (Satchidananda, 2012).

This widening of awareness to the flow of present moment experience requires not only the ability to sustain attention, but also to flexibly switch attention (Bishop et al., 2004). In order to focus on present moment experience without being carried into the past or future by the mind's storytelling impulse, one must be able to flexibly engage and disengage attention to and from objects of awareness as they arise and pass out of present moment field of consciousness. The intention to focus on the present moment supports a non-elaborative state of awareness; the mind disengages from elements in awareness before being pulled into the remembered past and predicted future. This suspension of elaborative meaning making creates space between perception and habitual action of the mind.

The ability to sustain attention on present moment experience is supported by an orientation toward that experience marked by a quality of acceptance, non-judgment, and friendliness. Lest mindfulness be construed as a practice of cold cognition, Kabat-Zinn (2003)

notes that in many Asian languages the word for mind and heart are the same, so that mindfulness can also be interpreted as *heartfulness*. This interpretation highlights an approach-oriented motivational quality involved in mindfulness practice, which aligns well with a trauma-sensitive yoga practice aimed at befriending the body. An open and curious orientation toward distressing experience also counteracts the need to fix that experience through reactive and avoidant means (Hayes, Strosahl, & Wilson, 2012).

### **Aspects of mindfulness beneficial for trauma survivors.**

**Attention.** Training in attentional control may be a first step in increasing a survivor's ability to flexibly attend to and respond to their internal and external environment in intentional and effective ways. Attention directs the flow of energy and information through the mind, and the ability to sustain attention in a focused manner is required to plan for and pursue goals, encode novel information into explicit memory (i.e. to learn), engage in relationships, solve complex problems, and reflect on the future before taking action (Siegel, 2012). Trauma can narrow a survivor's field of consciousness toward threat related stimuli and disrupt the ability to maintain intentional states of mind necessary to carry out effective action (Bateman & Fonagy, 2004; Ogden et al., 2006; van der Kolk, 2006). This flexibility of attention may also support detaching from ruminative processes that perpetuate trauma-related self-schemas (Follette et al., 2006), and expanding the field of consciousness to non-traumatic, vitality enhancing experiences at the somatic level (Fosha, 2000; Ogden et al., 2006; Panksepp, 2009). Evidence also exists that engagement of focal attention (attention with awareness) activates the hippocampus and neocortical regions necessary for the encoding of explicit memory (Wiltgen, Brown, Talton, & Silva, 2004). The extent to which the practice of yoga aids exposure based processes in trauma

treatment, through which implicit, somatic and affective memory traces are reincorporated into explicit memory by retelling of the trauma story, has yet to be examined.

***Acceptance and distress tolerance.*** The approach oriented quality of awareness involved in mindful yoga practice may help reduce the threat-oriented reactivity of the mind and body seen in trauma survivors, which otherwise contributes to experiential avoidance, emotional dysregulation, and perpetuation of trauma-based narratives. A study of 239 adults with a lifetime history of trauma exposure examined the relationship between the experience of posttraumatic stress symptomology and levels of mindful acceptance (Vujanovic, Youngwirth, Johnson, & Zvolensky, 2009). On average, researchers found a significant negative correlation between levels of post-traumatic symptomology and scores on the Accepting without Judgement subscale of a mindfulness self-report assessment tool. These findings support trauma theory that describes how aversive reactivity to and subsequent avoidance of reminders of trauma (i.e. non-acceptance), may exacerbate posttraumatic symptoms (Foa, 2011).

Trauma survivors need to learn how to approach and tolerate distressing experience if they are to reintegrate memory, overcome fear, and become agents in their own lives (van der Kolk, 2006). If a person is constantly reacting to distressing emotional experience in automatic, stereotypical ways that orient her to the traumatic past or anticipated future, it will be difficult to use the messages of her experience as a guide to action in the present (Follette et al., 2006; Linehan, 1993; van der Kolk, 2006). Mindfulness practices such as yoga can be seen as a form of exposure to previously avoided elements of internal experience (Follette et al., 2006; Hölzel et al., 2011b). An accepting, warm attitude toward experience counteracts anxiety associated with inward observation, fostering an approach mindset toward the self that may lead to increased distress tolerance.

Scientific evidence suggests that mindfulness practices may help reduce affective reactivity associated with threat related emotional dysregulation. For example, mindful awareness of breath practice has been linked to an overall lowering of negative affect and reactivity, and a greater willingness to approach negative affective stimuli (Arch & Craske, 2006). Reductions in perceived stress scores positively correlated with reduced amygdala gray matter in the brains of people who participated in an eight week MBSR course (Holzel et al., 2010). Mindfulness practice has also been associated with increased grey matter density in the hippocampus (Hölzel et al., 2011a), a region important for attenuation of stress response and fear extinction learning.

***Witness consciousness and deconstruction of trauma-based self-system.*** The ability to be mindful entails shifting one's perspective toward the ongoing flow of experience of self, in which one observes this experience without identifying with it. This quality has been referred to as *disidentification* (Walsh & Shapiro, 2006), *de-centered perspective* (Bishop et al., 2004), and *reperceiving* (Shapiro, Carlson, Astin, & Freedman, 2006) in the mindfulness literature. Similar concepts, such as *witness consciousness* (Faulds, 2005) and *vairagya* (non-attachment) appear in yogic literature and scripture (Satchidananda, 2012). A similar concept has been described by trauma clinicians in emphasizing the importance of helping survivors to develop dual awareness, in which one can observe elements of experience associated with past trauma, while also maintaining awareness of the present context of safety. This perceptual split has been described as a separating out of an observing self from an experiencing self (Rothschild, 2000).

A mindful, non-elaborative state of awareness promotes suspension of the narrative impulse to link elements of present moment experience to the remembered past and predicted future. By separating out and observing sensation, affect, and thoughts, survivors may begin to

deconstruct trauma-related meaning systems, breaking the “illusion of language” (that language describes an essential reality, rather than structures an ongoing subjective reality) that maintains rigid trauma-based self-narratives (Hayes, 2002, p. 104). Rumination and worry have been conceptualized as attempts to fix or control distress under conditions of perceived inability to take effective action (Hayes et al., 2012; Segal, Williams, & Teasdale, 2002). The attempts are futile, however, because rumination will not change non-sensical and uncontrollable contexts (such as childhood abuse and neglect) in which adaptive action is impossible. The paradoxical notion of contemplative mindful practice is that by giving up any effort to change or alter experience as it is, change can occur (Kabat-Zinn, 2013). Non-evaluative or non-judgmental observation of present moment experience breaks the cycle in which distressing somatic and affective experience trigger negative language-based attributions, which in turn heighten distressing feelings and affect.

Neuroscientific evidence supports this idea that mindfulness practice may help to interrupt ruminative self-narratives that maintain negative affective states and frustrate adaptive action. For example, Farb et al. (2010) compared neural activation in response to sad movie clips between depressed and anxious people who received mindfulness training (MT) and those who did not. Compared to controls, the MT group not only showed reductions in depressive symptoms, but when presented with negative affective stimulus they demonstrated increased activation in regions important for interoceptive awareness and decreased activation in areas important for self-referential processing and language-based appraisal. The study authors suggest that this data demonstrates how interoception and a non-evaluative stance may support emotion regulation, wherein direct awareness of internal sensation precludes secondary,

language-based reappraisal that connects internal experience to previously held negative self-schemas.

*Insight, adaptive action, and reconstruction of self.* Yoga philosophy teaches that one must calm the fluctuations of the mind in order to clearly see self as divine, whole, and connected (Desikachar, 1999) . By reducing experiential reactivity and avoidance and adopting an accepting, decentered perspective toward self-experience, it may be that mindfulness aids the extinction of defensive survival based neural network activation within the brain, and creates space for reinforcement of new patterns aimed at an expansion of consciousness toward self-exploration, compassion, and curiosity about one’s internal and external environment (Hölzel et al., 2011b).

Jon Kabat-Zinn, the founder of MBSR, has stated that mindfulness practice “implies waking up to the full spectrum of our experience in the present moment which...we rapidly discover is severely edited and often distorted through the routinized, habitual, and unexamined activity of our thoughts and emotions, often involving significant alienation from direct experience of the sensory world and the body” (Kabat-Zinn, 2003). Waking up to the full spectrum of ongoing flow of energy and information in the mind and body promotes insight into how we organize experience and opens the door to exercising agency over that experience (Ogden et al., 2006; Siegel, 2012). The approach-oriented motivational quality of yoga and other contemplative practices supports this exploration of experience, possibly activating exploratory primary affective states (Ogden et al., 2006; Panksepp, 2009; Porges, 2011). The mindful practice of yoga creates a container in which trauma survivors can slowly and safely come into contact with dissociated parts of self, particularly their embodied self. Bishop et al. (2004) note that negative affect arises when a discrepancy is perceived between the needs of the self and

present context. By stepping “out of the war” (Bishop et al., 2004, p. 237) with their negative internal experience, trauma survivors can begin to befriend embodied affect as a guide to organizing experience and meeting the needs of the self (van der Kolk, 2006).

By increasing a trauma survivor’s awareness of her internal world (i.e., interoception), mindfulness practice may facilitate her ability to make adaptive sense of that world (van der Kolk, B. A., 2006). Holzel and colleagues (2011b) describe how mindfulness-based interventions have been linked to increased grey matter in brain areas associated with embodied self-awareness and perspective-taking, involving the adaptive referencing of autobiographical representations of self across time, and reflecting on the minds and perspectives of others (i.e. theory of mind or mentalization). This data suggests that mindfulness-based practices may be beneficial to trauma survivors, who struggle to take their own mind, and the mind of others, in mind as a means of generating alternative perspectives about present context. This ability to generate alternate perspectives based on an expanded understanding of one’s own mind and the mind of others is essential to reconstructing adaptive meaning systems following trauma exposure.

A trauma-sensitive yoga class provides survivors with opportunities to take effective action based on attention to internal wisdom, thus linking sensation previously associated with trauma to new experiences of mastery, an important element of extinction learning related to previously conditioned fear responses (LeDoux, 1996; van der Kolk, 2006). For example, a yoga student may notice how she holds her breath when faced with a challenging pose, and guided by this new somatosensory awareness, choose to invite deeper breaths. A subsequent relaxation and ease in the body following intentional alterations to breath provides a new experience of effective self-regulation and a path toward reversing long held traumatic action tendencies

(Emerson & Hopper, 2011). By accepting and attending to present context, trauma survivors learn to skillfully act (Linehan, 1993), and build a new sense of mastery that supports a reconstruction of self as an effective agent.

**Engagement, integration and effective action.** In summary, through a variety of inputs that affect the self-organizing capacity of the mind and body of a trauma survivor, yoga promotes the integration at the heart of self-regulation. Regulation of the body's autonomic stress response through breath and body movement begin to create an internal context that indicates safety rather than threat. This in itself may be a profoundly new experience for a trauma survivor. Autonomic regulation also creates an internal environment that supports an orientation toward experience marked by engagement rather than avoidance, as a neuroception of safety is a prerequisite for deactivation of "survival brain" and activation of engaged learning and social interaction. For survivors to be able to engage higher order executive functions such as volitional attention and self-reflective thought, their physiological arousal needs to be within a window of tolerance. Of course, the external safety of a trauma-sensitive approach is also essential to creating the conditions in which a protective, trauma-based meaning system can begin to be deconstructed.

At the same time, mindful attention to the present moment suspends rigid, trauma-based meaning making processes (further reducing physiological arousal), creating space for more intimate, yet non-reactive contact with the ongoing flow of energy and information in the mind/body system. Within a safe context, survivors can begin to approach previously avoided/dissociated elements of their experience from a stance of curiosity rather than defensiveness, activating brain regions and meaning systems that promote self-awareness,

reflection, and the ability to take effective action based on their awareness of internal wisdom of the body and heart.

**Yoga as a relational practice.** Attachment and neuroscientific perspectives on consciousness suggest that constructs of self and other are co-created in interpersonal space, and appear to map-out across shared midline structures of the brain (Schoore, 1994; Siegel, 2012). If the practice of yoga builds self-regulatory capacity through a reorganization and expansion of self-experience and meaning-making apparatus, how might it also reorganize a trauma survivor's experience of other? Will the soothing and balancing of a person's autonomic nervous system through yoga bolster her capacity for social engagement, as suggested by Polyvagal theory?

A small body of qualitative literature has begun to identify a sense of connection to community as a theme in the experience of trauma survivors who practice yoga (Emerson & Hopper, 2011; Spinazzola et al., 2011; West, 2011), and similar relational themes appear as part of the common discourse in yoga studios across North America.

The extent to which yoga activates and strengthens mirror mechanisms within the brain's networks for self and interpersonal regulation has yet to be examined, but relational elements of yoga practice highlight this as a plausible area for inquiry. For example, yoga is often practiced in a room with other practitioners, sharing synchronized movement and breath, and students learn postures in part by observing the demonstrated actions of their teacher's body. In addition, mindfulness practices are associated with greater cortical thickness and gray matter concentration in the anterior insula (Hölzel et al., 2011a; Lazar et al., 2005), an area that has demonstrated mirroring properties and thought to play an important role in social cognition and empathy (Iacoboni, 2009; Uddin et al., 2007).

Traditionally, yogic knowledge has been conveyed through student-teacher relationships, and even in modern classes, it is the teacher's voice that guides a student through their exploration of the body and mind. Just as a mother or father use their voices to soothe an infant's nerves or to engage him in exploration, so too may a yoga teacher use his voice to convey a resonant quality of safety and curiosity. In a trauma-sensitive yoga class, the choice and agency of survivors are reinforced by language of invitation used by the yoga teacher. This careful use of language in relationship subverts the experiential loss of control and power suffered by survivors of relational trauma. Finally, the interpersonal difficulties of survivors may make the *relational* practice of yoga difficult, and the interpersonal barriers to the practice of yoga, even when that practice is trauma-informed, warrants further investigation.

From a yogic perspective, suffering results from the illusion of separateness from which we operate on a daily basis (Satchidananda, 2012). Habitual grooves of perception and behavior (*samskaras*), built through the karmic cycle of action and reaction, maintains this dissociation from the divine, universal Self. By consistently turning toward experience (*abhyasa*), with an attitude of surrendering attachment (*vairagya*), we begin to see more clearly the constructed nature of the individual Self that maintains our illusion of separateness. Mirroring the dynamic tension described in Western psychology between self-definition and relatedness (Blatt, 2008), yogic philosophy proposes that the more intimately we engage with our construction of Self, the more intimately connected we become.

### Chapter. 3 – Narrative Methodology

The purpose of this study was to explore the stories of yoga practitioners who are survivors of relational trauma. The research question for this study was: “How do participants describe and understand their experience of body, self and relationships within the practice of yoga, and in relation to their process of healing from trauma?”

Despite the growing body of academic research exploring therapeutic application of eastern contemplative practices for mind/body healing, the majority of this work has produced outcome and process-based quantitative data. In an academic literature that has tended to reify concepts such as *mindfulness* and *self-compassion* in order to establish efficacy and change mechanisms, participant-defined conceptions of meaning have played a lesser role. Narrative research provides a way to understand participant’s inner worlds, through the narrative representation of that world, thus presenting a complexity of meaning not accessible through quantitative measures (Lieblich, Tuval-Mashiach, & Zilber, 1998). This study contributes an important qualitative, narrative perspective in understanding how people with histories of relational trauma make sense of their experience of yoga within their healing process, and in doing so privileges the stories of participants as important sources of knowledge.

Yoga is a complex, multi-layered practice for systemic change, and inquiries into personal meaning allow for this complexity to remain cohesive, rather than reducing yoga to its contingent parts (e.g., breath practices, meditation, physical activity, etc.). This form of knowledge is especially useful to counsellors who, given the popularity of yoga in western culture, are likely to have clients who practice yoga, find it meaningful, and can benefit from integrating this understanding into the therapeutic process. In addition, participants were recruited from the real-world setting of a local non-profit and community organizations, adding

to the body of applied research surrounding the therapeutic practice of yoga. This research setting contributes to understanding the experiences of a socially marginalized participant cohort who may not otherwise have the space and opportunity to tell their stories or reflect interpersonally on experiences of yoga.

### **History of Narrative Inquiry**

Storytelling is a universal meaning-making activity and an everyday act; in this sense, narrative inquiry is as old as human culture (Barthes, 1975; Riessman, 2008). Narrative inquiry as an academic discipline can be traced to the work of early 20<sup>th</sup> century sociologists and anthropologists who began documenting life histories of various cultural groups. However, little attention was paid to subjectivity, hermeneutics or the specific role of language (Chase, 2005).

Several academic and cultural trends in the middle part of the last century helped shift the focus of narrative theory and research toward an examination of subjectivity and the fluid process of identity formation through narrative construction (Burr, 1995; D. Polkinghorne, 1988; Riessman, 2008). In the sociological disciplines, as early as the 1930's, Mead's ideas of 'symbolic interactionism' described how identities of self and other are constructed through everyday social interaction (Mead & Morris, 1934). Berger and Luckmann (1967) introduced the concept of *social constructionism*, describing the way that social practices perpetually construct our sense of the world through a cyclical exchange amongst social actors. These constructions are institutionalized at the societal level and passed down through culture. Individuals may not be aware of this socially constructed process, and thus mistake an internalized idea as an essential and fixed truth.

Positivist scientific assumptions began to be called into question, and these critical perspectives on scientific knowledge aligned with changes in social psychological perspectives

emphasizing the contextual understanding of psychological knowledge, namely that our understanding of psychology is embedded in and inseparable from historical and cultural contexts (Gergen, 1973). Post-modern influences from the arts and literature called into question the existence of any universal truth or singular reality. This postmodern perspective also criticized rational assumptions that the tools of scientific technology could solve all the problems of human suffering; in some cases, truth constructed through scientific reasoning had been used to justify atrocity (Polkinghorne, 2000)

In addition to shifts in perspective on the nature of scientific knowledge, Langellier (2001) points to the 1960's and 70's cultural movements and their contribution to the "narrative turn" in the social sciences. The popularity of the autobiographical memoir, social movements concerned with matters of identity and social oppression (civil rights, feminism, etc), and growth of psychotherapy as a means of personal exploration encouraged people to reflect in an autobiographical manner, constructing their sense of self through the telling of their stories. Western academic and popular culture became increasingly interested in the interdisciplinary examination of the reflective construction of personal meaning.

Narrative research came into its own in the 1980's, with contributions by people such as Bruner (1986), Polkinghorne (1988), Mishler (1991), and Sarbin (1986), who privileged narrative ways of knowing over other epistemological traditions (positivist and postpositivist). Since that time, it has continued to grow as a field within the social and human science fields, and today the output of this movement can be found in academic journals dedicated to narrative research and collected volumes, such as Josselson and Lieblich's *The Narrative Study of Lives* (1999).

## **Social Constructionism**

Narrative research is embedded in a theoretical perspective describing how human experience is built through socially constructed processes (Burr, 1995; Gergen & Gergen, 1983). Key elements of social constructionism that influence narrative research include perspectives on language, identity, context, and relational ways of knowing.

**Language.** The ability to conceptualize and assign meaning to experience is only made possible through the structural framework provided by language; therefore, language is a necessary pre-requisite for thought.

Language does not just express concepts that already exist in reality, it actually *constructs* our conceptual understanding of reality (Bruner, 1986). This understanding of reality as constructed rejects the traditional scientific understanding that essential truth can be approached through unadulterated observation. As social beings, we are constantly constructing our understanding of self, other and our phenomenal world through language. It gives structure and meaning to our experience of internal states, and this organization of meaning gives rise to our sense of self/person. In other words, “the way that experience and consciousness are structured” is shaped by the language that we use (Burr, 1995).

Language itself lacks any fixed, inherent meaning, and so the way that we categorize our experience through language is arbitrary, although not random. The meaning and structure of language is negotiated through the social interchange, building on the particular discursive concepts available to us within our culture. Language occurs within the context of social interaction and relationship, and so the construction of conceptual meaning through language is a fundamentally social process. Even internal dialogue is social in that it references our understanding of self within a relational world, and is created from the discourses made available

to us by our culture. When we engage in discourse through language, we take action toward the construction of our social world, and that action is taken up by others toward their own process of constructing knowledge. In this way, language is a form of social action.

This social process of construction through language creates “coherent systems of representation”, or discourses, at the cultural level (Burr, 1995). These cultural discourses structure our sense of self and the world, and are so pervasive as to be mistaken for essential, rather than fluid, reality. Within society, the struggle for power between dominant and non-dominant groups is represented by dominant and alternative discourses, respectively (Gergen & Gergen, 1983).

**Identity.** As mentioned above, our experience of selfhood (that is, as a unique entity experientially separate from other entities, with a particular set of beliefs, motivations, and values that guide action and ways of relating) is created by the constructive process of language. As the meanings of language are constantly being negotiated through social processes, our sense of self is also marked by change and the possibility of a multitude of alternative experiences of personhood, depending on the social context. Social constructionists sometimes prefer to use the word *identity*, as a way of signifying the fluid and context dependent nature of a self in flux. They observe that we experience ourselves differently depending on “whom we are with, what we are doing and why” (Burr, 1995). Our identities are negotiated within our relationships, and we may hold a multiplicity of identities dependent upon the social context and relationships therein. Despite the fragmented and flux-like nature of selfhood, language creates a subjective experience of coherent identity within a given social context.

**Context.** All ways of knowing and understandings of selfhood are products of a particular historical and cultural context (Burr, 1995; Gergen & Gergen, 1983). The meaning we

assign to language, from which knowledge is constructed, depends on and is limited by the discursive cultural framework within which we live. This language and cultural framework of meaning becomes available to us through our social world and relationships.

This contextualized epistemological framework creates implications for the generation of psychological knowledge through research. From a social constructionist perspective, psychological understandings and knowledge are only valid within a given historical and cultural time and space. The generalizability of psychological knowledge generated within a particular context must be examined critically, and any examination of intra-psychic processes should consider the social and cultural context of the people whose psychological world we study.

**Relational/Dialogical Knowing.** We represent knowledge through language, and language is a dialogical process through which meaning is negotiated. Therefore, rather than being an internalized representation of truth acquired through internal psychological processes, knowledge is constructed within the social interchange. We come to understand ourselves and our world through the active, every-day construction of knowledge within our relationships. In other words “knowledge is not something people possess somewhere in their heads, but rather, something people do together” (Gergen, 1985). We are constantly engaged with one another in a shared construction of reality.

### **Narrative Methodology**

Based in these principles of social constructionism, narrative methodology is concerned with exploring the process and product of human meaning-making through the stories we tell about ourselves, others, and our world (Polkinghorne, 1988), and in relationship with researchers during the research process. Narrative is a *process* of meaning construction (we narrate our experience in order to organize and make sense of it), and the *product* of this constructive

process (the resultant property of human discourse about ourselves and others). Although we cannot directly observe the cognitive process of narrative meaning-making, as researchers we can engage in the meaning making process with participants, co-constructing stories that are products of the narrative process, and which are then available within a culture's discursive framework.

Through the telling of our story, we bring coherence to experience, rendering it meaningful in relation to our larger understanding of past and future (Bruner, 1986; Riessman, 2008). The narrative form of knowing is a way of organizing our experience within time and space by connecting disparate episodes in storied form according to interpretations of meaningful relationships between episodes (Sarbin, 1986). Our actions and those of others are rendered meaningful and coherent as we language their relationship to unfolding outcome across time and space. Narrative represents the creative organization of the parts of experience in a particular way that demonstrates the relationship of these parts to a larger whole: "narrative is a meaning structure that organizes events and human actions into a whole, thereby attributing significance to individual actions and events according to their effect on the whole" (Polkinghorne, 1988).

This meaningful organization of experience across time has been referred to as emplotment (Ricoeur, 1984). Not all aspects of experience enter into a narrative, as narrative is more than a chronological listing of events. Emplotment within narrative construction draws out and makes significant those events that contribute to the theme of the story as a whole, smoothing away elements that don't fit (Polkinghorne, 1988; Sarbin, 1986). People tend to place experience into temporal order by structuring narrative in terms of beginning, middle, and end (Sarbin, 1986), although the linearity of narrative has been debated. The hermeneutic unity provided by the narrative structure is particularly functional during times of disruption or

conflict, helping to organize experience in a way that guides purposeful action despite the chaotic nature of our world (Crossley, 2000; Murray, 2008; Ricoeur, 1984).

Barthes (1975) observed how the transcultural pervasiveness of narratives points to its role as central to the human experience: "...it is present at all times, in all places, in all societies; indeed narrative starts with the very history of mankind; there is not, there has never been anywhere, any people without narrative..." (p. 237). To be human means to be driven by the *narrative impulse*, an inherent tendency to form our experience into narrative structure (Riessman, 2008). As such, narrative processes do not just make sense of isolated sequences of events out there in the world; we tell our story in order to know ourselves. Identities are in fact narratives, fluid processes of reflecting on experience as a way of constructing one's place in the past, present and future landscape of time and social world. We are constantly in the process of constructing our life story, reflecting on past experience to understand who we are now, who we wish to be in the future, and our capacity for embodied agency in creating that future.

Our construction of self through narrative is lived out in the action we take, or don't take, in the world and in relation to others (Polkinghorne, 1988). Rather than existing in some disembodied conceptual space, narratives are active and dynamic, simultaneously directing and reflecting on action within the lived moment. Within the moment of construction, we may "recall the actions we have achieved and also those that have been suppressed by others" (Murray, 2008). We play out the roles that we create for ourselves through this constructive process, which may reflect agency (actively creating an experience or world) or suffering (Polkinghorne, 1988; Ricoeur, 1984). Narratives of suffering represent a lack of agency, as "when we are denied the opportunity to express our agency, we experience suffering" (Murray, 2008). The act of telling stories previously repressed by dominant social discourse, such as those

told by women survivors of gender-based violence, plays an important role in restoring agency (Herman, 1997).

The narration of self should not be misconstrued as a private matter, as “we are heavily dependent upon the willingness of co-actors in the construction of our story” (Burr, 1995, p. 94). Self-narration is a negotiated action, co-constructed in relationship, and always influenced by discourses available in society. As we engage with our social world, we are exposed to a “milieu of multiple narratives” that shape our understandings of social place and function (Gergen & Gergen, 1983, p. 263). From this milieu, we construct an identity that is acceptable to our social world. We also attempt to influence our social world, using narrative constructions that persuade, deceive, entertain, demonstrate lived experience, or mobilize others to action (Riessman, 2008). Narratives play social functions, rely on symbolic systems only meaningful due to the shared (i.e., social) nature of meaning, are subject to *social molding*, and develop through reciprocal processes of meaning negotiation within relationships.

### **Considering the Body within a Narrative Framework**

Returning to the subject at hand, the practice of yoga, brings up an interesting tension in the endeavor to explore a somatic, often non-verbal, practice using narrative methodology, and particularly in terms of theoretical foundations of social constructionism. How to reconcile the possibility of a direct, non-conceptual, yet meaningful, experience of the material body within the present moment, with a theoretical foundation that, at its extremes, denies any reality beyond what is socially constructed through language? What is the relationship between material reality (e.g. physical body) and constructed reality (created by language) in our sense of self and identity?

One proposal is that, while we cannot directly perceive it, a material reality does exist, and provides the raw material for the social construction of knowledge and understanding. This also means that material reality (such as the physical body) limits the possible forms of our constructed world, as we cannot construct a world totally separate from the raw materials of experience (Parker, 1992). However, it is possible to go further toward recognizing the ontological status of the body as meaningful in and of itself, and allow for a more complex relationship between conceptual and non-conceptual ways of knowing, without rejecting the social constructionist and narrative principles outlined above.

The ideas of interpretative phenomenologists help to temper the purely constructionist argument in the recognition of our embodiment within lived experience, which at the same time, is always interacting with intersubjective, hermeneutic processes (Heidegger, 1962; Merleau-Ponty, 1962). In his seminal work on narrative knowing, Donald Polkinghorne (1988) describes how Merleau-Ponty saw language as embodied through speech, itself a bodily activity constituting the phenomenal presence of thought. In the telling of our story, we are descending into the felt experience of the body, harnessing its meaning, rhythm, and melody, and from that *wild logos*, creating a new level of meaningfulness. A similar idea is expressed by Wittgenstein in his understanding of our spontaneous, embodied reactions to the lived world as the root of our language games (“what is inexpressible....is the background against which whatever I could express has its meaning”; Wittgenstein, 1968).

In addition, the body plays a vital role in our *relational* construction of self – attachment research points to the way that self-construction begins prior to the formation of language capacity in infants, through non-verbal, yet meaningful bodily mirroring of affective experience between infant and caregiver (Schorre, 1994; Trevarthen, 2009; Tronick & Beeghly, 2011). Even

as verbal language develops and expands our capacity for complex self-reflection and interpretation, throughout our lives we continue to construct meaning within the social interchange through non-verbal means (the discovery of the mirror neuron system demonstrates just how inextricable our bodily experience is from intersubjective space; Iacoboni, 2009). The way that we directly perceive our physical environment and concrete activities may even modify the beliefs about self and identity created from dominant cultural discourse (Chandler, 2000). In this way, the lived experience of the body can potentially disrupt dominant social discourse.

It seems reasonable then that the self is constructed from multiple levels of experience (Neisser, 1988), and that our narratives synthesize both conceptual and non-conceptual ways of knowing the self (Polkinghorne, 2000). This still allows for the fluidity of identity and the important role of language and context proposed by social constructionism, while taking into account non-conceptual, non-verbal forms of perception and wisdom in this constructive process. Perhaps the main point of departure from pure social constructionism is that the wisdom of our non-conceptual felt sense does not require the organization of language to be known (Gendlin, 1997). However, language constantly interacts with felt sense in the process of self construction:

Language takes up the contingencies of existence, and the perceptual openness of life to the natural and intersubjective worlds, and molds them into a meaningfulness that is greater than the meaningfulness they originally hold. (Polkinghorne, 1988).

### **Researcher's Subjectivity**

Growing up as an athlete, my body and capacity for physicality has always been an important part of my identity and sense of social confidence. I have been a yoga practitioner since 2004, and received my 200-hour yoga teaching certificate in 2011. I have also received training in using a trauma-informed approach to teaching yoga, and since July 2013 have been

volunteering as a yoga teacher at a Vancouver-based women's organization that serves women who are leaving situations of intimate partner violence and/or are at risk for homelessness. My own understanding of yoga and its meaning in my life story has evolved over time; my early yoga practice placed more emphasis on physicality and play, but over time I have increasingly incorporated the study of yoga's philosophical and spiritual teachings, and its meditative practices. This deepening of my practice has included the refinement of my awareness and attunement to the felt, non-conceptual space of my body, and learning to stay in contact with both comfortable and uncomfortable experience within that space.

From an academic and theoretical standpoint, I take yoga seriously as a scientific system for empirical understanding of the human experience, carried out primarily through observation of the mind/body. At the same time, I see yoga as embedded within an evolving cultural discourse of increasing complexity, as the narrative of yoga in North America is constructed from Asian (often incorporating Buddhist mindfulness paradigms of east and Southeast Asia), South Asian, European, and North American cultural influences. I regard with conflicted skepticism certain cultural discourses that influence yoga as it is practiced in North America, such as its place within a socioeconomically privileged sector of society, its role as a corporate industry, yoga as competition, and an overemphasis on individualistic narratives of personal empowerment at the expense of collective empowerment and social responsibility.

### **Narrative Method**

I conducted a narrative analysis of participant stories, as outlined by Riessman (2008) and Lieblich, Tuval-Mashiach, and Zilber (1998), the latter referring to this type of analysis as holistic-content analysis. In this method, participant interviews are transcribed and analyzed as a whole for meaningful thematic content in relation to the research questions. Less emphasis is

placed on the structural and literary elements of the story than in other narrative approaches, although these elements may be noted if particularly salient to the research question. The process of analysis is iterative and dialogical, with movement back and forth between the participant's voice (interview material), the theoretical framework, and the researcher's own self-awareness, and interpretative process (Bakhtin, 1981). Knowledge generated from the research process is co-constructed between participant and researcher, and cultural and social context are considered in the interpretative process of this construction. The interpretative process results in written stories that preserve the autobiographical identity of each participant, rather than being broken into themes across interviews as is common in other qualitative methods. The stories included in the final research report are seen as contextualized snapshots of a narrative process that continues to unfold. To provide further structure to my engagement with interview text, I chose to incorporate the method of the *Listening Guide* (Gilligan, Spencer, Weinberg, & Bertsch, 2003; Gilligan, 2015) into my interpretative process (detailed description below).

**Recruitment procedures.** Study participants were recruited through a Vancouver non-profit organization, Yoga Outreach, that trains and places volunteer yoga teachers in service agencies serving marginalized populations. Yoga Outreach currently places teachers in correctional centres, addictions centres, community mental health agencies, and other agencies serving women, youth, and aging adults. Their teachers are required to complete a 200-hour yoga teacher training, the basic industry standard for certification, as well as a 30-hour strengths-based, trauma-sensitive teacher training. I also recruited participants through other community yoga settings that provide trauma informed yoga, as I was referred by community gatekeepers.

Recruitment of participants occurred in collaboration with Yoga Outreach and partner organizations. Flyers (Appendix B) were posted in YO settings with the permission of partner

agencies. I also used e-mail to connect to gatekeepers such as yoga teachers and agency contacts, asking that they refer consistent yoga students to this study. Posters and communication with yoga teachers and agencies provided a study-specific e-mail address for interested participants to contact me directly. In one instance I also attended the beginning of a yoga class in a Yoga Outreach partner agency to describe the study and invite students to contact me if interested in participation. Participants were provided a \$20 gift card to a local coffee shop. When interested participants contacted me, I conducted an initial telephone screening. Prior to asking screening questions (see Appendix C), I informed the participant of the study purpose, limits of confidentiality, and freedom to withdraw, and acquired verbal consent to proceed with screening protocol. If the participant met inclusion criteria, we arranged an in-person interview, where they received a more extensive explanation of the study purpose, requirements of participation, risks and benefits of participation, measures taken to ensure confidentiality and limits on confidentiality, and were asked to provide written informed consent (Appendix F).

***Inclusion criteria.*** I interviewed four yoga students from community settings providing trauma informed yoga, although one participant primarily practices yoga at a private studio that emphasizes student safety and a gentle hatha yoga style. Yoga student participants were adults over the age of majority, who sought yoga classes in response to difficulties related to a history of relational trauma. Relational trauma includes, but is not limited to, any form of emotional, physical or sexual abuse (including witnessing abuse of a close other such as a parent or sibling), childhood neglect, traumatic loss, physical attack or rape, and exposure to warfare or other forms of violence. Determinations of trauma history were made based on participant self-report. In order to derive rich descriptions of yoga experience, all participants had attended yoga classes within the past two years, and the experience of practicing yoga was sufficiently meaningful to

be able to tell a full story about their experience. Participants' mental health was sufficiently stabilized to maintain an interview conversation, although some were still struggling with the various symptoms of traumatic stress, and other difficulties associated with poverty and social marginalization. All participants spoke and understood English sufficiently to participate in an in-depth interview.

From the perspective of narrative research, each participant account is constructed within a unique social context and therefore not generalizable. As generalizability and sample representativeness are not aims of narrative research, large sample sizes are not necessary. The recruitment of a small sample of individuals allows the researcher and participant time and space to construct rich, detailed narratives of experience from an extensive interview and analysis process.

***Exclusion criteria.*** People currently experiencing mental health symptoms that interfere with the ability to engage in an interview process or provide detailed narrative accounts of experience were excluded from participation (e.g., people with severe or untreated psychosis, ongoing violent behaviors, inability to tolerate interview length or subject matter due to emotional volatility). Participants who were visibly intoxicated at the time of screening or the interview were also excluded.

**Ethics.** All participants provided written informed consent, and I also solicited ongoing verbal consent at various points in the research process. I provided participants with a list of trauma-informed resources for psychological support (see Appendix G), and also gave them the contact information of the research supervisor, Dr. Marla Buchanan, who offered her expertise should participants need psychological assistance. Interviews would have been stopped should the participant become overwhelmed, and in general safety and control was stressed at every

level – this includes ongoing confirmation of informed consent, but also the researcher’s way of being and openness to participant’s choices of what to talk about or not talk about. I (the researcher/interviewer) have completed all clinical training requirements for a M.A. in Counselling Psychology, which included an eight month supervised practicum experience providing individual and group counselling to survivors of complex forms of interpersonal trauma (e.g., domestic violence and childhood sexual abuse); this experience has provided me with the interpersonal skills and clinical sensitivity necessary to create an interview environment in which participants feel safe and in control. The initial written account of the participant’s story was also shared with participants for reflection and correction, providing them with control over how they are represented. Interview tapes and handwritten notes referencing participant data were stored in a secure, locked location, and all electronic files of participant data were encrypted and password protected. Participants selected a pseudonym for use in the final report, and research documents related to that participant used that pseudonym identifier rather than the real name of the participant.

**Data collection.** Data collection consisted of two interviews per participant. At the end of the screening telephone meeting, participants were asked to spend some time reflecting on their experience of yoga, with the suggestion to journal or create a visual image through art making as a way of reflecting in preparation for the first interview (see Appendix C). The first interview with all participants lasted no longer than 1.5 hours, was audio recorded using a digital recording device, and participants had the choice of being interviewed in a private space of their choosing, or a private space arranged by the researcher. All interviews were conducted by the primary researcher, following the interview protocol described in Appendix D. Informed consent was ascertained and all participants signed the consent form, received a copy of the

signed consent form (Appendix F) and completed a basic demographics form (Appendix E) prior to beginning the initial interview.

The purpose of the narrative interview is to generate detailed, rich accounts of experience built from an egalitarian, collaborative process between the participant and interviewer. The interview is a conversation in which both parties construct meaning together, and thus is open ended, following the conventions of discursive talk, rather than a strict question and answer interview schedule (Mishler, 1991; Riessman, 2008). Simple, open-ended questions on the part of the interviewer encourage the telling of an extended account of experience, allowing for sufficient time and space for the full narrative to be told according to the participant's pacing. Follow-up and clarifying questions tend to be saved toward the end of the full narrative account, and may explore particular events or turning points to generate further narration (Murray, 2008). This joint, egalitarian meaning-making process requires the interviewer to give up control of the direction of the conversation, despite specific interests or research questions (Riessman, 2008).

I kept a research log following each interview, including initial impressions and interpretations, as the interpretative process begins with the interview conversation (Murray, 2008). As part of the reflexive process of understanding researcher subjectivity as part of the constructive process, I also recorded personal and emotional reactions to the interview in this log. A second interview (Appendix D), either by phone or in-person according to the participant's preference, was scheduled after analysis of the first interview transcript, in which I shared the written construction of the participant's story. At that time, I also described to the participant the analysis process that I used to construct the story (see next section), so that it was clear why her story was represented in that particular form. This provided the space for the

participant to correct any representations of her experience, and to add important elements that were missing.

**Data analysis.** In light of the ongoing narrative, interpretative process we are always engaged in, an informal analysis process begins with the initial interviews, and continues as interview tapes are transcribed in written form. I kept a log of my thoughts and reactions following the creation of each transcript.

Beginning formal analysis of the interview transcripts, I followed the Listening Guide technique (Gilligan et al., 2003; Gilligan, 2015). This particular method is aligned with the narrative analysis and holistic content-analysis narrative methods described by Riessman (2008) and Lieblich, Tuval-Mashiach, and Zilber (1998) respectively. The Listening Guide approach to analysis fits well with the research question and narrative framework in its emphasis on listening to multiple voices in one story, all of which are embodied, cultural, and relational. This idea of voices recognizes the musical elements of storytelling (cadence, rhythm, mood, etc), and allows for analysis of meaning that extends past what is simply said, to what is felt in both the telling and listening of a story. Embedded within a relational psychology that highlights the fundamental role of relationships in human development (Gilligan, 1982), this approach embraces both the embodied nature of experience and the social construction of reality contributing to the telling of storied lives. The structure of analysis provides a systematic way of attending to and analyzing various layers or voices within one story, providing insight into the complexity of the individual teller's psyche and understanding of relationships. Multiple *listenings* focus on these various layers, which are then synthesized in the final analysis allowing for the *contrapuntal* nature of co-occurring voices (much like the dance of independent strands of melodies within a single piece of music).

Analysis of each interview text unfolded over four stages:

**1. *Listening for the plot.*** This stage is split into two parts – listening for the plot and the listener’s response. Listening for the plot involves identifying descriptive aspects such as what happened, with whom, when and why, as well as identifying relevant images and metaphors, dominant themes, conflicting themes or absences, and details pertaining to social context. A short summary of this listening is written in story form. In addition, the listener describes her response to the listening, thus intentionally including the researcher’s subjectivity into the analysis process. The listener may ask herself: What is my response to this listening? In what ways do I respond emotionally and feel connected or disconnected to the interviewee? Gilligan et al., (2003) likens this process to a clinician evaluating experiences of countertransference, building awareness of how her own subjectivity influences understanding of a client.

**2. *I Poems.*** The goal of this stage is to zoom in to the speaker’s first person voice, in order to hear how she talks about herself, and to capture the cadence and rhythm of how she does that. Gilligan et al. (2003) describe this process as one of “coming into relationship” with the participant, by highlighting his first person voice and engaging directly with his “associative stream of consciousness” (p. 163). In this listening, the listener moves through the transcript, underlining every usage of the first-person *I* along with the accompanying verb and other important words. These phrases are then pulled out and listed separately in chronological order, and separated into stanzas according to shifts in meaning. The resultant text tends to read like a poem, with a poem’s inherent cadence, rhythms and meaning, and so is read out loud as part of the interpretative process. This stage of analysis was particularly helpful in identifying the portion of the research question around understandings of self through yoga.

**3. *Listening for contrapuntal voices.*** Building on the plot and first person context constructed from the first two stages, this stage returns to the research question by pulling out and tracking particular voices that co-occur in the listening. Contrapuntal voices may be harmonious or conflicting, and this stage allows for the multiplicity of voices represented in the participant's construction of reality. The research question helps guide what voices to listen for in the telling. For this study, contrapuntal listenings tracked voices related to body, relationships, and understandings of healing through yoga, as well as other voices that were identified during the process of analysis as relating to the research question.

Each listening focused on one voice strand throughout the text. Evidential phrases of this voice were marked by underlining in a particular color. Subsequent listenings focused on other voice strands, underlining phrases in a different color for each voice, and allowing that a single phrase may represent multiple voices. The process of marking first-person *I*-statements as well as multiple contrapuntal voices on one transcript creates a visual representation of the relationships between these various voices. Exploring the relationships between voices is just as important as differentiating these voices. In this study, this meant listening to how participants talk about the body and relationships but also how sense of body and relationships interact together and toward understanding of self (as represented in the I-poems). The definition of contrapuntal voices is an iterative process, beginning with a definition based on theory that is refined with each listening, and in reflection of the relationships between voices.

**4. *Composing an analysis.*** The final stage brings together the thoughts, notes, transcription codings and interpretative summaries from the first three stages to create an integrative narrative in the reflection of the research question. This analysis was represented as

the participant's story, and referenced the participant's own words as well as portions of I poems as evidence of my interpretations in constructing the story.

**5. Member checking procedures.** Initial stories constructed from the analysis stage were shared with participants, and a second follow-up interview provided a space for me and the participant to discuss any misinterpretations of the client's experience or any important elements missing from the story. The final story was then completed in reflection of this second conversation. This listening process was repeated with all four participant stories.

**6. Thematic analysis of stories.** Once I completed the final stories, I conduct a thematic analysis across participant stories to highlight common themes across participant experiences, as described by Riessmann (2008). A final discussion chapter discusses the findings in relation to the research question, the relevant literature on trauma and mind/body practices, and directions for future research.

**Criteria for evaluating quality of the study.** The following four criteria were used to guide evaluation of the quality of this study: resonance, comprehensiveness, pragmatic value, and coherence. These criteria were assessed through the member checking procedure described above, as well as through expert peer review. I recruited an expert peer reviewer, who has conducted research on yoga, is familiar with the literature, and has a Master's degree in Counselling Psychology.

*Resonance* refers to whether the stories resonate with the participants firstly, and other readers with a background in the field of study secondly. The criterion of *comprehensiveness* evaluates whether the story as written covers the entire story as told, and was evaluated by members checks with questions such as "Is there anything missing from what you told me?" The study's *pragmatic value* was evaluated regarding its potential role in influencing the practice of

counselling psychology and yoga teaching for healing from trauma. This criterion was assessed by the expert peer reviewer. Finally, the *coherence* of the study asks whether the final study makes sense, is understandable and meaningful, and was assessed through member checks and expert peer review. All four participants participated in a telephone or in-person member check, and affirmed the resonance, comprehensiveness and coherence of the study, based on the questions listed in Appendix D. At this time I also affirmed that each participant was comfortable with the level of self-disclosure and personal detail included in their narrative account. The expert peer reviewer affirmed the resonance, noting that the findings resonated with her expert knowledge as well as her personal experience of practicing yoga, as well as the study's pragmatic value and coherence.

## Chapter 4: Research Findings

*If you look after the root of the tree, the fragrance and flowering of the tree will come of itself. If you look after the body, the fragrance of the mind and spirit will come of itself. - B.K.S. Iyengar*

### Sam's Story

Sam is a Caucasian woman in her thirties who lives in Vancouver, but grew up outside the province. She has experienced a complex history of interpersonal traumatic events and environments, beginning during childhood, and has been diagnosed with a mental health disorder for which she has received treatment.

Sam has been practicing yoga for about two years, and first came to the practice at the beginning of her mental health recovery process, when her living situation was safe for the first time and she felt well supported by “the mental health community.” This recovery process also included other therapeutic interventions, including counselling, meditation and group support.

Despite this new found sense of environmental safety, Sam describes her emotional context at the time of beginning yoga as unsafe, guarded, and marked by confused interpersonal boundaries and a lack of self-confidence, in part related to a childhood environment “that was definitely guarded, needed to be.” However, at that time Sam asserts that “overall, I definitely never realized how unsafe I felt” at the time she began practicing yoga.

In addition, Sam had grown up as a competitive athlete, but recent health issues had contributed to difficult changes in her physical body that left her frustrated:

...What I do know, as far as like going to yoga, I didn't, um, necessarily have like any idea of what it was going to be like. There was the insecurity of like “am I gonna be able to do these moves?” I know my hamstrings aren't flexible (laughs), and if I lift my legs they shake. I'm not a gym person but I've been going to the gym off and on for a little bit

and, one thing I've found very frustrating is my cardio especially and just my athletic ability isn't where it was, so I would find it very frustrating going to a class [at the gym] and like I couldn't keep up, or I knew it wasn't a the level that...would be constructive for me.

This passage demonstrates how part of Sam's experience of herself before practicing yoga was marked by a voice of not knowing or not being able be effective in her body, combined with a voice of criticism and frustration with her body/self. The I-poem constructed from this passage portrays a sense of internal conflict between knowing and not knowing, and the struggle to accept a body that no longer can "keep up":

What I do know

I didn't

Am I gonna be able

I know

If I lift

I'm not

I've been going

I've found very frustrating

I would find it

I couldn't keep up

I knew it

Having recently moved to Vancouver, Sam had set the intention to move out of her “comfort zone”, beginning to test the boundaries that previously kept her safe. Yoga represented one way of doing that:

So when I first moved here I was definitely as far as my comfort zone and trying new things, so I was trying to push myself out of my comfort zone in certain areas. So when yoga, I definitely didn't go into it thinking, it was more of like, “oh I don't consider myself very flexible”, or like “I've always been very athletic”, but, ya, kind of try something different. Like I definitely didn't go into it thinking that there would be other effects as well. It was more of like a physical, type of, ya, mmhmm.

Sam's identity as an athlete made a physically active practice like yoga inherently interesting, while her sense of deficient physicality (e.g. “I don't consider myself very flexible”) and a desire to “get back to where I was before I got ill” also motivated this new step. Yoga represented a way of fixing a deficiency, or at least seeking growth, while also being anchored by a part of her identity that was already a source of pride and strength.

When asked to provide a metaphor or image that described how trauma was impacting her life at the time she began to practice yoga, Sam offered a pair of images. One was a rosebush covered in leaves and thorns, flowering in certain parts of her life, but not others, and “literally floating” and unrooted. This image first came up during therapy in the years before beginning yoga, and represented the deep healing work that she had yet to do:

it was very representative of where I was, like I had no roots, I hadn't gone into any of like, I've gone to my past stuff, like I thought I did what I needed to do. But I didn't really go there.

The I-poem constructed from Sam's description of this time highlights a voice of not knowing, particularly related to a lack of awareness or disconnection of important parts of herself:

I didn't know

I think back

I was

I had no roots

I had, hadn't

I've gone to my past

I thought

I did

I needed

But I didn't

She did not know at the time that there was more to discover, had not yet gone into the "roots" of herself to find the healing that she sought.

The second image extends this rosebush metaphor to her stage of recovery just before beginning to practice yoga:

P: So if I was to take that analogy to just like when I first got here before starting yoga, I would say it would be more of like a little seed in the ground, nothing showing yet.

I: So that whole bush wasn't above ground for other people to see?

P: Umm, correct, ya, there was, nothing, ya

I: Ok, but there was the potential for it there in the seed.

P: Mmhmm, ya. And um, that's how a rose bush grows (laughter, tears in eyes).

I: ya, mmhmm. I can see even just thinking of that image, its touching for you.

P: Mmmhmm, ya. Mmhmm (soft laughter, reaches for tissue)

Sam highlights that there was much of herself that was not yet known, but ready to emerge and be seen.

Sam began practicing yoga as an extension of programming she was already involved in at a mental health treatment facility (herein referred to as *the community centre*), and the class was taught by two volunteer yoga teachers and coordinated by her recreational therapist. In addition, she already knew several other students in the class. In comparison to many classes in a yoga studio which often have twenty or more people, the class usually consisted of ten to twelve people.

Despite struggling with a strong inner critic and lack of confidence in her ability to perform the physical poses (e.g. “so initially going into it I was hard on myself [soft laugh], kind of you know not knowing the moves, like having to look at the instructor, looking around...I remember in the beginning either just like wanting it to go to like the savasana part, like I just want to lay here, or child’s pose”), the sense that she was taking an active step for herself (“just a reason to get out of the house”) and engaging socially (“The group, we would go for lunch afterwards, so it was kind of like this social part of it too”) provided sufficient motivation to continue.

This sense of agency and supportive connection was enhanced by what she describes as the “person-centered” environment created by the yoga instructors, marked by a non-competitive and accepting attitude toward their student’s experiences:

The amazing thing about the class is you don’t compare, you don’t, it’s like wherever you are, that’s perfectly fine. Just the focus on you know it can change day to day, it can

change minute to minute. Not, like the competitive, or just kind of, like the gym aspect, is just a very different environment.

The instructors consistently reiterated verbal messages that honored the agency of their students in coming to class with words like, “its amazing that you got here, like thank you for being here, how much it takes.” This accepting and validating relational environment helped Sam to persist in her yoga practice despite frustration with her body’s performance, distressing internal experience of self (“I didn’t want to look, I didn’t want to be in that moment, I didn’t want like as far as the, whether it was preoccupied mentally or hard physically, emotionally”) and other environmental triggers.

Sam also began practicing at a mental health resource centre (herein referred to as *the resource centre*), an environment that initially triggered trauma-related memories. However, the presence and verbally expressed support of the instructor shifted the context from threat to one of safety:

...when I first went in, brought up so much for me, as far as like, a lot of people are struggling, and whether it was relating to my mom or myself or like, but just that safety – at the time I was heightened, like, don’t know that I necessarily felt like threatened, but I definitely did not feel secure. And then now practicing yoga there is probably the safest I’ve felt. And I think part of that is the instructor and being like you know “I’m watching, you are safe” like just, she comes from a very healing kind of background.

The I-poem constructed from Sam’s description of her relationship with her yoga instructor further highlights this transition from a sense of self under threat to a sense of self as safe:

I first went in

I was heightened

I don't know

I necessarily felt

I definitely did not feel

I've felt

I think

“You are safe”

I think

I know

I know

I think

I can relate

I feel

I'm telling myself

I'm responding

Sam's voice begins in a place of not knowing, experiencing a “heightening” of feeling in her body, or conversely a disconnection from her body (e.g. “not feeling”). However, with the care offered in relationship (“you are safe”), a voice of knowing, connection (“feeling”) and relatedness emerges.

This safety and validating guidance provided by the instructor allowed Sam to have new experiences of connection to self, exemplified by the process of learning to close her eyes while practicing. At first, Sam could not imagine feeling safe enough to close her eyes in a public

space; her need to be vigilant was driven by the question “is someone going to hurt me?”

However, within the safe holding container created by the yoga teacher, she is now able to close her eyes. For Sam, this simple act has led to a deeper connection with body and self:

...now I can follow just by their voice, which I would not have been able to do, and then it just tunes me into *me* so much more when my eyes are closed...whether I check in with certain parts of my body or my breath, like phenomenal that I can close my eyes in a group setting and not be preoccupied with “is someone looking at me? Am I doing it different? Am I using the wrong arm?”

Over time, Sam has been able to internalize this sense of safety and carry it with her outside of the yoga class. For example, she can now close her eyes in other types of public places, such as the gym, an experience that never would have happened “if it wasn’t for yoga”.

By relationally inviting Sam to tune into body and self with compassion, the teacher offered an alternative frame to Sam’s habitual patterns of perfectionism and self-criticism. As a competitive athlete, Sam learned to push her body to its fullest extent, sometimes past the point of pain. However, following experiences of physical and mental illness, Sam struggled between a desire to “to get back to where I was before I got ill” and the emerging sense that her body had changed in ways that defined a new reality. Prior to the onset of these changes in her health, Sam talked about how she was her own best advocate and biggest critic. After becoming ill, this critical voice took up more and more space than ever before, silencing the advocate.

Within this conflict to accept the limitations of her body, as Sam began practicing yoga she sometimes felt preoccupied with comparison to others and self-criticism. However, her yoga teachers consistently reiterated the importance of softening this demanding stance toward the body, offering words of nurturance and acceptance to her students, like “if you’re in pain, please

let me know so I can help you or adjust” and “your body is strong”. One teacher connected caring for self to a practice of connection with the wider community, saying “it’s just not good for all of us if you’re actually in pain”. Sam acknowledges how this gentle stance toward the body has helped her find balance between expanding her personal boundaries while maintaining safety and care for self:

I’ve pushed so hard, and so much and I think, strengthening, and when I breath in stretching out and then just trying to go a bit further, but no pain...and I think although it starts checking in physically, it’s going to other areas in my life too. It’s like, if its past kind of going out of my comfort zone or pushing a little bit, but its causing me pain, then that’s not good.

As an alternative to striving to reach an external ideal, Sam’s teachers invited their students to be in the present moment with acceptance:

And the other part I *love*, no matter how much I hear it, I’m still like “YES!” is just like “you don’t have to be anywhere”, like “you have nowhere to go, nothing to do”, like “no one wants anything from you.” Just cause, I never would have got that *ever* (soft laugh), I don’t think, without it, like without, ya. (tears).”

Sam experienced her instructors as relatable and trustworthy, as people who also shared in and understood the experience of human suffering. She attributes this experience of relatedness as an important source of self-compassion:

I think for me...the thing that has the most impact...I know the people both at [the community centre] and [resource centre], I know they have struggled in certain ways. With the resource centre [the teacher] sharing or her relating, I think helps me go there too...Like her going through mental health concerns. Cause, the more I can relate to

someone, the more compassion I feel for them, which then helps me have compassion for myself.

The teacher's practice of being present and authentic to her own challenges provided Sam with a direct experience of compassionate relatedness in the here and now. In a momentary exchange, Sam regards the suffering of her teacher with compassion, and in that very moment more deeply accesses an experiential understanding of compassion for self, an understanding that is "more instant...more real".

Enabled by the foundations of safety, a compassionate frame toward self, and a present-centered focus, in addition to a basic confidence in her ability to enact the physical postures, over time Sam's practice has evolved to incorporate more complex self-regulatory practices and a deeper connection with self and those around her. For example, Sam's describes her expanding relationship with the breathwork aspect of the yoga practice:

... my lungs are not very strong, but the deep breathing for me I'm realizing I can, it feels like I can breathe out forever, but not necessarily breath in for very long. Which I'm just thinking of now is very representative in some ways of my healing and my yoga process...cause I got a lot to get out.

She later elaborates on how, as her connection with breath has deepened, she has begun to work with this idea of cleansing with her exhalation:

I've been working with mindfulness and stuff like that. With yoga where it was like, I think about the breath or I think about what I'm doing if I don't know what I'm doing. Where now it's like most of the postures I know, or most of the positions, whatever. Where I can focus on the breath more consistently, and I've recently been using the breath, like I was saying, as far as like "I need to breath these things out"...So as far as

on the trauma side, now in addition to the physical areas of my body, it's more of the  
...just like sweeping my body. So I feel like I'm creating a space for me in my tummy,  
cause that's where I concentrate the breathing on, but I feel like the trauma is  
everywhere. So just sweeping through and really like ya, removing, all the junk.

The experience of *knowing* how to use her body effectively, allows Sam the space to tune in to  
her breath and access a new tool for self-regulation. With the breath she is learning to use her  
body as a resource within her recovery process, restoring a sense of agency to the body and self.

The I-poem constructed from this passage also demonstrates this inner self work.

I've been working

I think

I think

I'm doing

I don't know

I'm doing

I know

I can focus

I've recently been using

I was saying

I need to breath

I physically

I'm very conscious

I've never really thought

I feel

I'm creating a space for me

I concentrate

I feel

She begins to work, moving between doing but not knowing, and with more doing begins to know. With this knowing and doing she becomes more aware of her physical body, focusing on her need to breathe. Raising her consciousness in this way she is feeling more and creating space for herself, in the spaces that the trauma once occupied.

Sam's practice of breathwork has also begun to include a relational element:

It was always a very kind of personal experience, but the longer I do it, sometimes now I'll tap into the other people too. So, for example, if I'm practicing beside a lady who is ... breathing loud, then I can, it really kind of tunes me into my breathing more too.

As Sam's breathwork helps her "tune in to self", it also expands her ability to self-regulate in relationship.

One particular pattern of breath work "goes really deep", and leaves Sam feeling "powerful":

Well its like (laughs) whose gonna come up to you if your like [demonstrates breathing technique]...I'm using guided imagery as far as circling around me and like trying to incorporate that into like boundaries and barriers...and its like the bearded dragon, if she's upset she puffs out and goes [makes a *hahhh* hissing sound]. Its like back off, like get out!

The shape her body makes to practice this breathwork, combined with the depth, sound and cadence of her breath, evokes a sense of her own ability to protect her boundaries and keep herself safe.

Immersion into sensory experience has also provided an important resource for grounding and tuning in to self. Sam describes how the use of music during the yoga class over time led to a conditioned relaxation response, saying “there’s a few songs that like, now when I hear them, it just grounds me so much more”. She also highlights how the use of essential oils, her instructor’s tone of voice, and the vibration of auditory chanting have a “grounding” impact of bringing her into the present and soothing her nervous system. In connecting to her sensory experience during yoga practice, Sam builds her body’s resources. An I-poem constructed from Sam’s description of her work with sensory experience and the breath evokes a voice of deepening awareness and agency (knowing) and connection to self and body:

*I love it*

*I love*

*I hear*

*I would say*

*I’m really really tuning in*

*I would concentrate*

*I’ve realized*

*I’ve had*

*I’m realizing*

*I can*

I can breathe out forever

She has also begun to expand this sensory experience by using imagery and visualization as an active self-regulatory tool:

P: So sometimes depending on if I'm feeling very grounded, peaceful, loving, like all the kind of good energy, I'll picture that flowing to the other people in the class, and then other times when I'm like, lower, or like feeling insecure, then I'll try to like – usually I don't necessarily from the individuals, but more from the instructor, maybe, or if like someone is like deep breathing.

I: So you kind of try to draw the energy that they have that you need, in toward yourself?

P: mmhmm, mhmmm, Or even from the music, or the smell.

Recently, Sam has taken the opportunity to use her yoga practice and expanding somatic awareness as a way of working through trauma-based attachment patterns:

And then the last couple weeks I was actually practicing beside a lady who talks to herself quite a bit. And, my mother has suffered from schizophrenia since I was probably three or four, and so her talking to herself was a huge source of being scared, not understanding, confusion. And so recently I've just been playing with how [the classmate's] talking to herself is affecting me...like where I can go with it. Cause there's certain memories I have that really really scared me. And kind of I remember how my relatives reacted and I remember the setting and I remember lots about it, but I c – but my mom won't go there so I can't work through that with her. So I feel like I'm not even talking to this lady, she has no idea. Other than I will give her a card someday and be like, "thank you".

In this story, we see how Sam's learned ability to observe her automatic reaction to a distressing stimulus with curiosity and active intention ("playing with", "where I can go"), allows her to begin processing traumatic memories without ever speaking a word.

Sam's story continues with many more examples of ways in which her yoga practice over time has continued to evolve and present opportunities for self-exploration, expression and expansion of boundaries. She affectionately speaks about how she loves one type of breathwork for the way it allows her to be silly and express her individuality ("And most people don't do it, and I'm like "YES!" And I do it so much longer than everyone else"). Within the accepting frame of the yoga class, Sam has become more comfortable with her own limitations and now finds it amusing (rather than embarrassing) when she accidentally performs a posture on the opposite side from the rest of the class. While this may be a passing moment over the course of an hour, it represents a more broad experience of a softening inner critic. As Sam's confidence grew with practicing yoga, she even began to attend an outdoor yoga class. Practicing in a public place, with class sizes anywhere from 20-200 people, was certainly expanding her comfort zone, but she has come to love this class for the energy and diversity of styles of the various instructors, the opportunity to practice in a beautiful natural setting, and the joy of interacting with a diverse range of people (whether they are fellow practitioners or spectators).

For Sam, the story of her yoga practice has been one of fundamentally changing her relationship with herself and her body, intertwined with experiencing new ways of being in relationship. Throughout much of her life, Sam served as the caregiver for those around her, but struggled to offer herself the same patience, nurturing and compassion. Traditionally at the end of a yoga class students rest in stillness, and Sam recalls her teacher encouraging the students to end this resting practice with care for self, saying "it's your own practice, your own pace, we're

going to wait for you anyway, so go as slow—go slower than you want to, go slower than slow”.

Over time, Sam has internalized this message:

With yoga, I’m there for me, for sure (sighs and laughs). And allowing myself to just, like when I think of [the end of a yoga class], it’s like “everyone’s waiting for me” the beginning, or prior to yoga, there’s no way. I’d be the first one done and like, “people aren’t going to wait for me” like, it’s not me. Where now it’s like, “I’m gonna take my time” (laughs)...And so at the end of yoga now, every time I’m really just like bringing it back in, and just really, whether I’m picturing myself hugging, or like literally hugging my knees into my chest.

In conjunction with other therapeutic modalities, these experiences of self care in yoga have generalized to profound changes in the way that Sam connects with self and others in her life:

I think this week, I’m finally like at a point of like, really healing. Knowing I can give myself whatever I need, and not having to get it from someone else. But I can now if I need stuff from other people, can ask for it, and ask for help. And ya, (with tears), I could, asking for help was something, I don’t even know how to phrase it (soft laugh), just wasn’t an option. So being an adult now, ya, I can do what I need, I can give myself comfort, I can put boundaries up and tell people when what they’re doing is not serving me...to think that someone can live 33 years without feeling safe, (tears), ya. It’s a lot...

And then now, to have so many areas where I feel safe, supported, is just, incredible.

Sam goes on to connect this experience of self transformation with the overall feeling of relatedness that she found through yoga:

And then even the bowing to yourself at the end. And [the teacher] will say like “for all those who can’t be here”. And whenever I thank her, for the guidance and her instructing, she’s always like “no, thank you for sharing your practice”. And I think, that’s to me the basis of yoga. Is just like, everyone is different, everyone has different experiences, but its, ya, your sharing in some ways.

**Voice Analysis.** In tracking how Sam understood her experience of body, self and relationships throughout her story of healing with yoga, four voices emerged that speak to body, self and relationship:

1. *Critical voice* – This voice represents a strong inner critic, and is particularly present during the beginning of Sam’s yoga story. It is marked by a sense of frustration with self, deficiency, harsh judgement, and lack of acceptance towards self.
2. *Voice of Not-Knowing* – This voice is defined by two sub-voices:
  - a. *Disconnection from Self* – marked by discussion of parts of self that are unknown, lack of awareness and a retreating or distancing from the self.
  - b. *Lack of Agency* – marked by a not knowing *how* to be effective in the world, discussion of inability

These first two voices evoke an overall tone of a body/self/sense of relationship that is unsafe and unsure of how to move toward safety.

3. *Voice of Knowing* – This voice is also defined by two sub-voices:
  - a. *Connection to self* – marked by a knowing or awareness of self, an engagement of inner experience with curiosity rather than aversion, realization and insight

- b. *Self as Agent* – marked by a sense of knowing how to be effective, having the ability to meet one’s needs, and to engage actively with the world and inner experience
- 4. *Voice of Self-Acceptance* – This voice is marked by words of caring for self, compassion for self and others, and non-judgement of inner experience

These final two voices evoke an overall tone of a body/self/sense of relationship that is safe, effective, and connected.

These four voices of self are manifested in Sam’s story not only in how she talks about herself in the first person, but also in how she talks about her body and her relationship, the latter which represent two additional voices:

- 5. *Voice of Body* – marked by references to physicality, movement, sensation and breath, expression of the body through use of skills or other action, description of specific body parts
- 6. *Voice of Relationship* – marked by references to relationship with yoga teachers, other students, and attachment figures. This voice also includes references to Sam’s reaction to others, her sense of how she should or shouldn’t behave around others, her sense of connection or disconnection to others, and discussion of interpersonal boundaries.

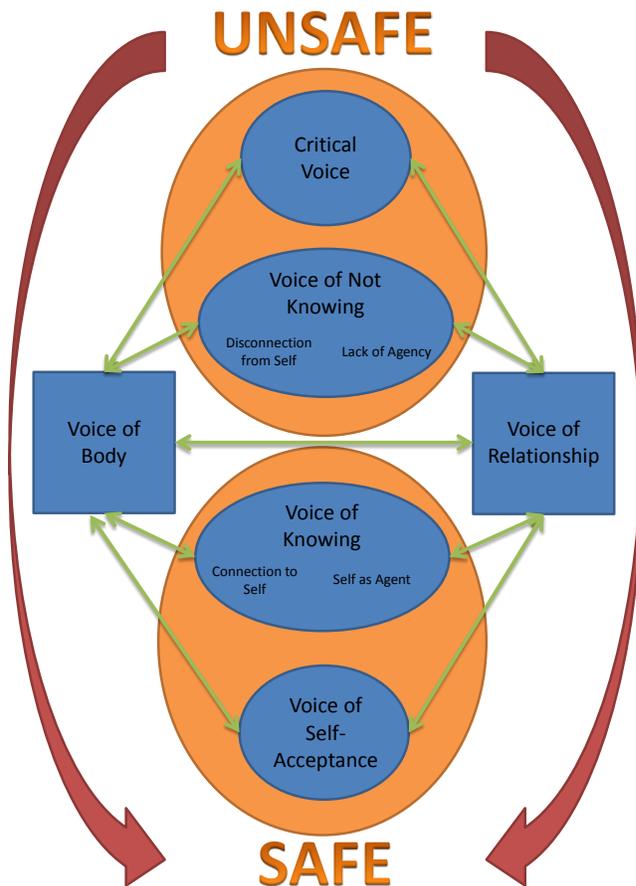
If these voices of body and relationship are viewed as differentiated but linked aspects of Self, then the first four voices described above (critic, not-knowing, knowing, and acceptance) are also manifested in the way that Sam talks about her body and relationships.

Throughout Sam’s yoga story, she we see how her sense of body, self and relationships are shaped by *voices of criticism and not-knowing*, particularly at the outset, and increasingly by *voices of knowing and acceptance* as her practice of yoga deepens and expands. Sam began her

yoga practice critical and unsure of her body’s capability, comparing her ability to others, and was at times triggered by other students. However, the experience of beginning to build positive relationships with others in her yoga classes, and taking effective action (*knowing/agency*) motivated Sam early on to keep practicing yoga. Over time, with the voice of her instructor gently guiding her and offering nurturance and alternative ways of regarding the self/body, Sam reached deeper levels of *knowing* and *connection to self and others*. Importantly, over time Sam’s story moves from an overall tone of unsafety to one of safety, and is indicative of her healing process.

The following graphic demonstrates this dynamic relationship between the voices present in Sam’s story:

**Figure 1: Model of voice analysis for Sam’s story**



All of these voices still exist in Sam, but now the *voice of the critic* and *not knowing* are waning, and the *voices of knowing* and *acceptance* are growing stronger. If anything Sam appears to be more comfortable with the multiplicity of voices that co-exist in her story, and the constant flux within which they all interact. When asked what thoughts she might offer to another person who was just beginning to develop a yoga practice, Sam says:

That the changing part, or the balancing thing, it's like, you might be different on the left or the right. Or day to day, hour to hour. It doesn't matter where you are, everyone starts in different places, everyone ends up in different places. There's definitely days where I'm still critical and there's definitely days where, like yesterday I went, I was tired, I was cranky, I didn't want to talk to anyone. And I'm like "I just want to sleep". And then by the end of it, it was like I had the most restful nap. Like its just, but that won't be all the time-it's worth it! (laughs). I guess that's what I would say, "It's worth it!"

### **Madeline's Story**

Madeline's first experience of yoga began at the age of twelve. She attended classes with her parents, and remembers this as a special time with them. They often worked long hours, so she spent a significant amount of time alone, watching television, and describes herself as a "loner child". She talks about the impact of yoga at the time in her life within the context of her family relationships: "I never had a really good relationship with my family, so it was good to have that thing that we did together."

Madeline "fell in love with pigeon pose", and was pleasantly surprised by her experience of the practice. Throughout her childhood Madeline participated in other creative pursuits, such as dance, singing and acting, and she sees yoga as fitting in with those other forms of personal expression. The way that Madeline was drawn to the practice of yoga illustrates a voice of

engagement that runs through her story, marked by experiences of yoga as pleasurable, motivating and inherently interesting.

During high school, Madeline was involved in an abusive intimate relationship with her boyfriend, which ended when she moved across the country to attend university. She describes her move to the West Coast of Canada as a “good escape”, a way of leaving her past behind and starting new. This is when she began practicing Bikram yoga, a popular hot yoga practice that was founded by a charismatic yoga guru (who has received media attention due to multiple charges of sexual harassment and assault made against him by former female students and colleagues). Classes are taught in rooms heated to 40 degrees Celsius, and students move through a set of 26 standing and seated poses before a final resting period (*savasana*). Madeline found this practice very engaging, and enjoyed the impact it had on her body:

I loved it at first, cause it was such a thrill, it just required so much energy. But at the end you'd feel so relieved cause of all that work that you did. And it increased your energy at the same time. Like you felt like refreshed and energized.

At some point however, she began to have doubts about how the yoga practice impacted her body and the way Bikram teachers treated their students:

Bikram has this history of not treating his students well and stuff. And I started to think that it was bad for my body to do it as much as I was doing...It's like, a mix of what other people were saying about Bikram, and a mix of my experience. Which was just, it was very authoritative, it wasn't as soothing or therapeutic. I mean I think it was physically, but the way they talk to you was very repetitive. It was like a drill sergeant. Part of what she loved about practicing yoga was the experience of newness and variety, but the repetitive nature of the Bikram yoga practice did not spark her creative interest in the

same way as other forms of yoga. With these reservations about the practice of Bikram yoga specifically, but fueled by an overall love for the physical practices of yoga, Madeline decided to enroll in a hatha yoga teacher training program.

The yoga teaching industry is self-regulated by The Yoga Alliance, an organization that specifies the industry standards for a basic 200-hour yoga teacher training program needed to become a registered yoga teacher (Yoga Alliance, 2016). These training programs are required to include direct instruction in yogic techniques and practice (asana, pranayama, meditation, etc), teaching methodology, anatomy and physiology, yogic philosophy, lifestyle and ethics and a ten hour practicum. However, there is significant leeway within these regulations for teacher trainers to determine their own specific learning objectives, leading to a wide variety in the methods and practices used to deliver a teacher training program. For Madeline, many of the elements included in her teacher training, beyond the practice of physical postures, were new and “eye awakening”. For example, she talks about being surprised by the role of spirituality in the culture of yoga:

I didn't see yoga as very spiritual before then. And I was like, they talked about God in one of the classes, and I'm like “what does yoga have to do with God, I don't understand?” And so someone said to me, “a lot of yoga has to do with God.” And I was confused, and I was just like “really?” And I was like agnostic at the time, I wasn't, I didn't believe in God.

Madeline's describes her experience in a yoga teacher's training as a good experience overall, but notes several aspects that were unsettling. She struggled at first to integrate the more abstract philosophical and spiritual ideas into her own frame of reference. In addition, one of the activities the students were asked to participate in by their trainers did not sit well with Madeline:

...like I think we did a little bit of re-birthing or something? Which was really, like some people...well we were lying down on our back and we just went like this [demonstrates movement with arms and legs] and some people would get these weird reactions, and I was just like “I don’t want to do this, this is really strange.”

She also describes a feeling of never quite fitting in to the community in which she was learning, highlighting a sense that “these weren’t the girls that I was supposed to study yoga with for some reason. And I still enjoyed some of their company, but, they all seemed on a different wavelength than me.” She also talks about an upsetting interaction in which a program trainer questioned Madeline’s motivation and desire to teach yoga, a suggestion that Madeline perceived as invalidating and which sparked anger and a vague sense of distrust toward that teacher.

The I-poem constructed from Madeline’s description of her time at teacher training highlights this sense of inner conflict and struggle to integrate these new experiences into her existing framework of self:

I don’t know

I didn’t think

I didn’t see

I don’t understand

I was confused

I was agnostic

I wasn’t

I didn’t believe

I can’t

I think

I don't want

I mean

I remember

I was *so* mad!

I was so upset

I liked it

I had this feeling

I felt

I was supposed

I still enjoyed

I messaged

I kind of didn't believe

Who am I to judge

This I-passage demonstrates the complex nature of this experience by highlighting the contrapuntal voices of a self that feels confused and perhaps unsafe, with a self that is interested and engaged. Like most things in life, the yoga teacher training was not perfect, and involved difficult experiences. However, similar to her approach with practicing Bikram yoga, Madeline was able to take benefit and enjoyment from her training as well. One of the most significant experiences that arose from her involvement with a teacher training was the opportunity to assist in teaching yoga to people with disabilities

For Madeline, this experience was marked by compassion for others and pride in self.

She identifies how exercising compassion as a teacher was a key element in making the practice accessible for her students with physical disabilities. She and her fellow teacher also gave students neck massages at the end of class, an act of nurturance performed because “it feels great!”

Teaching yoga also manifested Madeline’s determination to make it through challenge. For example, she describes an uncomfortable experience with one of her students:

I remember the one day I got really triggered by one of the people, cause he was also schizophrenic, and I could feel his energy and like, I don’t know it was weird. I just got really sensitive around him and I wanted to leave, but I stayed.

Again, this passage highlights both a voice of body and relationship as unsafe, with a voice of self as agent (“but I stayed”). With a body urging her to flee, she stayed and continued to teach. Ultimately, staying despite discomfort allowed Madeline to connect to her inner strength and express parts of herself embedded in a sense of pride. She describes her love for teaching and its significance in her life at that time:

I: What did you love about it?

P: It just made me feel alive.

I: Hmm, in what way?

P: It’s just like I’ve been studying this thing for so many years, and finally I’m out on a platform and showing my knowledge and my care and my um, determinism, determin...

I: Determination?

P: Determination. Ya. I mean I was just the assistant, but still. It meant a lot to me I think.

Compared to the I-poem from her description of yoga teacher training, marked by a sense of self as unsure and in conflict, the I-poem constructed from Madeline's description of her time teaching yoga demonstrates a very different sense of self:

I was working

I did

I did

I did

I did yoga

I didn't

I loved it

I then decided

I've been studying

I'm like out on a platform

I mean

I was just the assistant

It meant a lot to me, I think

This poem echoes a voice of self as an active agent (repetition of "I did"), engaged ("I loved it") and connected to something important to her.

Unfortunately, during the fifth month of her yoga teacher training program, Madeline experienced a severe panic attack that led to a return to her family home on the East coast of Canada, and then a period of travel. Looking back now at her time in yoga teacher training, Madeline acknowledges a feeling that "it wasn't my time," and talks about how the larger ethic of yoga helped her come to terms with having to leave the teacher training before finishing:

I even saw one of my teachers from, it was back in 2010 that I did it, and she's like "well you can come back any time, just do it when you're ready" you know? And it's beautiful that you can just say to yourself "when you're ready", that you have that choice. Cause like some other place might not say that kind of thing.

This message of acceptance, patience and choice helped Madeline to be less hard on herself and her body.

Following a return to the east coast and some time traveling around the world, Madeline was diagnosed with schizoaffective disorder, a condition which still impacts her life today. During the two years that she was at home working on recovery, she would occasionally attend a class at a fitness centre with a yoga teacher that her parents "loved." However, Madeline found that many of the elements that were important to her, such as chanting and the practice of a final resting pose (*savasana*) were not included in this class, and that overall she found the classes to be "boring". The practice of the ritual elements of yoga, such as chanting, the use of the Sanskrit greeting *Namaste*, and *savasana*, created a "community feel." Without these elements the class felt "more disconnected".

Madeline also had the opportunity to attend a month-long yoga retreat in India with her parents, which combined the practice of yoga with Ayurvedic treatments. She was surprised to find that the yoga taught at this retreat was very similar to forms that she practiced at home. However, she also describes the instructor's teaching style as "pushy", encouraging her to take on more challenging physical postures, and that she found herself wishing that "he was softer".

Madeline eventually moved back to Vancouver, and began practicing at a number of different yoga studios around the city, eventually settling in to practicing primarily at a studio that is close to her home. Over time, yoga has become part of the habitual rhythm of her life:

“Ya, yoga is such a big part of my life that I don’t even think about it anymore. It’s just there. It’s like “oh ya, I could go to yoga tomorrow, why not?”

Yoga may have become an ordinary part of life, but that does not mean that it has become boring. The studio where Madeline practices offers a variety of classes with teachers who all have unique teaching styles, and she has enjoyed exploring how she responds to different styles:

But with hatha or power or yin, you do, it’s different every time and different teachers.

And like in the past few months I’ve been going to [her regular yoga studio] and I’ve been trying like all different types of yoga teachers, cause they have a lot, and like I think it’s interesting all the different ways people teach. How you get attached to one. And so I know the ones I like the best now (laughs).

Throughout her story, Madeline emphasizes the role of “variety and dynamism” in awakening her natural curiosity, and how exploring “things that are alternative and different” present ways “to stretch myself.” In the case of yoga, this natural curiosity is often sparked by new experiences in her body. She states that a good yoga teacher is knowledgeable and incorporates variety into their instruction of the physical postures:

P: I like when they bring out new things I’ve never seen before.

I: What about that is...?

P: Just like a certain stretch that I’m like “huh, I would have never thought to do that” you know.

I: Sort of opens your world up a bit.

P: Mmhmm

In addition to the concrete practices offered, the teacher also plays an important role in shaping the overall frame of the yoga practice by emphasizing the importance of a

compassionate and accepting stance toward the self. Over time, these messages have helped Madeline to meet the needs of her body and mind as they arise in the moment, and as those needs change over time:

Lately I think because I'm in kind of a depressed state I'm more likely to go to the [teachers] that are gentle. Whereas like, I think in my early twenties I was more attracted to ones that were more high power, like more energetic, more cardio, like that kind of stuff. And I know, I know when I go to yoga, I always know it's the right thing. Like, they say that in classes too like, "as long as you're here" like "you got here, that's the biggest part is just getting here".

When asked about the role of compassion in her practice of yoga, Madeline highlights how her teachers have emphasized the importance of tuning in and accepting her body as it is in the present moment, so that she can grow and change:

Where the teacher instructs you to just be where you are, and accept where you are, and grow from there, rather than trying to like get to the top immediately...Go at your own pace. And like if this pose doesn't work for you, here's an alternate pose for you. And its hard being like, ok everyone else is not doing this alternate pose, but I still am. So, I think I have some guts in a way too. I had a class once where I was just like, everything I did was below par, but there is no par. And after the teacher was like "good for you, your like listening to your body."

In the passage above, Madeline highlights just how hard it can be to not compare herself with others during a yoga class, and the courage that it takes to be accepting of body and self as different than others (e.g. "I have some guts"). Struggling over the years with a variety of assaults on her body, in the form of a sexually abusive intimate relationship, panic attacks,

unwanted bodily changes cause by psychiatric medication and several other health problems, Madeline has needed to learn how to tune in to her body as a way of caring for herself. In response to a question about the role of yoga in dealing with the suffering of her body, she links the compassionate stance of yoga with the exercise of choice and personal agency:

It makes me be less hard on myself. Cause that's a big thing about yoga, to not push yourself, unless you're in a state to push yourself, and you're like "YES I want to do this today". Just to be patient... Its just very therapeutic and soothing. And there's always options, you know, like "if this doesn't work, try this block, like bolster, or just lie down, or just do this, do whatever feels right, make it your own."

Throughout her story, and in many of the passages above, Madeline notes how the verbal messages of her teachers shape her beliefs about self and body, and offer new, more empowering ways of relating to experience with compassion, patience and a sense of self as agent:

P: But like they say really encouraging things during the session, or at least most teachers do. Like... "leave your day at home" and like "just be in this room right now". It's very empowering. I can't think of all the things they say, but that's just one that came to mind.

I: So it sounds like that the way the teachers speak, and the words they use, plays a big role, would you say so?

P: Mmhmm. I like when you get that phrase that sticks in your head and like, helps you through the day kind of thing. Yep.

The experience of relatedness to other students in a yoga class also shapes Madeline's experience of self and body when practicing yoga. Sometimes, when she is struggling, witnessing the struggle of other students to enact a posture helps her be more accepting of self:

And then other times when I'm not having, it's a not so great day. I'm like "ah, she's like me". Or he, or whatever...Just like, we're not as flexible in this way, or strong in another way. But the truth is we're all in our own separate worlds.

This dance between differentiation ("we're all in our own separate worlds") and connection ("ah, she's like me") can also play a role in the way that Madeline works to expand her personal boundaries. What she describes as the "competitive" aspect of her practice, demonstrates how the practice of yoga with other people shapes how self is experienced:

I feel more motivated, like the energy of the whole room kind of helps you keep going. Whereas if I was at home I would just like, "ugh, twenty minutes is enough" you know?...Just all the different people, where they're at in their practice and, like competitive aspect of it...it's like, I have this person on the left side of me, this person on the right, and this one's doing this pose like this, and this one's doing this pose like this. And I'm in the middle and just doing my own thing, but I'm also thinking, "ooh, maybe I could go farther, maybe I could go less..."

The I-poem from this passage highlights how practicing with others expands Madeline's possible experiences of self. In the first stanza, describing what it is like to practice at home, there is a sense of stagnant energy and limited creative potential:

I feel

If I was at home

I would just like, ugh

However, in the second stanza that describes Madeline's experience in a class with others, there is an increased sense of movement and multiple possibilities for self:

I have this person

I'm in the middle

I'm also thinking

Maybe I could go farther

Maybe I could go less

Throughout Madeline's story, she talks about how yoga provides an active way of coping with adversity, specifically symptoms related to trauma and mental illness:

Mmm, well I deal with mental illness too. So it's a way of grounding myself. And making me feel sane. At least somewhat. Kind of gets me out of the stigma, my mind goes out of that box, for an hour and a half at least. And I feel empowered. And I think I'm lucky because I have that. Cause some people who have suffered from mental illness don't have that hobby or that thing they do that lifts them out of their rut.

In this passage Madeline describes juxtaposed identities, and offers an explanation for the role of yoga in constructing a new identity. A sense of self defined by mental illness includes the experience of being stuck in a rut, stigmatized and boxed in. However, yoga offers Madeline a way to actively move out of this rut, constructing a sense of self as grounded and empowered. Even the act of going to yoga when facing mental health related challenges reflects an admirable quality of self: "I'm proud of myself that I'm still going, even though I'm dealing with, I have schizoaffective disorder. And a lot of people that have that don't function very well."

Madeline's description of coping with hearing voices during a yoga class illustrates how her practice subverts the experience of disempowerment characteristic of mental illness:

P: Well I hear voices and sometimes they tell me what to do. So if I'm in a yoga class and I'll want to do this pose, like a lunge or something, they might stop me from doing it. That's really, so annoying, I hope it stops someday. Yep.

I: How do you cope with that when you're in a yoga class?

P: I sometimes just go into like child pose or something. But I feel like yoga gives me the light to make me stronger, and if I'm in a strong body I'm much more easy, able to, much easier, able to ward them off, the voices. So like strong body, strong mind kind of thing.

When faced with voices that counteract her sense of agency, Madeline is able to use her body as an active regulator (she later describes how child's pose has a grounding and comforting effect). This experience of strength in her body has a direct impact on her state of mind. Even when coping with the reality of mental illness and the impact of trauma on her body, she is able to go to yoga and "feel strong in my body". Madeline uses the image of light to describe how yoga helps her feel safe and confident:

I think it's given me the light to like, fend off negativity. Like I have a lot more power from it. In my body and my mind. When I just picture my body, picture this like area where light comes through, and how that like ya, how that defends me and strengthens me.

**Voice Analysis.** Throughout her story, a number of harmonious and contrapuntal voices weave in and out to ultimately shape a sense of self moving in a healing direction. *Voices of agency of body and self*, marked by descriptions of active coping, a sense of control and options for self-definition and action move contrapuntal to a *voice of disempowerment of body and self*, marked by descriptions of a lack of safety and control, being boxed in or lacking options, and a sense of stagnant energy and fatigue. A *voice of disempowerment* also highlighted particular experiences of *relationship* that are highly authoritative or lacking in encouragement of personal agency, as well as unsafe and abusive. In addition, this *voice of disempowerment* is often

accompanied by a *voice of disconnection*, characterized by a sense of self as disconnected from others, alone or not fitting in. Contrapuntal to this disempowered expression of relationship is a *voice of nurturance*, defined by descriptions of compassion toward self and body and within relationship, the offering of options and choice, and the cultivation of personal growth. In addition, a *voice of connection with body and within relationships* describes experiences of engaged interest, exploration, pleasure and expansion of self in relation to others. This *voice of connection* also relates closely to the *voice of agency*, as experiences of connection draw out the internal motivation and energy to actively regulate self.

For Madeline, ultimately the practice of yoga has helped her to craft a story of self that is not defined trauma and mental illness, despite the continued occurrence of difficulties in her daily life. Through yoga, she is able to create space for an expansive experience of a creative self:

It's like a positive experience, like where I can be one with myself. And like, push away all the negatives, kind of abusive, um, thoughts or memories. Ya, just being one with myself, and my soul. It's like none of that stuff even matters. I'm just moving my body in a way that feels good. And like feels like I'm working toward something that will make me freer, and feel empowered."

### **Susan's Story**

Susan is a Caucasian woman in her fifties. She has attended yoga classes several times over the years, but more recently began using yoga as a tool for coping with the impact of posttraumatic stress disorder. Susan was sexually assaulted when she was a young woman, and recently her attacker was released from prison. This event, and additional complications related to the release, left her feeling unsafe and exposed, and triggered an onset of posttraumatic stress

symptoms. Many of the most prominent symptoms of PTSD directly impacted her body, and included poor digestion, weight gain, and hypervigilance (“physically, your body has, you go like, crouch like this when your terrified”) She also went through periods where she lost her voice – a phenomena that Susan attributes to being strangled by her attacker, so that subsequently “the muscles had wrapped themselves so hard, nothing comes out”. Previously a social and active woman, Susan withdrew and isolated, hiding out from a man whom she had been warned was still dangerous. She describes these changes to her body and social habits as the “very very real symptoms of being terrorized.”

Throughout her description of the way trauma was impacting her life when she started to practice yoga, there is a clear voice of unsafety which runs through how Susan’s experience of her body, self and relationships. In addition, there is a related voice of loss and disconnection, particularly in reference to her body and her sense of self. At times losing her voice and being “literally silenced”, she also talks about how in states of terror “you leave your body, you’re not in control”, and expresses wanting to “get my body back” after all the painful changes that have occurred within this context of unsafety.

After several unsuccessful attempts at finding a helping professional whom she trusted, Susan began working with a trauma counsellor who incorporates yoga and other somatic approaches into her work with clients. The establishment of a trusting relationship with this counsellor has been essential to their work, and this trust in her counsellor’s competency and genuine care for her clients helped Susan to try out some new body-based exercises. After six months of talk therapy, Susan’s counsellor began teaching her yoga-based breathing and awareness exercises to cope with overwhelming emotions and memories. At first, Susan resisted the idea of slowing down in session:

I really wanted to *talk* with my counsellor about stuff, and she's calming me down with, stop talking, and I'm like "no no no I have so much to say, blah blah blah, I must get this out, I must get this out, I must say!", and I'm just kind of going into a spin, a twirl. And so not wanting her to stop me from speaking, but, but it really, I must admit it is good."

Despite initial hesitation, they are now working together to create a space for both talking and grounding in the body. Yoga-based exercises helped to contain their sessions together, so that Susan can leave feeling grounded and safe.

Breathe. Stretch. Wiggle toes. Clench fists. Shake arms...she is trying to do that with me at the end of every session...It really does work. And then you walk out of her appoint--, my time with her, and I see her for an hour and a half, and she puts it like...wanting me to leave without wanting a drink or without wanting a valium, because I have just let so many things out that are very difficult. So it's a way of bringing a person down. And I have said to her, it actually does work. It does work.

The counsellor framed this work in a neuroscientific context, helping Susan to understand how trauma impacts the brain, and how the body could be used as a resource to ground and calm her nervous system. Susan learned that in her hand was a model of her brain, so that her thumb represented the amygdala and was encapsulated by four fingers representing the neocortex of the brain:

Ya, cause when you're in PTSD or trauma, you're not, this is gone (references top four fingers), and nothings protecting it [the amygdala], that how she explained it to me. And really, makes a lot of sense, and I've never heard about this before.... I've really loved that part with her. Really a great counsellor, and she's the one that's into yoga and breathing.

Susan has begun to use this model as a grounding tool, turning her attention to the physical sensation of squeezing her thumb and fingers into a fist, while imagining her brain's alarm system (the amygdala) being soothed by the neocortex. Susan describes how using her physical body in this way helps her feel safe in the world: "Walking down the street in that way, like I don't want to hit anybody, but its, its very symbolic too. Very protective..."

For Susan, the most immediately impactful element of this yoga-based work with counsellor has been the use of breathing and physical grounding to find a place of calm and relaxation in her body. Throughout her story, Susan returns again and again to the importance of the breath in the practice of yoga: "This is still relatively new to me, its not really something I really was wanting to do. But its all about calming someone down and breathing. Its about breathing. So, that's how it works, or is helpful."

She and her counsellor have also begun to work on building awareness of physical cues as a method of grounding her during times of overwhelm:

P: We just, just I guess, feeling from your head down, I guess ya. Or grounding the feet, ya grounding the feet.

I: What kind of, what does that look like?

P: Putting your feet into the floor, feeling your toes, wiggling your toes. Ya.

I: What does that do for you?

P: Still learning, um, it actually does work, it actually does work.

I: What do you notice happening?

P: I guess your um, focus is on another body part, something else. Its on something else, your focus is removed and, by clenching different muscles. Is that still yoga?

I: ya, ya.

P: Um, and then relaxing them.

I: Ya, so, it sounds like...kind of when your focusing on your feet, on the ground, it like brings your attention away from something else that might be distressing or upsetting, and you can just focus on feet on the ground, connecting to the earth.

P: Yes! Ya.

In addition to physical sensations in her body, Susan notes that the counsellor's tone of voice also produces a similar calming effect.

More recently Susan attended a trauma-informed yoga class at a local community organization. The class is taught by a person who works with her counsellor, and with whom she also has a trusting relationship, a precondition that helped her feel comfortable expanding her comfort zone ("If it wasn't her, I wouldn't have been going"). Although Susan had tried yoga at various times in her life, this is her first experience of a yoga class that is explicitly trauma-informed, and the first time she has practiced in a public class after the onset of PTSD. One challenging aspect of this class has been the way the physically demanding poses highlight the changes that have occurred in Susan's body as a result of trauma:

"P: Ya, and it's a lot harder than people think.

I: mmm, in what way?

P: Holding poses, balance, and breath, and you realize how out of shape you are (laughs).

I: mmm, so you kind of notice some of those self-critical thoughts coming up a little bit as (nods head, laughs) when you're faced with the challenge maybe

P: [The yoga teacher has] been doing it for many, for ten years she said. So she's pretty good. Reach down to the floor and we're reaching to our knees.

I: What was that like? Kind of--

P: Just a reminder of how out of shape. No its good, it was great, and I'm definitely going, and that's again on Thursday."

Susan further talks about how her body's current state of fitness has been directly impacted by trauma, and how the challenge of holding yoga poses and stretching highlight the parts of herself that she has lost touch with:

P: Um, so, back to why the stretching was hard...Everything that's said about trauma and PTSD, its true. Shockingly true. From gaining weight, to isolation. So that includes not going and working out to hiding, this whole hiding thing. Which I'm furthest from the kind of person to hide. To becoming a recluse, which is totally not my personality. We see that, so that includes not working out, cause you have to go out to work out...So obviously, physically, your body has, you go like, crouch like this when your terrified, so its really you know my body has aged big time in five years. So the stretching just showed me even more really, how much I need to get my body back.

I: It almost seems like, maybe there's two parts when you're practicing, coming up against these physical challenges in your body it's like, "I feel good cause I'm out", like you're getting out, you're going out and you're doing something active. And it's hard cause you see where you're at and it's hard to be with that a bit?

P: Ya, well of course. (Laughs) But it is what it is.

This passage highlights two voices that often intertwine in Susan's story. On one hand she talks about the loss of body and self that occur when traumatized, a loss that is made more poignant when directly observed through her body's performance of yoga postures. However, there is also a voice of body as a resource/agent, in the way that Susan understands that reclaiming her physical body is an important step toward healing.

In light of these difficult physical changes that sometimes impact people who experience trauma, Susan suggests that a non-performative approach should be a key aspect of a trauma-informed yoga class. This would entail:

To not care so much about how ridiculous you look and that you can't do them, that that's not a big deal. Because the focus on looks in any work-out place, or not any, but too many, prevent people from being active... Again, to not focus on your looks, or how in shape, out of shape, how ridiculous you look, you know. To make it much slower, definitely much slower. Not too difficult. And just really slower, just really got to emphasize that one. And breathing, slower in the breathing. That's how it would be different. Instead of the right mat and the right clothes.

This kind of accessibility and spirit of acceptance was an important part of the trauma-informed class that Susan attended:

P: Practicing yoga at a regular centre and then practicing yoga at [the community organization] are completely different. Different clientele...

I: Ya, does that change your experience of your own practice?

P: Its easier. Way easier.

I: How come?

P: You're not, you can't fail. We had fun...It um, you know, it wasn't the seriousness, it wasn't the looks, that you're going to get at a regular yoga class.

She talks about how one woman in the class was actually practicing in a chair while others were on mats, and how impressed Susan was to see this woman making that effort to participate. As described above, practicing with people who also face physical challenges helped Susan to be easier on herself about her own body's struggles.

Susan's intentions for her yoga practice have also shifted now that she's focused on healing from trauma. Where in the past when she practiced yoga it was primarily for the physical workout, now she is more interested in how yoga can help integrate the mental and the physical aspects of self:

I hope, I hope it's not so much practiced on the poses. I guess this is pretty important to say. I guess I hope it's not so much practiced on the poses, and the strength of the poses...but it's more about breathing. When you said about the physical thing and going to hot yoga, and now it's not so much about the physical...

She continues to explain this distinction, emphasizing the role of yoga in providing a sense of control and connection within her body:

P: ...But now it's about a mental, not a physical.

I: Mmmhm, in what way?

P: Just the calming down.

I: What does calming down look like for you? Or feel like for you?

P: Being able to breath. Being in your body, like not in fight or flight. It really, for real, ya...And trauma... And it's very real...you leave your body, you're not in control... But it's not, it's not a forever life sentence like other things are.

This deceptively simple act of breathing and being in the body cannot be underestimated. In response to the question "What's it like to be in your body", Susan says:

What that's like? That's wonderful (laughs). Um, I mean its breathing, its being aware of your surrounding, its you're calm. Its wonderful, you don't realize how wonderful till you lose it. And yoga will definitely be part of me recovering.

Susan describes how this practice of using the body as resource to restore control and agency is enhanced by building self-awareness and a conscious discipline:

P: (Takes a big breath through nostrils and sighs out). Being able to breathe, it's just a grounding...And you need to...get it before you're totally off the rails with trauma. You need to catch yourself before you're too far left, left the earth. And um, so it's a muscle, you need to train yourself, as anything. And the more something becomes a habit. And something that you would go to before trauma completely takes hold.

I: And so I want to make sure I understand. So the yoga practices are something you can go to, the breath and--

P: Ya, and go to, you learn to do it...sooner rather than later. And you don't necessarily have to be doing it in a yoga class to be doing forms of yoga. Instead of reaching for something external to calm you down, it's an internal. Which isn't again, is not, not always in a class to do that, things you carry...

I: So you learn it and practice it within your counselling or class, so that you can--

P: Your daily life, practice it in your life.

For Susan, the power of yoga includes the practice of turning inward to find comfort and soothing, and so is something that can be available to her whenever she needs it. She sees yoga as a proactive alternative to the use of pharmacological substances that tend to numb, rather than connect her to her body:

No its just all positive, it's a positive, it's not drugs, it's not pills, it's just, its positive moving forward method of calming the body and relaxing. And it's a healthy, positive thing, it's not drugging the body. Because I have been put on, I'm not on them now,

Clonazepam for panic attacks, which are horrible. Um, the panic attacks and the pills (laughs).

Looking ahead to her unfolding process of healing, Susan sees yoga as a proactive path to reclaiming herself and her body. She hopes that working through the body in this way will center the parts of herself that were fragmented by trauma:

P: ...And we can start to move forward finally. So this yoga will be part of it.

I: How do you know that it will be part of it? Not just because of what your counsellor says, but for you?

P: Because it's just a very calming, healthy, without Valium, I, just using the word grounding, cause that's what it is...So someone is not scattered all over the place. And it just really needs to be a part of it.

I: I can see how kind of, that image of feeling scattered, feeling kind of fragmented.

P: ya, oh ya, and fragile.

I: And then what is yoga do with those fragile pieces?

P: It helps pull it together

Susan talks about how, having established a certain amount of physical safety in her life at this point, she is on the brink of moving forward. With anticipation she affirms that "I'm just ready to get me back...yoga is one of those things." Part of this process of re-discovering her self involves returning to the rituals of self-care that she practiced prior to the onset of PTSD:

Well that's, breathing, its exercising, its stretching its healthy. Physically and mentally.

When you go through such a traumatic thing, you stop taking care of yourself. Or you are, I guess you are, even when your eating that wonder bread, it's a form of taking care

of yourself. But ya, but I'm ready to go on further from the wonder bread stage of taking care of myself.

Although yoga is a relatively new practice, Susan links yoga to her affinity for other forms of body and sensory based "alternative medicine" that used to be a regular way of taking care of herself:

I: And now, you're ready to build in a new practice.

P: oh yeah, and the stuff that I used to do. I lost myself for all these years. This is, I'm going back to stuff I did, going back to how I am. That's why I mentioned the acupuncture for my back. Ya, I'm going back to me, a new and improved me. I didn't have yoga as a really, I'd done it, but it wasn't really a go to thing, but I really, I'm in the midst of learning more about yoga. But I've done aromatherapy for decades...acupuncture. All of this.

Part of the appeal of yoga is that it fits within a framework for self-care and health that was already part of Susan's identity. Alternative therapies such as acupuncture and yoga, represent a way of maintaining power and control over her body within a dominant societal system that she fears can do more harm than good:

Ya, so ya, of course I'd be open to something like [yoga]. They want to, too many times society wants to do pills and whatever, and surgery for my back, and fast fixes. Which end up making more problems.

Susan talks about how even as a young woman, she did not trust the "system". She tells a story about how after a catastrophic back injury, she chose to heal herself through massage and acupuncture, rather than through the back surgery recommended by her doctors. Susan asserts that this "stubbornness" in her has protected her from systemic abuses of power, and will

continue to serve her in her fight to recover from trauma. She talks about the profound sense of betrayal that many women feel when the police and judicial system fail to protect female survivors of violence and sexual assault. For her, yoga and other alternative therapeutic practices can be a form of resistance to this abuse of power:

P: But I tell every person, especially women, if you're raped, you do not go to the police, you don't call, you find the peace within yourself. Because the system will re-rape you.

I: So just kind of to bring it back to the yoga practice.

P: That's how you start to move forward, that's how you get healthy. You don't get healthy by the police, you get healthy with things like yoga, and meditation and um, you find it like, it's a whole, its, um, aromatherapy, meditation, yoga, that's a whole kind of thing together. Holistic, ya.

I: It's a way of kind of ...

P: Finding your own closure. Your own healthiness.

I: Despite the world around not really creating the environment to do that in, you kind of are carving out your own way.

P: Ya, I mean you become smart on how to hide yourself, and you just, it is reality... And we find our own justice and our own moving forward. And justice is moving forward.

**Voice Analysis.** Susan's story begins in a context of a history of many unsafe and unjust relationships, and this *voice of unsafety in relationships and in her body* dominate the beginning of her story of practicing yoga. However, within the context of two safe relationships, she begins to practice yoga, and from that practice a new *voice of body as grounded and safe* begins to emerge. By slowly re-connecting her mind to her body, she is learning to comfort and soothe

herself. Intertwined with this voice of learning to ground the body and reconnect, is a *voice of loss of body and self*. In returning to her body through the practice of trauma-informed yoga, Susan is reminded of how much she has lost to the effects of trauma. However, ultimately this return to her body empowers a *voice of self as agent*, proactive, moving forward and taking charge of her own healing. Finally, in framing this act of self-empowerment within a systemic lens, Susan's voice reflects a sense of *yoga as resistance* to the violence and fragmentation of interpersonal trauma.

By reclaiming her body, getting active again and building an internal sense of safety and calm through yoga, Susan takes back her power. Within this power lies a lot of hope for the future:

I have a few years to make up, a few lost years and I plan on making them up. I will never be the same, before the police knocked on the door to tell me my life was in danger, so I'm kind of excited about getting me back. But it will not be the same me. Because we have our before and after, I mean it totally changed my life...Um, but I have, I'm very excited. I am excited. Truly I have five years to make up.

### **Rachel's Story**

Rachel is a Caucasian woman in her late thirties, who sought out the practice of yoga as part of her recovery from a sexual assault that occurred within an intimate relationship. Despite working with a trusted counsellor following the assault, Rachel still struggled with the profoundly dysregulating experience of being trapped in a body that was no longer safe:

I had never experienced anything before where it was like, I *don't* want to be in my body. I don't feel safe in my body. I just don't feel safe. I didn't want to be there. I felt very vulnerable. You know, it just felt like such a vulnerable place to be.

The assault had left Rachel with a visceral sense of danger that fundamentally altered her relationship with herself and her social world. Normally an affectionate and direct person, Rachel recoiled from contact:

Cause I didn't want to be touched by anyone, I was pretty withdrawn from friends and things, and just not feeling, it's like I didn't want to be in any situations where I could be touched too? Even hugged, even my friends, like hugged and ...didn't want to be around—so it was just, I was having this feeling of not being safe in my body and not wanting to exist in my body...”

The assault had also altered the way her body and mind processed sexual sensations. The exploration of pleasure, even without the presence of a partner, only triggered feelings of grief:

...there's this *physical* aspect to it too, you know like I couldn't, I couldn't, I couldn't do like solo sex, I couldn't, I was just crying, that's when I knew I started, like I was really affected, like every time I kind of tried to do that I was, that took a long time, but then I would just cry every time I came. Like bawl.

The I-poem constructed from Rachel's description of this time highlights the ever present sense of threat that defined her sense of self:

I hadn't really experienced

I was just

I just didn't want to be

I'm like

I don't want to be

I don't feel safe

I couldn't

I was thinking

I didn't want to

I didn't want to be

I just

I, it was awful

I was just talking

I didn't want to be

I was pretty withdrawn

I didn't want to be

Where I could be touched

The repetition of the phrase "I don't want to be" demonstrates just how trapped Rachel felt. The container that was supposed to protect her from danger (i.e. her body) had failed, and so she remained caught in a constant flight from self. In addition, the betrayal of being assaulted by a trusted partner fundamentally disorganized the meaning system through which Rachel navigated the world:

...it was such a violation. Such a violation of trust too. That this person that was capable, that I trusted so much...I just never thought that they were, would be capable of something like that. And so the trust was, I was just so fearful in my body all the time, and it was like I couldn't, I didn't feel safe inside *my* body. And I didn't feel safe around others in this body. It was such a betrayal. And I'd never experienced anything like that. And so it was like you couldn't trust yourself. I'd betrayed, my body, my mind had

betrayed me in choosing this person. In trusting this person. Or having left yourself kind of vulnerable.

It was within this context of profound fear and a “deep depression” that she resolved to engage in an active recovery process. Rachel herself is a graduate student in the health sciences and believes in a holistic approach to healing. Already engaged in talk therapy and experimenting with gentle shiatsu massage, at the suggestion of her counsellor Rachel began researching trauma-sensitive yoga. She found a practitioner in the Vancouver area and enrolled in a workshop series entitled “Yoga for Anxiety and Depression” that would be taught with a trauma-sensitive lens. She was also able to obtain a scholarship that helped to make the cost of the class more manageable.

The first day of the class, the yoga teacher spent some time explaining what the students could expect from the class and her approach to teaching. In addition, the teacher shared her own story of using yoga to recover from a violent sexual assault, a story to which Rachel could clearly relate:

Knowing that this was someone who has experienced something similar to what I, she’d experienced a violent sexual assault. You know, you don’t always need to experience it, it was like “oh, she knows what its like to feel this way inside.

The teacher’s disclosure of her own experience of suffering and recovery, helped create an implicit experience of empathy within Rachel. Although Rachel did not explicitly disclose that she was recovering from an assault, she still felt understood by the teacher:

It still was fresh, um, and I don’t think I disclosed to [the yoga teacher], I think all I said was you know I’m not feeling safe in my body. Like I think she knew what that meant though?

This experience of relatedness and being understood helped Rachel feel safe within the class.

The teacher's overall presence and way of being also contributed a sense of safety:

...she's just very gentle, and it was very, she's like a badass too, which I like. You know like, I trust people who curse (laughs). And she was really no nonsense, she had a great sense of humor, very warm, open and just like, ya this dynamic force. And I felt very safe! She was like a love warrior. You know? Like you know those people that are connected and really compassionate and empathic, but you also know like, they're really badasses, you know?...Really strong.

In addition to an experience of *relatedness*, established by empathy, and *nurturance*, established by a gentle and warm teaching approach, the teacher's confident presence also created a secure and intentional frame within which her students could feel safe. In Rachel's description of her teacher there is a sense of trust in the teacher's ability to protect her students.

Proceeding from this introduction and in the knowledgeable presence of her teacher, the class began with some simple centering practices. One of the first memories Rachel recalls from the class involved laying on the mat, and moving her arms from the floor, toward the ceiling, and back again in time with her inhale and exhale. She observed the movements of her body:

I had to lay there and be with myself for the first time. You know, and, that's not something that I was ok doing, before. And like, just like the breathing...gentle lifting of your arms and things. And everything is you're invited to, you know? And everything is kind of with permission, and like, it's so gentle.

The return of safety to her body was a poignant experience:

...it was like the first time it felt *ok again*, to be with me again. And like, oh, its emotional, its emotional... Ya, that was the first time, I remember just like laying in the

room and breathing, and with [the teacher] kind of instructing us and it was, it was like coming home to your body again. You know, I was like “oh, you! I missed you”, you know? And that’s when I started to feel safe. You know I started to feel like I didn’t, I wanted, I was ok with being in my body again.

Rachel’s description evokes a sense of a person returning from exile to reunite with her long-separated loved one. The I-poem from this description highlights the mixture of surprise and relief from longing that accompanied the return to her body:

I remember

I was like, “oh!”

I missed you

I started to feel

I started to feel

I didn’t

I wanted

I was ok

This I-poem also speaks of how re-engagement and repair of her body (“I started to feel”) fostered a re-connection to self (I missed you) and a foundation of security (I was ok).

The present finally was beginning to feel safe again. In that moment her mind and body were not pre-occupied with the remnants of the assault, but rather joined in a curious exploration of self.

I remember just sitting there. And I thought this is the first time I’ve sat still, and was like, I’m moving my arms now, and this is what my breath is like...it was just, just the simplicity of breathing, moving your limbs, and being aware, like you know, I’m here

now, I'm in my body, this is what my breath feels like. Just feeling my arms move back and forth. It was like the first time I was in my body again, and was ok to be there and it felt safe! And it felt, ya, it really felt safe again. It felt safe again.

In this passage there is a sense of curiosity and wonder, as if she is getting to know herself for the first time (“this is my body, this is what my breath feels like”).

For Rachel the practice of *vinyasa*, linking breath, body and mind through movement, was particularly reparative:

And then after the yoga...that's what brought me back into myself again. Like after that I felt safer again. I felt safer and safer each time...I just, I remember everything just sitting in that class, like movement, I'm in here, I'm doing this, you know, this is my body, I'm moving my arm., I was so, connected with the breath work and the movement. And connecting the breath to the movement. Everything was very, like the pranayama breathing, that's the soothing, that's what kind of chills out your body. And moving with that breath was just like, it was just coming into your body and moving things for the first time, and feeling whole again.

These collection of passages all evokes a sense of innocence, an experience of self as fresh and undamaged. The ability to experience her body in this way, with new eyes, was predicated upon feeling safe – “And I really do credit with feeling safe again in my body”. Rachel talks about how in past years with another yoga teacher, pranayama breathwork helped her overcome panic attacks and gave her a sense of control over this dysregulating experience. This trauma-sensitive yoga class reminded her of this resource, and helped to reframe her beliefs about body as dangerous. By linking attention, breath and movement, Rachel could disengage

from ruminative thought patterns (“pull you out of your head”) and use her body as resource for regulating internal experience and restoring safety.

Another I-poem from Rachel’s description of her experience of the *vinyasa* practice highlights the dynamic nature of this return to agency:

I felt safer

I felt safer and safer

I just

I just remember

I’m in here

I’m doing this

I’m moving

I’m just

I was so, connected

Contrasted with the I-poem from Rachel’s experience of her body prior to beginning yoga, which emphasizes a sense of self as trapped and defensive (“I don’t want, I don’t feel, I couldn’t), this poem underlines how safety and active engagement of the body helped connect her to a sense of self as agent.

When asked for an image or metaphor to help demonstrate what it was like to be in her body in the months following the assault, Rachel talks about an image of a small, wounded part of herself:

P: the images that are coming up for me are like a smaller self, inside of a larger self.

Kind of like a smaller me trapped inside here... You know? Just like a smaller me, just kind of almost trapped inside.

I: Yeah, I see you kind of, like almost like in a crouch

P: Yeah, just like kind of wrapped up, almost in fetal position, kind of wrapped up and crawling. And then like wrapped up in like, a little ball...It just felt like, it was interesting cause I haven't, it was such a unique feeling. I just didn't want to be in my body. I didn't want to be in my body around anyone else. And I felt so vulnerable. Like I was saying, it was *vulnerable*, I was just *raw*, and I was, I felt weak.

This description evokes a sense of a cowering, terrified person collapsing under the weight of ever present danger. However, as safety was restored to her body through yoga, a new image emerges:

I: ...the other thought that comes up for me as you're talking about this time and what a loss it was, and so afraid you were, to then the converse image would be this moment when you're lying in the room, and suddenly its ok to be somewhere that you thought wasn't ok (Yeah, yeah) and like, then what kind of image comes up there for you?

P: I see like lots of white, like white is like healing, and when I picture myself it's kind of like being filled with a white light again. And I kind of see that the little, what do they call it, homunculus, like kind of that person inside, but is like frolicking. Like just checking things out, free, happy again...curious, I feel like frolicking. Like these are the arms again, these are the legs again, look how, this is ok again. And just kind of exploring. You know I was saying it was like coming into your body again for the first time.

I: There's a newness

P: There's a newness to it. So that's why I picture "oh, this again!" you know that they're excited.

I: Kind of child like? Innocent?

P: Yeah. Exactly. Like there's a youthful, playfulness to it as well.

This image demonstrates how for Rachel, the core emotional states related to play, exploration and joy, became accessible through the restoration of safety and a focus on present moment experience. There is also an echo of an innocent, childlike developmental stage in which the world is explored through the body.

While joyful, the intensity of reconnection with her body also bordered on overwhelming. Rachel describes the complex combination of joy and grief that emerges from the inseparable relationship between recovery and what was lost to trauma:

And then it was also, you know I find repair work is so emotional too. To feel good again, was *so* emotional. I think I just laid there and cried. I was just like crying. Like at first you're just breathing and lifting my arms up above my head with my breath, I was just crying because it was so powerful to be safe and feel good again. To be in that place again. Its like when you have that reparative, corrective work, its just like your body's been thirsting for it, like starving for it. And then you get it and its like, whoa, it's a little much too. You know?

I: Its like a relief, but also a bit of like, just a lot all at once.

P: Yeah, and it's like, you know if you go through abuse or an assault, it's like the opposite. You know? It's like the opposite feeling, but they're connected. If you're feeling, so like the first time laying down and feeling ok again, and feeling good in my body again. It's the counterpoint to the pain, but they're opposite sides of a spectrum.

And so it reminds you too, of what it was like before. It reminds you of what was like before.

I: Mmm, so almost seems like a grieving in a sense? Like not in a negative way, but there's almost still like pain in the relief and joy. I don't know?

P: Yeah, totally.

Other complex emotions arose as she began to heal. Rachel resented that she had to do this reparative work at all. After already surviving the assault, she now had to go through these intensely emotional experiences, at times even re-experiencing aspects of what happened to her. This seemed wholly unfair. It was the talk therapy that Rachel engaged in while practicing yoga that helped her to separate out the positive steps she was taking to care for her body, from the anger at having to take these steps at all.

Rachel also appreciated the way the trauma sensitive frame helped her re-organize her relationship with bodily pain. Having been through the intense pain of sexual assault, coupled with an experience of powerlessness, the trauma-informed yoga room had to provide a different kind of experience in relation to pain. This frame restored Rachel's sense of choice and control over how to work with those uncomfortable and painful sensations, with an emphasis on actively choosing to care for self:

Like there's a real mindfulness around not being in pain again. You know making sure you're comfortable and you're doing—and you're not in pain again. Which I feel like isn't in other yoga classes? That mindfulness of like “this is hurting, you probably should do something else, or make a modification.” And ...she doesn't leave you in positions very long also. So you're not in that state [of pain]. And then if I started to feel uncomfortable, I would just go into a different pose. Because it is really activating. To

feel that pain in your body again. Which is what I think the trauma-yoga protects you from.

Restoring this choice meant that Rachel didn't have to fear that pain anymore. When activated, she could take action that altered this experience. She would never be trapped in that pain. Again, restoration of this control is the antithesis to the feeling of powerlessness that defines the violence of assault.

Rachel contrasts this focus on listening with care to the internal signals of the body, to the overarching frame of many mainstream yoga classes: "Compared to being in other yoga classes, where it's just not done through the lens of, it's done with like—the poses are the thing, the focus. And being able to twist your body." She connects her experience in the trauma-sensitive class to the philosophy of a previous yoga teacher with whom she had studied:

Like my yogi I love at home he would say, "You can still twist your body like a pretzel and still be a shitty person". You know, he's like "it means nothing". He's like "well, what are we doing here?"...And when we'd go into tree pose, if we fell out, we we're supposed to laugh. And he's like, "what are you doing, you're standing on one foot. And let's calm down here for a second. We have to be angry at ourselves because we can't stand on one foot today?" (laughs) So, and he was like "and that's the practice, like the laughing, after falling out is the practice". He's like "use that next time you take the subway. Can you laugh next time you miss the subway?"

In her yoga teacher's questions, there is a resistance to the discourse that dominates some yoga classes embedded in Western culture; this discourse focuses on performance and meeting a rigid standard defined by an external authority. For a survivor of trauma, this performative frame can exacerbate the feeling of powerlessness and suffering originally established in traumatic

circumstances. For Rachel, the frame of the trauma-sensitive yoga class subverted this authoritative, critical discourse that defines part of the dominant North American yoga culture, and which also shaped parts of her childhood experience:

And it was just like this—I have felt in other yoga classes, I don't know maybe from childhood, which I don't like. The pain in your body kind of stuff. That wasn't the goal. There was a permission there. If you're feeling pain, if you can't do this with joy today, if you can't push yourself today with a smile on your face, then don't do that. And I think I definitely had a fear of other yoga classes, of being not safe! You don't feel safe. Like I'm going to be left in this pose how long? And there's a mindset of the culture and of the class, and everyone else is in their poses working really hard. And you're just like, I'm miserable. I'm miserable, I *hate* this. And I don't want to hate this. I want to feel that joy in my body. That's what helped me reconnect too is, is the joy of being in your body again. That simple breathing, that simple movement. Just the simple things that your body can do. You could find joy there again. And if you were feeling that pain, cause it is, like any of those physical pain sensations again, you're just recoiling from... Like where if I wasn't permissive, or didn't come from that school of thought earlier, I'd stay in there. And you're like, "when is this over?" You're enduring.

Rachel emphasizes how, following trauma, physical pain in the body is experienced in a fundamentally different way because it has become intrinsically linked to the entire gamut of emotions associated with being trapped and powerless. The key to correcting this association of physical pain with trauma lied in the restoration of agency:

There were things that we did [in the trauma-sensitive yoga class], and I was like "I'm doing that for a second". She'd hold for a second and I'm like, "and I'm out"...I don't

want that sensation again in my body. I was so resistant to it. It was so, it was a little jarring to have that pain come back...and it was on like levels that I so didn't want as soon as I felt it. There was such a connection to what had happened. So to have that permission, that permission was given to take yourself out of things. And that you know your body, that you know best too. I know my body best. I know what I need right now. Like "this pose hurts too much". And what we carry in our, the emotion that we carry in our body. And how it can be released. Is really kind of palpable."

Rachel credits her ability to take care of her needs with the way her teacher created a strong frame that reinforced internally motivated choice. Throughout the workshop series, the teacher used language designed to reinforce the theoretical frame of trauma-sensitive yoga ("I invite you") and also explained this theoretical perspective to the class with brief discussion and take-home reading.

The trauma-sensitive yoga teacher also introduced the role of ritual in creating safety and bringing yoga into the students' every day lives:

"And then we kind of created little rituals for ourselves too, that was part of our practice, to kind of cultivate a home practice as well. And so that was nice, too, just have a little time, we set up a little altar of things, and that was, my little altar was just little things that remind me of friends or myself, and you set up a little space...and so it was like, burning sage and just kind of making my space, like safe.

The practice of ritual was another method of cultivating intentionality and a return to self on a daily basis:

"like having a word for your day, really bringing in mindfulness, intentionality. And having some things at the end of the day. And things you can do that aren't so

overwhelming. Still are challenging to do every day, obviously...Like any habit...But, just the setting up the space, and I like burning sage and just, you're just going to sit here and be with you for a while. Which is rare...our first homework was setting up a space. Like you're setting up a space where you're going to try and do your ten minutes, or fifteen minutes a day. And setting up a space and bringing in things that I want. Things that I love, you know, I just can see as I'm---

I: Yeah symbols

P: Little symbols. Things that represent one of my friends. And another thing that represented friends or family. Or, you know, my dog (laughs)

I: Yeah, things that bring you joy.

P: Things that bring me joy! And so setting that up.

The I-poem from Rachel's extended description demonstrates both the intentionality and joy of connection to self that is involved in ritualistic practice :

I like burning sage

I mean

I aspire

I actually do

I think

I want

I love

I just can see

I've incorporated sage burning

I love

I'm very sensory

I really like

I feel

I've set it up

I've put these things here

I'm beginning

As Rachel reflects back on this experience of reconnecting with her body and self through yoga, she returns again and again to the essential role of safety and intentionality within relationship that facilitated this reparative experience. She talks about how the act of signing up for a group entitled “Yoga for Anxiety and Depression” includes an implicit disclosure and admission of shared experience amongst all the students:

But everyone that was there had some anxiety or some depression and, so everyone was very vulnerable...So everyone is there kind of stepping into it. So people were very forthcoming...And it was just a very—you know over those weeks people did share things about what they were going through. Even just sharing, being in an anxiety and depression group is something—

I: There's some kind of shared, it's really personal--

P: It was really personal! And I of course think we should be talking about it more, and be more open and stuff. But there is still a lot of stigma around it. So kind of even coming in with that shared experience, that vulnerability, was really meaningful.

To be vulnerable in a group setting, and to then be understood and treated with care from that place of vulnerability, is in itself a corrective experience that fosters safety. Rachel describes

how she is acutely sensitive to interpersonal dynamics, and so she was attuned to how the collective vulnerability and intention of her classmates also supported personal transformation:

This was *so so* safe. You know, and you are, it's reparative, and its corrective, and you're sharing this space in this—people that are like attuned with energy, it feels different. It feels *different*, you know? And the mindset and the energy that people are bringing into a space, you know—that everyone's lining up for power yoga and I'm like, no way, that feels not good. (laughter)...But for me I'm like no, that feels wrong...But the collective has a lot to do with the safe space that is created.

I: uh huh, and I hear that it's like that there is a really intentionality, like it's a shared intention?

P: yeah, yeah. I mean its mindfulness, and there's an intention. And you're here, it's not just like, I think that's also very meaningful too. It's not like we're here to exercise, you know. Yes, we are also making our bodies strong, but there's a much deeper purpose. It's more holistic than that, it's not just you know -- the yoga for physical yoga sake doesn't make sense to me, or doesn't speak to me. And this has deeper meaning, deeper purpose going through it.

Rachel also emphasizes the important role of her relationship with her yoga teacher in establishing a frame of safety. She highlights how the gentle nature of instruction reinforced an ethic of care and non-harm to self, and how the language the teacher used (e.g. "I invite you to...") emphasized permission and choice that returned agency to each student:

P: And establishing that relationship, I think, no small part of it was my instructor. That I felt a connection to, I felt safe with. I felt they were very experienced and knowledgeable. And the safety means more than anything. It was that she created this

safety. And that was established. And like your trust, that alliance, you know...And you're like, ok, you get it, you get me, you know what's going on. And then you have someone who's in that power position. You know, you're still vulnerable. You're in a vulnerable spot. And you have someone who is, like an expert. And you're vulnerable, you'll do what they say...but having someone say "No, you know. You decide. You choose. Your choice. You decide". It goes back onto your own knowing and understanding. And gives you that permission, takes that power dynamic—

I: Moves the power back?

P: Moves the power back!

Rather than just being a pre-requisite for the work of repair, the safe relationship with her yoga teacher in itself became reparative. The *experience* of relationship with her yoga instructor as safe, her vulnerability honoured with care, and her body's agency and self-knowledge respected, subverts the abuse of power inherent in sexual assault, and which lay at the core of her wound.

Rachel describes how this experience of trust gave her something that exists in a space beyond words:

So creating that safety and having that choice and that permission given back to that person is—Its almost something like, I didn't know was gone, but I wasn't able to articulate until I received in the class. Like I wasn't able to articulate that I needed that permission again, I needed the power to come back to me. I needed to be in control again, um, in control of my body, even in this class, in control of my body.

She talks about how the experience of assault was so visceral, and that she needed to have an equally visceral experience of reclaiming control:

...it's what it feels like in the room to have the control given back to you. Or being able to reclaim, you're having that power back, you're having that control back...all I could say I remember that time before I started going was like, "I don't feel safe in my body". I couldn't even, it was even difficult to explain what that meant...Like I was saying before it's almost without language...You're body has the language, or your body is able to access these things and feel these things that I—I never would have gone in and been like, I need this, this and this. I didn't know I needed what I was given. What I was able to receive in that class. And that was able to facilitate that healing.

Although Rachel had benefited from similar forms of yoga practice in the past, this most recent transformative healing experience has given the practice a new sense of the sacred. She talks about how the ritual burning of sage symbolizes the healing process she has gone through and a continued intention to treat herself with care:

I've incorporated sage burning into more and more things, cause I love, I'm very— (sensory?) Sensory, I really like smells, they're very soothing to me. And like the symbolic washing and like cleansing you know? And just bringing it in to your different chakras and things. Like that, I feel like it just honours also what you are doing, you know?

I: Mmhmm, what do you mean?

P: Just um, instead of kind of jumping into poses, you're—It adds that intention, that mindfulness into the practice that [the yoga teacher] was trying to incorporate. Like here's, this is my space, and I've set it up, and I've put these things here and this is how I'm beginning...And the reasons for doing it have kind of shifted because of the, since the—doing it with a different lens in the trauma-sensitive class you're like, it is this kind

of repair work that you're returning to, this healing. This self-healing. You know it's kind of taken on this other form of this healing, right? It's part of the work, part of the healing, part of the repair that it's become now. Maybe that added aspect of the ritual has kind of made this more—

I: Sacred? The word sacred is coming up for me—

P: Yeah, yep. Exactly, this more sacred act. You know, this is—And because of the impact it had on me and everything, it's something that you honour. And you're loving yourself and being gentle and really caring for yourself again.

Yogic ritual honours the sacredness of the healing process, a necessary component to repairing the damage caused by an assaultive act of spiritual desecration:

I: Yeah. Its like, this sense of kind of making your body a sacred place again.

P: Mmhmm! Exactly.

I: You know, cause that's been violated, right?

P: Yeah, exactly. Yeah, like you're cleansing this temple again. Like it was desecrated, right?...And then you're using the yoga to heal yourself, to heal and to make this sacred again. And safe again, and honored again. You know what, I felt... you're honouring yourself again, you're almost like self, I don't want to say worship but you're kind of, the self, like you're making this all sacred again. And more so and different than it was before. But yeah there is a, the reclaiming! The reclaiming and the healing and making your body that was—yeah that word desecrated comes to me. And you're taking it and you're taking it back and making it you know, not just a place to be safe again too, but a sacred place again.

I: It just brings to mind, like, in yogic writing there's this kind of fundamental idea that we are always veiled from the divine in us. And that yoga, you know bringing mind and body together is the act of really truly connecting to our fundamental divineness. Which is connectedness, which is bigger than ourselves. But that also in us is the divine. That we are often not, we can't see that because of all the different shit that happens in life, you know? But then that this act of going inwards and connecting brings us back to that.

P: yeah, and isn't *Namaste* like "the divine in me recognizes the—

I: the deepest most profound, yeah

P: recognizes the deep of you". Yeah, that speaks to me, yeah.

**Voice Analysis.** At the outset of Rachel's story, we hear *voices of both body and relationships as dangerous*. These voices are both marked by descriptions of not wanting to be in her body or around other people, overall withdrawal from contact (internal or external), the loss of trust and pleasure, and an ongoing sense of betrayal and fear. However, as Rachel begins practicing trauma-sensitive yoga, another *voice of re-connection to self through the body* emerges, highlighting the essential role of accessing the body as a conduit to healing self. This voice emphasizes a sense of exploration and joy to be with self/body in the present moment and a sense of experiential knowing and feeling in the here and now, in a way that lies beyond language.

Several relationship-oriented voices support this safe return to the body. There is a *voice of teacher as guide*, holding a strong frame that supports safety, marked by Rachel's discussion of the language her teacher used, the theory that informed her teaching approach, and her teacher's presence as strong and confident. A related *voice of connection in relationship*

highlights how the experience of feeling understood and relating to others through shared vulnerability and collective intention also reinforced the safety that allowed a return to body.

Rachel's story also speaks of twinned voices of body and relationship. A *voice of nurturance in relationship*, marked by an encouragement to care for the body with compassion and a general mindfulness of the needs of students, directly influences a *voice of nurturance of body*. This latter voice is highlighted in Rachel's descriptions of working with pain through gentleness, and listening to her body's needs. A *voice of restoration of agency in relationship*, highlighted in Rachel's discussion of the transfer back of power through permission and choice, directly supports a *voice of body as agent*, heard in Rachel's descriptions of actively using her body to regulate, a return to movement, and a delight in what her body *can do*.

Finally, all these voices of body and relationship harmonize in an almost transcendent way. In Rachel's experience of relationship through yoga, the voices of a strong frame, nurturance, connection, and a restoration of agency, combine to create a *voice of relationship as transformative*. This voice is emphasized in Rachel's description of a visceral understanding of safety triggered by a direct *experience* of trust in relationship, and the power of a collectively held intention toward healing. Closely related to this transformation in relationship is a *voice of body as sanctuary*. As Rachel was able to connect to her body in the present moment, nurture her body, and experience the active agency of her body, she experiences a return to her body as a sacred refuge. This voice of body as sanctuary is particularly highlighted in her descriptions of coming home to her body, being ensconced in a white light, a connection to a joyful and child-like part of self, and the restoration of honour and sacredness to her body and self.

### **Cross-story Thematic Analysis**

A brief cross-story analysis of all four stories highlight several shared themes that begin to speak to the research question. For all four women, their experience of *relationship with the teacher* (the counsellor in Susan's case) *provided an important frame of trust and knowledge*, which impacted their students' experience of the body and beliefs about self. In some cases, such as for Rachel and Susan, the teacher/counsellor provided a theoretical frame that explained how the practice specifically worked to help cope with trauma symptoms. For all the women, trust in the teacher (or lack of trust in the case of Madeline's experience in yoga teacher training and Bikram yoga) played a foundational role in feeling comfortable to work directly with the body in the present moment (or conversely an aversion to the present moment in cases of distrust). Three of the four women explicitly discussed how the teacher's use of language, especially invitations to modify the practice for their own needs, provided a welcome and important frame for the practice. For all the women, this frame of trust and knowledge helped to build safety.

All four women also touched on the theme of *reconnection to self through body*. For Rachel, a return to the body became a sacred act of honouring self. Susan talked about how grounding through the body simply allowed her to be with herself and connect with her environment, rather than trying to flee her body and surroundings. For Sam, learning to treat her body with care and gentleness helped re-awaken a nurturing and playful part of self that had previously been overpowered by a strong inner critic. The act of connecting to pleasure in her body helped Madeline step out of stigma of trauma and mental illness, and allows her to be "one with myself and my soul".

Closely related to this connection to self through body, is the theme of *restoration of self as agent*. Throughout the stories of all four women are many examples of how connecting to

their bodies and its resources restored a sense of power and control over their internal and external environment. For example, in describing her experience of strength in her body, Madeline evokes an image of an internal light that protects her from the negative thoughts and beliefs related to trauma. In more concrete terms, Susan, Rachel and Sam emphasized the significance of mindful, yogic breathing in soothing trauma-based hyperarousal symptoms. For Rachel and Sam, the breath also became a tool for accessing deeper layers of awareness and self-healing. All four participants noted how an internal focus on the body's needs in the present moment (rather than an external, performative focus) was important to harnessing this experience of agency. The teacher's role in reinforcing this frame of agency and internal locus of control were explicitly described by three of the four participants.

Finally, it is important to note that all four participants noted times when the practice of yoga brought them into *contact with suffering*. Both Sam and Susan talk about how practicing yoga brought up critical thoughts and feeling toward their bodies. For both women, it was painful to be directly in contact with the ways trauma and mental illness had changed and limited the actions of their bodies. In Madeline's discussion of her teacher training and witnessing the reaction of fellow students to certain body-based activities, we see how a lack of a strong frame of safety can make it more difficult to cope with distressing internal experience. Conversely, Rachel's description of how pain in the body during yoga triggers associations with trauma exemplifies the important role of a relational frame of choice in restoring a sense of control and an ability to work with pain. Lastly, Rachel, Sam and Madeline explicitly discussed how a relational frame of nurturance and acceptance of the body's limitations played an important role in working with painful internal experience in gentle ways. Although not explicitly mentioned, Susan's discussion of the need for a gentle and slow approach to practicing yoga for trauma

implies a support for this accepting and nurturing frame toward the body, given its limitations and needs.

## Chapter 5: Discussion

In exploring the question of how people describe and understand their experiences of body, self and relationships within yoga for trauma recovery, it is important to emphasize that each story represents a contextualized snapshot of a moment in time, and a construction of meaning between researcher and participant. The following discussion of the research findings in light of the theoretical and empirical literature makes no claims to essential truths about yoga for trauma recovery, but rather are an additional layer of subjective meaning making, which nonetheless may provide useful insights for researchers, clinicians, and yoga practitioners who hope to help their clients through a recovery process.

### Findings Congruent with Current Literature

**Body Dynamics and the Nervous System.** One common mechanisms of change proposed in the literature on yoga highlights how working directly with *bottom-up* body dynamics (contrasted with *top-down* cognitive control) may directly alter the nervous system's stress response (Gard et al., 2014; Salmon et al., 2009; Streeter et al., 2012). These theories suggest that practices such as breath work, movement and physical posture soothe the nervous system, reducing allostatic load, and over time return homeostatic functioning to mind/body systems that have been disrupted by chronic exposure to stress. All participant stories in this study reflected ways that breath, movement, posture, as well as other sensory inputs such as sound (particularly voice and music) and smell, had a soothing and grounding impact. In addition, the three participants who had practiced yoga for a longer period of time experienced trajectories of feeling more and more safe and capable in coping with distress, suggestive of a generalized return to homeostatic functioning of the nervous system.

Polyvagal theory (Porges, 2011) suggests that when the fight or flight response of the sympathetic nervous system is unable to alleviate danger, a more primitive branch of the parasympathetic nervous system begins to shut down all nervous system functioning with an *immobilization* response. Clinicians working with body dynamics suggest that trauma survivors may cycle between extremely high states of arousal characteristic of sympathetic activation, and low states of arousal characteristic of the immobilization response (Ogden et al., 2006; Siegel, 2012). Therefore, in working with body dynamics, survivors may also need to learn to up-regulate their nervous systems out of states of numbness, low energy and dissociation. Dan Siegel (2012) refers to this practice as learning to widen the *window of tolerance*, so that people can face distressing circumstances without entering nervous system states associated with the fight/flight response (top of the window) or immobilization response (bottom of the window). In addition to soothing hyperarousal symptoms, most participants talked about ways in which practicing yoga helped to energize them, cultivating “yogic energy” and a sense of body as active, strong and capable, rather than lethargic and numb.

**Mindfulness and Reclaiming the Body and Self.** Participant experiences clearly reflect the trauma-sensitive yoga framework that emphasizes the importance of repairing a person’s relationship with her body in healing from trauma (Emerson & Hopper, 2011) Emerson and Hopper (2011) describe how a trauma-sensitive yoga practice first must help clients to reconnect to the physical sensations of their body in the present moment. This practice can be difficult for people who don’t feel safe in their bodies and have adapted by not being present in that body. However, as van der Kolk (2006) emphasizes, in order to meet the body’s needs, one must be aware of the signals of the physical self. He emphasizes the need for people to find safe ways of building interoceptive capacity, described by Craig (2002) as a fundamental process for

cultivating self-understanding and awareness. All participants discussed numerous ways that *reconnecting to self through the body*, one of the cross-story themes of this study, was an important part of their recovery process. These experiences included attending to distressing internal information as a way of understanding needs and building self-awareness, but also reconnecting to a broader repertoire of sensation associated with embodied emotional states of pleasure, exploration, and nurturance.

As discussed extensively in chapter two, a major part of mindfulness involves the ability to attend to the present moment, a practice that at least initially requires control and flexibility of attention. Kabat-Zinn (2003) discusses how stress is exacerbated by the automatic reactivity of a mind that races into the past or future, with little attention to what is actually unfolding in the present moment. For survivors of trauma, this reactivity can trap them in painful memories of the past and ruminative thought patterns of future danger. In this study, all participants discussed how attending to physical cues in the body during their yoga practice helped to slow down automatic reactivity of the mind and in some cases interrupt ruminative thought patterns, both common processes described in the mindfulness literature (Bishop et al., 2004; Farb et al., 2010; Follette et al., 2006).

A second important theme of trauma-sensitive yoga is the introduction of choice as a means of cultivating a more gentle and friendly relationship with the body (Emerson & Hopper, 2011). This gentle stance toward the body plays an important role in reversing the violence of interpersonal trauma in which all choice and control was taken away. Most participants in this study talked about the impact of their teachers' messages of choice and how those messages empowered them to respond to pain in nurturing ways, governed by an internal locus of control. In addition to a present moment focus, mindfulness theory emphasizes the importance of

cultivating a mindset of acceptance and non-judgement to reduce reactivity of the mind and body (Bishop et al., 2004; Follette et al., 2006). This theme of acceptance was also apparent in the way that study participants talked about working with pain and other distressing feelings in their bodies. By becoming mindful, participants found a balance between expanding their bodies' boundaries of tolerance, while taking care to not exhaust their resources, become overwhelmed, or otherwise contribute to additional harm.

A third essential theme within the trauma-sensitive yoga framework is the emphasis on creating opportunities to take effective action (Emerson & Hopper, 2011). Exposure to interpersonal trauma often involves experiences of powerlessness in which the body's instinctive defensive actions are overwhelmed (Herman, 1997). Repeated experiences of such powerlessness over time can lead to a fracturing of the self-system that integrates perception, meaning making and action, causing people to "lose their way in the world" (van der Kolk, 2006, p. 277). Citing neuroscientific research on fear conditioning and extinction processes in the limbic brain, van der Kolk (2006) emphasizes the importance of learning to take effective action in restoring agency to the self following experiences of extreme powerlessness. In this study, the cross-study theme of *restoration of self as agent* clearly supports this literature on the way that yoga can promote restoration of control and agency. For example, all participants talked about how yoga helped them learn to actively use their body as a resource in coping with trauma-related symptoms and restoring a sense of control within the self.

We see how the practice of yoga helped participants to be more aware of their internal experience, lean toward that experience with curiosity rather than aversion, and then respond to that information in adaptive ways that met their particular needs with nurturance and care, all processes described in the mindfulness literature (Bishop et al., 2004; Holzel et al., 2010; van der

Kolk, 2006). Importantly, participants emphasized how the compassionate and gentle frame adopted by the yoga teacher, and the teacher's emphasis on restoring safety and control, facilitated the ability to turn toward self in this mindful way and take effective action. (I will return to more extensive discussion of this relational dynamic in a later section).

**Relatedness and Reconnection to Community.** As a primary focus of this study, the experience of relationship discussed by participants represent an important set of findings from this study, and some aspects support themes already emerging in the literature. Although the relational aspects of yoga have received little attention overall, the literature on *trauma-sensitive yoga* has highlighted how the practice of yoga facilitates a sense of community amongst practitioners, in part due to feelings of relatedness evolving from shared understanding of experience and mutual intention (Emerson & Hopper, 2011; West, 2011). In her classic feminist treatise, Judith Herman (1997) describes interpersonal trauma as a profoundly disconnecting experience, and that following re-establishment of safety, recovery must eventually include reconnection to community. All participants in this study noted how experiences of relatedness, collective energy, and shared vulnerability with fellow yoga students and the teacher had a positive impact on their sense of self and body. Finally, the literature on *trauma-sensitive yoga* emphasizes how the teacher's use of language provides an important frame of inquiry and control (Emerson & Hopper, 2011). Most participants spoke to the impact of their teacher's verbal messages in providing choice, encouraging self-care, and provided options for internally motivated, effective action.

### **Novel Findings**

As is the case with post-positivist research, much of the literature examining yoga attempts to break the practice down into functional constructs that can be measured, and as

described above, the findings from this study provide useful support for a variety of constructs proposed as change mechanisms. However, the narrative form of this study also provides a unique, holistic perspective of how participants make meaning of their experience of yoga, how that meaning evolves over time, and how that continuously evolving meaning helps to reconstruct the self following trauma. I argue that in light of these stories, it is possible to conceptualize yoga as an attachment-based system that helps to re-organize key developmental processes that are fractured by exposure to trauma. This conceptualization is in line with Siegel's (2012) view of self as a complex, dynamic system in continual emergence.

**Yoga from an Attachment-based, Developmental Perspective.** In the majority of literature on yoga and other contemplative practice reviewed in Chapter two, the yoga or meditation teacher receives no attention as a potential healing mechanism. The trauma-sensitive yoga literature describes the importance of the yoga teacher's presence (open, friendly, knowledgeable) and language (of inquiry and invitation) in reinforcing safety within the yoga class (Emerson & Hopper, 2011), but his or her role remains ancillary to the main work of the individual yoga practitioner in healing through the body by building self-regulatory skills. However, the stories of yoga in this study suggest a much more central role of the yoga teacher in healing from interpersonal trauma, as providing a direct, emotionally transformative experience of attachment in the here and now. John Bowlby (1979) described how adaptive human development emerged from the establishment of a secure base in caregiving relationships of early childhood. This secure base fosters self-differentiation by ensuring that exploratory, efficacy building efforts of the body can be tested, and if those efforts meet frustration, the ensuing internal state of distress will not go on forever. Allan Schore (2009a) describes how self-regulatory capacity is built through the regulation of emotion within intersubjective states of

mind, beginning with early caregiving relationships. The process of meeting distressing internal emotions with sensitivity and attunement (intersubjective regulation) build internal working models within the right brain, implicit self that foster auto-regulatory capacity. Particularly relevant to the field of yoga research is Schore's assertion that "An intersubjective field is more than just an interaction of two minds, but also of two bodies..." (2009b, p. 133). Reflective of the way a child builds regulatory capacity from the secure and attuned base of a caregiver, most of the participants in this study described how the teacher created a frame in which they could approach distressing internal experience with nurturance, while also expanding their boundaries of tolerance.

In addition to providing security, attuned attachment relationships foster the shared intentional mind/body states that fuel the exploration of the world and construction of self as agent (Bateman & Fonagy, 2004; Schore, 1994; Trevarthen, 2009; Tronick & Beeghly, 2011). Within a secure container, in which the adaptive action of threat oriented emotion is not needed, a person can turn her mind toward embodied, vitality oriented motivational states associated with exploration, play, and pleasure, all essential to moving the body and taking effective action (Panksepp, 2009; Porges, 2011). The narratives within this study demonstrate the role of the yoga teacher in creating this secure frame, fostering a nurturing presence that restored care and control to students, as well as a strong intentionality of mind that evoked exploration and curiosity within the body. In addition, the safety and intention shared between yoga students heightened these transformational energies of the body through powerful relational dynamics.

As people explore the world together, they co-construct increasingly complex forms of meaning in relationship and within the self (Tronick & Beeghly, 2011). This dance between connection and differentiation begins in infancy, and continues throughout life. From a place of

security fostered in relationship, being with oneself becomes both *tolerable*, even when the intentions of the self are frustrated, as well as *pleasureable* as we come to discover our own interests, capabilities and agency within the external world and within relationship. The proposal of attachment-based, experiential therapies (eg., Fosha, 2000; Gendlin, 1997, Greenberg & Watson, 2006; Ogden, 2006) is that distressing embodied emotional schemas associated with the survival of traumatic interactions can be directly accessed and transformed within a corrective relational context. These transformational experiences are marked by a subsequent emergence of self states marked by vitality, discovery and even exuberance.

Throughout the narratives in this study, we see evidence of how the *relational* practice of yoga fostered the emergence of increasingly complex and flexible self-states, marked by affective experiences of play, exploration, pleasure, and connection in relationship. This evidence of *transformational emotional experience in relationship* adds a new layer of integration to the body of research on yoga and mental health, which tends to focus more on cognitive and behavioral mechanisms of change.

Attachment relationships in the practice of yoga also shaped meanings at more explicit levels; the stories in this study also reflect the way that the yoga teacher shaped the beliefs about self and body through discourse. Through their mindful language of inquiry, invitation, and attendance to the present with a nurturing stance, yoga teachers in these stories provided an important and intentional frame that helped to re-organize trauma-based belief systems, and challenged harmful cultural discourse that emphasized performance and an external locus of control over the body.

A complex systems view of self-development recognizes the many inputs involved in this ongoing construction, from the individual neuron to the multiplicity of cultural discourse (Siegel,

2012). The theme of *yoga as resistance* found in Susan's story, and echoed in the stories of the other three women, represents a potential healing antidote to cultural discourses that perpetuate trauma-based meaning systems and critical and violent understandings of the body. In framing yoga as a path to reclaiming agency, celebrating the capability and power of the body, and affirming nurturance and connection in relationship and to self, these stories subvert the violence and powerlessness of trauma.

**Integration of the Spirit.** In their book outlining the theoretical and practical framework for a trauma-sensitive yoga approach for healing from trauma Emerson and Hopper (2011) advise yoga teachers to use very concrete, sensory based language and to avoid the use of metaphor when teaching people who have survived trauma. Given the fracturing of self and dissociation from the body that many survivors of trauma experience, this makes sense; the use of concrete sensory cues help to ground and centre a person in the present, guiding them out of their heads and into the body in a safe manner. However, within the trauma therapy field, the use of imagery and metaphor to reconstruct a stable and meaningful world after trauma is common and often helpful (e.g. safe space visualizations and inner child work). An interesting finding of this study is the way that yogic practices rooted in the body and the senses took on increasingly symbolic and metaphorical meaning for participants. For example, as Sam increasingly felt safe and capable in her yoga practice, she began to use imagery to actively enhance the practice of breathwork and to integrate mind with body. The breath becomes symbolic of cleansing and removal of traumatic remnants housed in her body. This more complex representation of the breathwork is a recent development in Sam's practice of two years, suggestive of the way that as interoceptive capacity increases over time, so too might the nuance and complexity of internal experience of self and emotion.

As yoga and other contemplative practice has been incorporated into a Western medical context, the ritualistic elements of the practice have been de-emphasized, an understandable modification given the plurality of spiritual and religious beliefs that exist in North American culture. This kind of cultural sensitivity may be especially important when introducing yoga as a way of healing from trauma; esoteric practices such as Sanskrit chanting or the use of Hindu iconography can be alienating or triggering for some people who would otherwise benefit from the practice of yoga. However, following exposure to trauma, the practice of ritual can also be a way of restoring meaning and sacredness to the self and connection to community (Allen & Wozniak, 2014). The practice of ritual often harnesses the concrete experience of the body and senses to evoke a more symbolic meaning. Three examples from the present study support this stance of the healing power of ritual in the practice of yoga. For Rachel, the practice of yoga, the burning of sage and the creation of an altar symbolized the restoration of sacredness to her body following assault. Susan linked her practice of yoga to other daily rituals and practices (such as burning candles and taking a nightly bath) that for her symbolized self-care. Finally, in her reference to the way that chanting and the use of the Sanskrit greeting *Namaste* gave her practice a “community feel”, Madeline acknowledges the way that ritual can connect community through the performance of shared meaning.

### **Implications for Counselling Psychology and Yoga Therapeutics**

Counselling psychologists from a variety of theoretical orientations may benefit from incorporating yogic principles and practices into their trauma therapy. The findings from this study indicate that yoga impacts body, self, and relationships at behavioral, affective, cognitive, and transpersonal levels. People who practice yoga for trauma recovery will also likely benefit from the combination of counselling and yoga classes, as the two can work synergistically. All

participants in this study were connected with a counsellor or other mental health professional while practicing yoga. Counselling may provide an important opportunity to verbally process the felt experience of yoga, leading to increasingly complex levels of integration.

When referring clients who have experienced trauma to yoga classes, counsellors may wish to do their research and provide specific options where they know the pace will be slower, and attention paid to safety and choice. The official “trauma-sensitive” frame of teaching is just one way of delineating a teaching practice that many yoga teachers follow without calling it by that name. It may be helpful to cultivate relationships with specific yoga professionals in your community who align with these therapeutic principles before referring clients. Clients will also likely self-refer to yoga classes in their community, given the popularity of the practice in the wider culture. Counsellors may find it helpful to debrief these experiences with their clients, supporting clients to understand any unsafe or dysregulating experiences that occur (even in a safe environment a client can be triggered) and working to offer alternative options should the class environment exacerbate trauma symptoms.

Given the experiential and felt nature of change experienced through yoga, counsellors and therapists should actually attend yoga classes themselves before referring clients or incorporating yogic practices into their counselling sessions. Yoga is more than just the next jazzy intervention; rather it represents a fundamental shift in how we connect with ourselves and others, and counsellors need to be engaged in the hard work of internal inquiry and be familiar with the culture and lexicon of yoga if we are going to involve our clients in the same practice.

Group counsellors may enhance their practice through the co-facilitation of yoga groups with a yoga teacher. Groups that incorporate both the practice of yoga and facilitated reflection

of that experience may be a way of harnessing the benefits of both professions, and enhancing the transformational group container already apparent in the stories of participants in this study.

Yoga teachers wanting to work with people who have experienced interpersonal trauma may want to consider whether they offer classes on a drop-in basis or as a closed group. While a drop-in class provides low-barrier access to yoga for people who may traditionally be excluded from more mainstream classes, this also may pose a safety risk to students given the complex challenges posed by exposure to traumatic stress. In light of the importance of relational factors in establishing safety and transforming trauma-based attachment patterns, yoga teachers may wish to have an initial intake conversation with new students to establish rapport, screen for factors that may interfere with group safety, and answer any questions so that students can make informed decisions about their participation. Yoga teachers may also benefit from additional training on the basics of therapeutic relationships and trauma theory.

Finally, the field of yoga for trauma recovery may benefit from more in depth discussion of the benefits and drawbacks of including more traditional elements of yogic practice, such as chanting and other ritual practice, in a trauma-informed practice. While the secularization of contemplative practices in healthcare makes sense in a multicultural society, yoga is embedded in a historical and cultural context ripe with religious ritual as a core vehicle to its healing capacity, with spiritual implications. When referencing yogic texts, Western scientific literature on yoga tends to focus on the Yoga Sutras of Patanjali, which outlines dogmatic principles that describe the path to liberation from suffering through deep inquiry into the nature of the mind (e.g. Gard et al., 2014), a framework that is more easily amenable to secularization and a cognitive behavioral theoretical orientation. However, other lineages of yogic practice place greater emphasis on the direct cultivation of healing emotional energies through devotion (Bhakti

yoga), and deep experiential connection to the divine in all worldly things (Tantra; White, 2012). These practices use rituals, iconography, and connection to the sensual world and the divine feminine as a path toward alleviating suffering through embodied mind states of love, pleasure, and transcendent connection.

By extricating religion from the practice of yoga, we may be depriving people who have survived trauma from a helpful source of meaning making and healing. The field of counselling psychology has a rich history of recognizing the role of religion and spirituality in well-being (eg., Pargament, 2011) and ritual has been recognized as a way of reconstructing meaning following adverse events like grief and loss (Neimeyer, 2009). The more traditionally religious aspects of yoga may actually be appealing for people who don't have another spiritual meaning framework already in place. There may be ways to take a more nuanced approach when working with people who have survived trauma that recognizes their needs for spiritual healing. For example, Rachel's yoga teacher invited her students to create altars at home that incorporated objects of personal meaning. This practice recognizes the importance of cultivating sacred spaces in healing from trauma, without imposing externally dictated meanings onto her students. Developmental psychologist Colwyn Trevarthen (2009) highlights how the construction of shared rituals cultivate the healing energies innate to all humans:

Once a shared story is being written within the fun of its valued rituals, many meaning can be discovered and thought about with self-confidence and in confiding friendships. Rituals of teaching/learning and the 'healing practices' to foster well-being in those who suffer from anger, fear, anxiety, and confusion depend not primarily on informational structures or 'instruction' or on 'training' of behaviors, but on sympathetic encouragement of the innate tendencies of all human beings – even the youngest or most

debilitated – to share pleasures and to learn new meanings in nurturing company (p. 83-84).

### **Limitations and Future Research**

From the perspective of narrative research, each participant exists within a unique sociocultural context, and therefore the findings from one participant's story are not generalizable. Although generalizability is not the intention of narrative research, it does mean that there are many other intersectional factors that may influence a person's experience of yoga, but which are not represented in the narratives of the present study. For example, it is important to note that all four participants were Caucasian women, and three of the four fell within thirty to forty years of age. Future research would benefit from the inclusion of a more diverse participant population, including but not limited to men, people of non-Caucasian ethnic and racial identities, elderly people and adolescents, and religiously affiliated people. Research would also benefit from further exploration of how intersectional factors like gender, race, nationality, and socioeconomic class impact experiences of yoga for trauma recovery, and may inform practitioners on how to adapt the instruction of yoga so that it is culturally sensitive and relevant.

Narrative research necessarily asks participants to rely on memory to recount past experiences; a research design that examines client experiences as change is occurring or in a time frame directly following the practice of yoga may provide more detailed and nuanced information on process and change factors impacting the experience of yoga. For example, methods such as Interpersonal Process Recall, in which clients or therapists (in this case yoga teachers) watch videos of a therapeutic session and comment on internal experience, could be

used to explore a number of relational and process factors in greater detail (Mackaskie, Lees & Freshwater, 2015).

A number of other process and contextual factors could be further explored through mixed-methods research. For example, what role does spiritual experience play in recovery from trauma through yoga? Are outcomes impacted by the inclusion or exclusion of ritualistic elements such as music, burning of incense, chanting, and invocation of deities? How often are people practicing in community yoga studio settings having adverse reactions to the practice? When they do experience adverse reactions, how do they cope? Given the emphasis on body awareness in the practice of yoga, how does the practice of yoga impact sexuality, particularly for individuals who are survivors of sexual assault?

An additional area of research lies in the integration of yoga with other kinds of clinical practice. For example, does the addition of a verbal processing element to the end of a yoga class impact client outcomes? Do clients who work with another mental health professional while practicing yoga experience increased positive outcomes compared to those who don't? Do people who practice yoga in public settings have different outcomes than people who practice primarily at home?

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## Appendix A: Recruitment Letter

### Recruitment Letter to Community Organizations and Agencies

**Principle Investigator:** Dr. Marla Buchanan, Professor, Ph.D.; Department of Educational and Counselling Psychology, and Special Education; Faculty of Education; University of British Columbia (UBC)

**Co-Investigator:** Nicole Brand-Cousy, M.A. (Candidate), Department of Educational and Counselling Psychology, and Special Education; Faculty of Education; UBC

Contact Information: XXX-XXX-XXXX or e-mail: xxxxxxxxxxxx@xxxxxxx

**School:** Department of Educational and Counselling Psychology, and Special Education; University of British Columbia

**Title of Study:** Exploring the Stories of Yoga Told by Survivors of Interpersonal Trauma

**Research Funding:** Social Science and Humanities Research Council of Canada; University of British Columbia

Dear [insert name of person/organization],

My name is Nicole Brand-Cousy and I am graduate student in the Counselling Psychology Program at the University of British Columbia (UBC). As part of the requirements for completion of a Master of Arts in Counselling Psychology, **I am conducting a qualitative research study exploring the stories told by yoga practitioners who are survivors of interpersonal trauma.** I am contacting you to see if (name of organization) is interested in helping me recruit participants for this research project. I will be recruiting a total of 4-6 participants over the age of 18, who sought yoga classes in response to difficulties related to a history of interpersonal trauma. Participants must trauma-informed yoga classes in the past two years, and have had a sufficiently meaningful experience of yoga to tell a full story about that experience. Participants' mental health must be sufficiently stabilized to maintain an interview conversation, although they may still be struggling with the various symptoms resulting from traumatic stress, and other difficulties associated with poverty and social marginalization. All participants will be compensated for their time with a \$20 gift card to a coffee shop, or other commensurate form of compensation.

If you would like to learn more about my research, I would be happy to meet with you in person or send you a copy of my entire research proposal. The following information provides some background on the purpose and design of the study, who I am as a researcher, and what participation in the research will entail.

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**Purpose of the Study:** Interpersonal trauma can profoundly impact the way a person experiences his or her body, sense of self, and self in relationship with others. Research is beginning to show that practicing yoga can be helpful for people recovering from trauma, but very little research has explored the meaning of practicing yoga from the individual perspectives of survivors; none have done so using narrative inquiry, which is a form of qualitative research that privileges the unique stories of participants as important sources of knowledge for scientific inquiry. Therefore, the purpose of this study is to explore the stories of yoga practitioners who are survivors of interpersonal trauma. Specifically, I am interested in understanding how

survivors of trauma describe and understand their experience of body, self and relationships within the practice of yoga, and in relation to their process of healing from trauma.

**Who is conducting this study?** I will be the primary researcher in this study, working under the supervision of Dr. Marla Buchanan at UBC. I have a B.Sc. in Anthropology, and am currently in my third year as a M.A. student in Counselling Psychology. As part of this degree program, I have completed eight months of practicum training working as a counsellor with people who have histories of complex traumatic stress exposure. I am also a yoga teacher and student, and have volunteered in non-profits settings teaching trauma-sensitive yoga.

**What will participation involve?** Interested participants can contact me by phone or e-mail (contact information below). Once they contact me, I will conduct a preliminary telephone screening to ensure they are eligible for the study and clearly understand what it entails. If we both agree to proceed, I will invite participants to meet with me at an interview location of their choosing. At the time of the interview, participants will be asked to complete a brief demographics form, and then engage in an open-ended interview in which I will invite them to tell their stories of practicing yoga as part of recovery from trauma. The interview will last approximately 1-1.5 hours, and participants will have full control over what and how much to share. Approximately 1-2 months following this first interview, participants will be contacted for a follow-up interview. At that time, I will share the story I have written based on what I heard in the first interview. Participants will have the opportunity to comment further, as well as request any alterations to ensure that the story represents their experience fully and accurately. **All participants will receive a \$20 gift card**, as well as bus tickets to and from the interview or parking reimbursement as required.

**Dissemination of information, consent and right to withdraw.** The stories constructed from the interviews will be included in a final research essay that will be submitted to complete the educational requirements of my degree program. I am happy to forward a copy of my final findings to your organization. The finding may also be shared at meetings and conferences and/or published in academic journals or magazines for other people to read. **The identities of all participants will be kept strictly confidential** and will not be revealed on any document. Consent to participate in this study is completely voluntary and participants can stop an interview at any time or not answer an interview question. Participants are also free to withdraw from the study at any time without explanation.

**Contact information:** I truly appreciate your help in providing the study information to students whom you think may be interested in participating or putting me in contact with yoga teachers and partner organizations that might do the same. I have included copies of a recruitment poster to be posted in locations hosting yoga classes, and would also be pleased to visit yoga classes to talk with students about participation. If you have any questions, concerns, or would like to speak with me further, you can reach me at [ubcyogaresearch@gmail.com](mailto:ubcyogaresearch@gmail.com), or 604-600-4319.

Sincerely,

Nicole Brand-Cousy

## Appendix B: Recruitment Poster



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THE UNIVERSITY OF BRITISH COLUMBIA

### Seeking Volunteers for a UBC Research Study



#### *Exploring the Stories of Yoga Told by Survivors of Interpersonal Trauma*

Are you an adult over the age of 18 who has practiced yoga as a way of healing from interpersonal trauma? Would you be comfortable talking about that experience of yoga? Have you attended yoga classes in the past two years? If so, you may be eligible to participate.

**Why are we doing this study?** Interpersonal trauma, such as childhood abuse or neglect, traumatic loss, domestic violence, sexual assault, and exposure to other kinds of physical or psychological violence, can profoundly impact the way a person experiences his or her body, sense of self, and relationships with others. Research has shown that practicing yoga can be helpful for people recovering from trauma, but very few studies have explored the meaning and lived experience of practicing yoga from the individual perspectives of survivors. That is why we are interested in hearing your story.

**What will you need to do?**

- Brief telephone interview to confirm eligibility
- One 1 - 1.5 hour in-person interview
- One 30 min. – 1 hour follow up interview

Participants will be compensated with a \$20 gift card and will also receive a copy of their yoga stories written by the researchers.

To get involved, please e-mail [ubcyogaresearch@gmail.com](mailto:ubcyogaresearch@gmail.com) and include your name and telephone number.

Study conducted by Dr. Marla Buchanan and Nicole Brand-Cousy, Educational and Counselling Psychology, University of British Columbia

UBC Yoga Research Study <a href="mailto:ubcyogaresearch@gmail.com">ubcyogaresearch@gmail.com</a>									
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## Appendix C: Screening Questions

### Participant Screening Questions

When a potential study participant contacts me by telephone, I will thank them for their interest and ask whether they would be willing to answer a few screening questions to determine their eligibility for the study. In addition, I will inform them that the decision to participate in the study is entirely their own, and that they have the right to choose not to participate following the screening. Before beginning the questions, I will also briefly review the purpose of the study, confidentiality and limits of confidentiality (i.e. duty to report in the case of self-harm, harm to other, or to protect a vulnerable child or adult), and the participant's right to refuse to answer a question and/or end the conversation at any time. Upon obtaining this preliminary informed consent, I will proceed with the following screening questions:

1. How did you hear about the study?
2. What interested you about participating in this study?
3. Do you speak English well enough to participate in an interview conversation?
4. Where and in what kind of setting have you practiced yoga? (e.g. community centre, mental health centre, correctional facility, yoga studio, etc)?
5. Do you think that practicing yoga has been a meaningful experience for you, and do you think you are able to tell me a full story of that experience?
6. I'm interested in understanding the experience of survivors of interpersonal trauma who have practiced yoga as part of their healing journey. I understand the topic of trauma can be a sensitive area, so I'll ask you not to go into detail regarding the following questions at this time:
  - a. Do you self-identify as a person who has experienced interpersonal trauma?
  - b. Did you seek out the practice of yoga as part of your process of healing from trauma, or has it otherwise had an impact on your process of healing?
7. The initial interview will range from 1-1.5 hours, and will take place in a private location, of your choosing. Alternatively, I can also arrange a private space on UBC campus. From this interview, I will write a story based on what you have shared with me, and will then share the draft of this story with you. At that point, we will meet again, either over the phone or in person, to discuss whether the story is accurate and if I have missed anything important. That second meeting should take 30-60 minutes. Do you feel comfortable proceeding with this process and time commitment as I've described it?
8. During the interview, I may ask you a few general questions about the type of trauma you have experienced, and how that experience has impacted your life. Knowing that you get to choose what and how much to share, would you be willing to discuss these questions to your own level of comfort?
9. Would you be comfortable talking about your experience of practicing yoga and the relationship of this practice to your healing process?
10. Do you have any questions for me before deciding to proceed?
11. If you are still interested, let's arrange a time and place to meet. I am interested in hearing your full story of practicing yoga, from the time you first heard about the opportunity to practice, up to the time of the interview. This includes both pleasant and challenging aspects of your experience, as you feel comfortable sharing. You may like to

spend some time before we meet journaling about your experience, or making a list of the main points that you would like to share with me – participants in studies like this often find it helpful to prepare beforehand in this way. Sometimes images can help describe things that are hard to put into words, so you may also choose to create a visual image or images about your experience through art making in any form (drawing, collaging, painting, etc). Alternatively, you may choose to bring a photo to the interview that represents your experience. If you do create an image or other artwork about your experience of yoga, please bring it with you to the interview, if you feel comfortable sharing it with me.

Both of these preparation processes, journaling or art-making, are completely optional.

It might help to bring to mind specific memories of yourself practicing yoga at different points in time, and to think about what you saw or heard, and how you felt at that time. You may also think about what these experiences have meant to you over time, and their impact on your process of recovery. During the interview, I may also ask follow-up questions to further explore different parts of your story.

## Appendix D: Interview Protocol

### First Interview:

All participants will first be asked:

“Can you tell me a bit about how your past experience of trauma was impacting your life around the time you began to practice yoga? Please only share as much as feels comfortable.”

Then participants will be asked:

“Can you tell me your story of practicing yoga, from the time you first heard about the opportunity to practice up until the present day? I am interested in hearing about any memories and reflections that come to mind, and you can tell me whatever feels important to share”

I will then listen as the participant tells her/his story, according to whatever structure she/he chooses, and with minimal interruption so not to interrupt the flow of storytelling. However, should the participant ask for further clarification, or otherwise express confusion or reticence about what to share, the following probes may be used to elicit narrative content:

- “What sparked your interest in yoga?”
- “How did you decide to attend your first yoga class?”
- “How were you greeted when you attended your first class?”
- “What was it like entering the yoga room for the first time? How do you remember feeling in that moment?”
- “What was the space like where you practiced yoga, and what was it like for you to be in that space?”
- “What was it like to practice for the first time? How do you remember feeling and thinking during that practice? Following that practice?”
- “How has your experience of practicing yoga changed over time, if at all?”
- “What is the experience of your body like when practicing yoga? How, if at all, has this experience changed over time?”
- “What is it like for you to practice yoga in a room with other people?” How has this experience changed over time?”
- “What role does the yoga teacher play in the way you experience your yoga practice?”
- “Do you recall any times when practicing yoga was particularly challenging or unpleasant? Can you tell me what you experienced?”
- “What role does yoga play in your life now?”
- “I notice that you created some images about your experience. Can you tell me about these images and what they mean to you?”
- What metaphor might you use to describe this process of practicing yoga? Perhaps there are different metaphors that represent different periods of time?

When the participant has reached a natural conclusion in her or his story, I may ask follow-up questions to further explore certain parts of the story or check my understanding, particularly related to experiences of self, body and relationships. This may include questions from the list above. I will end the interview by asking if there is anything else the participant would like to share with me, and asking how the interview experience has been for him or her.

### **Second Interview:**

At the time of the second interview, I will share a draft of the narrative that has been constructed from the first interview. I will also share with the participant my process of analyzing their story using the Listening Guide technique, so that it is clear how the draft narrative was constructed. I will bring a copy of the highlighted transcript from the first interview to help the participant visually conceptualize the analysis process.

Upon review of the draft narrative account of their story, all participants will be asked:

“Does this document accurately represent the story you have told me?”

“Does it make sense to you? Is there any part that you don’t understand?”

“Is there anything missing from what you told me?”

“Is there anything you would like to add or change now that you’ve had further time to reflect?”

## Appendix E: Demographics Form

### Participant Demographics Form

Please answer the following questions by filling in the blanks provided or circling answers where appropriate. **Your identity will be kept strictly confidential**, and you may choose not to answer any question that you are not comfortable with.

1. Age: \_\_\_\_\_
2. City you live in: \_\_\_\_\_
3. Gender: \_\_\_\_\_
4. Ethnicity: \_\_\_\_\_
5. Current living situation (e.g, homeless, shelter, recovery house, apartment, shared house, family home, incarcerated, etc.) \_\_\_\_\_
6. Highest level of education completed:
  - a. Elementary
  - b. High School
  - c. Post-secondary diploma
  - d. Undergraduate degree
  - e. Graduate degree
7. What type of interpersonal trauma have you experienced (circle all that apply):
  - a. Childhood abuse
    - i. Physical
    - ii. Emotional/verbal
    - iii. Sexual
  - b. Childhood neglect (emotional or physical)
  - c. Sexual Assault
  - d. Drug or alcohol abuse of a parent during childhood
  - e. Living with parent diagnosed with a mental illness
  - f. Incarceration of a close family member (mother, father, sibling)
  - g. Early childhood or otherwise traumatic loss of family or friend
  - h. Violence in adult intimate relationships
    - i. Witnessing domestic violence as a child
    - j. Other forms of physical assault
  - k. Witnessing death or assault of a family or friend
  - l. Living in a location directly exposed to warfare
  - m. Other (please specify): \_\_\_\_\_

## Appendix F: Consent Form



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THE UNIVERSITY OF BRITISH COLUMBIA

**Title of Study:** Exploring the stories of yoga told by survivors of interpersonal trauma

**Principle Investigator:** Dr. Marla Buchanan, Professor, Ph.D.; Department of Educational and Counselling Psychology, and Special Education; Faculty of Education; University of British Columbia (UBC); Office telephone: XXX-XXX-XXXX; E-mail: xxxxxxxxxxx@xxxx

**Co-Investigator:** Nicole Brand-Cousy, M.A. (Candidate), Department of Educational and Counselling Psychology, and Special Education; Faculty of Education; UBC  
Contact Information: XXX-XXX-XXXX or e-mail: [ubcyogaresearch@gmail.com](mailto:ubcyogaresearch@gmail.com)

*This research is part of Nicole's thesis requirement for completing a Master of Arts (M.A.) in the Counselling Psychology Program. Upon completion, the thesis will be a public document that can be viewed through the UBC library.*

**Sponsor:** This research is funded by the Social Science and Humanities Research Council of Canada (SSHRC)

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**Why are we doing this research?** Interpersonal trauma can profoundly impact the way a person experiences his or her body, sense of self, and self in relationship with others. Research is beginning to show that practicing yoga can be helpful for people recovering from trauma, but very little research has explored the meaning of practicing yoga from the individual perspectives of survivors; none have done so using narrative inquiry, which is a form of research that privileges the stories of participants as important sources of knowledge for scientific inquiry. Therefore, the purpose of this study is to explore the stories of yoga practitioners who are survivors of interpersonal trauma. Specifically, we are interested in understanding how survivors of trauma describe and understand their experience of body, self and relationships within the practice of yoga, and in relation to their process of healing from trauma.

**What happens if you agree to participate?** If you choose to participate, you will be asked to complete a brief demographics form, and then engage in an open-ended interview. You will be invited to tell your story of practicing yoga as part of your recovery from trauma. The interview will last approximately 1-1.5 hours, and you get to choose what you would like to share. The researcher may ask follow-up questions once you have finished telling your story, to which you may choose to respond according to your own level of comfort. Approximately 1-2 months following this first interview you will be contacted for a follow-up interview. At that time, the researcher will share the story she has written based on what you share in the first interview. You

will have the opportunity to comment further, as well as request any alterations to ensure that the story represents your experience fully and accurately.

**Study Results:** The stories constructed from the interviews will be analyzed and put together for a final research essay that will be submitted to complete the educational requirements of the co-investigator. The information may also be shared at meetings and conferences and may be published in academic journals or magazines for other people to read. Your name will not be shared in any presentation or publication.

**Potential Risks:** The discussion of traumatic experiences can sometimes bring up difficult emotions. Although we will not be asking you to describe your history of traumatic experiences in detail, it is possible that part of your story of practicing yoga contains painful experiences related to your trauma history. If a topic comes up that you would like support for, we have a list of community agencies and supportive services that can offer additional support. The research supervisor, Dr. Marla Buchanan, is a trained trauma counsellor and is available to meet with you or speak to you over the phone following this interview. In addition, you have the right to choose not to answer any question, to take a break, and/or end the interview at any time.

**Potential Benefits:** You will receive a copy of the final story produced for the research report.

This research will contribute to the knowledge base on the therapeutic application of yoga for healing from interpersonal trauma, and may be particularly helpful for counselling psychologists and other clinicians who wish to support their clients who seek out yoga as part of their recovery from trauma.

**Confidentiality:** All interviews will be taped and transcribed. Interview tapes and handwritten notes referencing participant data will be stored in a secure, locked location, and all electronic files of participant data will be encrypted and password protected. Unless you choose to use your real name, your identity will be protected through the use of a pseudonym identifier on all documents related to the information you provide, including copies of transcripts, researcher notes, and the final research report. It is UBC's policy that all data will be destroyed after five years.

With your consent, any artwork or other visual images you bring with you to the interview will be photographed. This is completely optional and voluntary.

There are three exceptional circumstances in which confidentiality of your identity cannot be maintained: 1) If there is a reasonable cause to believe that a child or vulnerable adult is being abused and is in need of protection; 2) If a participant is at serious risk of suicide and/or other serious harm to self; 3) If the participant presents a clear and imminent threat to someone else or society at large. If at any point the researcher assesses the participant's self-disclosure to indicate any one of these three situations, the researcher will be obliged to intervene to ensure the safety of participants. Interventions may include, but are not limited to: emergency services, reporting to the Ministry of Child and Family Development, and counselling support services. Participants will be informed of the precautions that are being taken and will be given the option of accessing these services themselves with the support of the investigator.

**Remuneration or Compensation:** As compensation for your time spent participating in this study, you will receive a \$20 gift card to a local coffee shop upon completion of the second interview, as well as bus tickets to and from the interview or parking reimbursement as required. For participants who are not able to access public spaces (such as those who are incarcerated or in residential addictions treatment) commensurate compensation will be arranged.

**Contact for Information about the Study:** If at any point before, during, or after the study you have any questions or concerns, please feel free to contact the principal investigator or co-investigator (contact information above).

**Contact for Concerns about the Rights of Research Participants:** If at any point you have questions or concerns about your rights as a research participant, please feel free to contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598. If long distance, e-mail [RSIL@ors.ubc.ca](mailto:RSIL@ors.ubc.ca)

**Consent and the Right to Withdraw:** Consent to be part of this research study is completely voluntary. You can choose to withdraw at any time with no explanation and with no consequences. You have the right not to answer any questions you do not want to answer, and can take a break at any time during the interview.

**Signature:**

Your signature below indicates that:

1. You understand the information provided for the study “Exploring the stories of yoga told by survivors of interpersonal trauma”
2. You have received a copy of this consent form for your own records.
3. You consent to participate in this study.

**Optional Consent:** By checking this box, you consent to having photographed any visual images that you bring with you to the interview.

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of Participant

**Signature of the Investigator:** “These are the terms under which I will conduct research.”

\_\_\_\_\_  
Signature of Investigator

\_\_\_\_\_  
Date

## **Appendix G: Supportive Community Resources**

### Supportive Community Resources

The researcher supervisor, Dr. Marla Buchanan, is a trained trauma counsellor and is available to speak to you over the phone or meet in person should you require additional support following the interview.

Contact information for Dr. Marla Buchanan:

Office telephone: XXX-XXX-XXXX

E-mail: xxxxxxxx@xxxxxx

### **Crisis Support**

Should you be struggling with thoughts of suicide or self-harm, the following crisis lines provide support to people in crisis 24 hours a day, 7 days a week:

Anywhere in BC: 1-800-SUICIDE (1-800-784-2433)

Vancouver: 604-872-3311

Sunshine Coast/Sea to Sky: 1-866-661-3311

Vancouver Mental Health Support Line: 310-6789

Fraser Health Crisis Line: 604-951-8855; 1-877-820-74444

### **Mental Health and Addictions Support**

Vancouver Coastal Health:

- Vancouver Adult Mental Health Intake Line: 604.675.3997
- Addiction Services: 1.866.658.1221
- Richmond Mental Health Intake: 604.244.5488

Fraser Health:

- Alcohol and Drug Information and Referral Line: 604-660-9382 or 1-800-663-1441

### **Free or Reduced-Cost Counselling**

**Family Services of Greater Vancouver, Counselling Program** - 604-874-2938

<http://www.fsgv.ca>

Counselling fees based on household income. Master's-level therapists. Trauma-specific counselling for adults and children available at no cost to those who qualify (subject to waitlist).

Program has a dedicated intake worker who can also refer to other counselling services or groups. Offices in Vancouver, Richmond, Burnaby, New Westminster and Surrey.

**Family Services of the North Shore** - 604-988-5281

<http://www.familyservices.bc.ca>

Professional counselling for residents of the North Shore. Sliding Scale.

**Oak Counselling** - 604-266-5611

<http://oakcounselling.org/>

Reduced fee. Secular counselling services provided at the Vancouver Unitarian Centre by supervised volunteers with Master's degrees in psychology or psychology-related fields. Individual, couples and family counselling.

**Adler Centre - Counselling Clinic** - 604-742-1818

<http://www.adlercentre.ca/clinic.html>

Sliding scale individual and couples counselling. Counselling provided by counselling psychology graduate students at the Adler Centre, supervised by an experienced clinician.

**Scarfe Counselling - UBC** - 604-827-1523

<http://ecps.educ.ubc.ca/counselling-centres/scarfe-free-counselling-clinic/>

Free. Counselling provided by counselling psychology graduate students, supervised by a psychologist. Clinic runs from September to April.

**UBC Psychology Clinic** - 604-822-3005

<http://clinic.psych.ubc.ca/>

Counselling services provided by doctoral student interns, supervised by registered psychologists. \$10-\$40 per hour.

**New Westminster UBC Counselling Centre** - 604-525-6651

<http://ecps.educ.ubc.ca/counselling-centres/new-westminster-ubc-counselling-centre/>

Free counselling for the general public by counselling psychology graduate students, supervised by a psychologist.

**Simon Fraser University - Counselling Clinics**

- **Surrey Clinic** - 604-587-7320 - <http://www.sfu.ca/education/centres-offices/sfu-surrey-counselling-centre.html>

- **Burnaby Clinic** - 778-782-4720 - [http://members.psyc.sfu.ca/cpc/mandate\\_and\\_activities](http://members.psyc.sfu.ca/cpc/mandate_and_activities)

Counselling provided by supervised graduate students in counselling psychology.

Services at the Surrey clinic are free and at the Burnaby clinic are offered on a sliding scale.

**Jewish Family Services** - 604-637-3309

<http://jfsa.ca/counselling/>

Sliding scale counselling to the Jewish and non-Jewish community.

**SUCCESS - Individual and Family Counselling Program** - 604-408-7266

<http://www.successbc.ca/eng/services/family-youth/counselling-service/611-individualand-family-counselling>

Counselling offered in Mandarin, Cantonese, Korean and English with a focus on helping new immigrants of Chinese and other ethnic origins. Play and art therapy also available.

**Living Systems Counselling** - 604-926-5496, ext. "0"

<http://www.livingsystems.ca/counselling/locations-fees-services#Counselling>

Individual, couple and family counselling using Bowen Family Systems Therapy. Lower cost counselling provided by supervised interns.

**Residential Historical Abuse Program** - 604-875-4255

[https://www.vch.ca/EN/find\\_services/find\\_services/?program\\_id=10946](https://www.vch.ca/EN/find_services/find_services/?program_id=10946)

Free counselling for those who were sexually abused while under the care of the province (foster care, group homes, etc.)

**Crime Victims Assistance Program** - Victim Link BC 1-800-563-0808 (available 24/7)

<http://www.pssg.gov.bc.ca/victimservices/financial/>

Program provides funding for counselling for victims of crime, their immediate family members and witnesses. Contact for eligibility.

**Qmunity - Free Counselling Program** - 604-684-5307

<http://qmunity.ca/get-support/counselling/>

Counselling for members of the GLBTQ communities.

**BC Society for Male Survivors of Sexual Abuse** – 604-682-6482

[www.bc-malesurvivors.com](http://www.bc-malesurvivors.com)

Provides individual and group counselling to male survivors of sexual abuse. Non-profit rates for clinical counsellors, and sliding-scale rates for supervised intern counsellors.