Mind-Body Bridging for Professional Self-Care: Preventing and Treating Secondary Trauma

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Secondary trauma, also known as vicarious trauma, which is indirect exposure to a traumatic event through first-hand account or narrative of that event, is a potential risk for professionals working with domestic violence perpetrators and victims (Baird & Jenkins, 2003). In this presentation domestic violence professionals will be provided a brief overview of Mind-Body Bridging (MBB) skills and practices for professional self-care to help prevent and treat secondary trauma. MBB is an evidence-based psychological intervention that increases foundational self-regulation skills, which promotes psychological resilience. MBB practice consists of various skills for cultivating present-focused awareness of one's body, thoughts, and emotions, and developing an understanding of the psychological mechanisms behind maladaptive mind-body states and behavior (Du Plessis, Webb & Tollefson, 2018a, 2018b, 2018c). The aim of this article, which accompanies the workshop, is to provide a brief overview of the theoretical foundations of MBB, as well as provide MBB mapping templates (see Appendix A).[2]

The aim of MBB is to provide individuals with psychosocial skills and coping strategies to increase their resilience. The concept of resilience refers to "the ability of individuals to adapt successfully in the face of acute stress, trauma, or chronic adversity, maintaining or rapidly regaining psychological well-being and physiological homeostasis" (Feder, Nestler, Westphal & Charney, 2010, p. 35). The notion of coping refers to specific processes in which a person engages expressly for the purpose of dealing with stress (Folkman & Moskowitz,

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[2] This article is adapted from Du Plessis, Webb & Tollefson (in press) *Resilient Mind for Schools Program Manual: Grades k to 6*. Utah State University CS Academic Publishing: UT, Logan.

2004). Studies have identified active coping strategies and cognitive reappraisal as some of the central psychosocial factors that promote successful adaptation to stress (Feder, Nestler, Westphal & Charney, 2010). MBB coping strategies involve cognitive, behavioral, and emotional responses to stressful events and circumstances as well as cognitive reappraisal techniques that allow individuals to reevaluate or reframe adverse experiences with a growth mindset.

In a recent publication, *Cognitive Behavior Therapies: A Guidebook for Practitioners,* (Vernon & Doyle 2017), MBB practice has been compared to therapeutic approaches like acceptance and commitment therapy (Hayes, 2003), dialectical behavior therapy (Linehan, et al., 1999), mindfulness-based cognitive therapy, and other mindfulness-based interventions[3] that are commonly referred to as the third wave of behavior therapies. Although MBB practice shares a similarity to many of these interventions, there are significant epistemological and methodological differences. For example, in mindfulness-based interventions the focus is teaching patients to adopt a 'decentered' perspective of their thoughts as 'mental events' (Greeson, Garland, & Black, 2014). MBB teaches clients how to adopt a metacognitive perspective of the biopsychological mechanisms (I-System and its sub-systems) and affect states that cause dysfunctional behavior.

The therapeutic focus of MBB is for the individual to develop skills to recognize and rest their overactive I-System, thereby removing the hindrance to the innate resilience of the 'true self' (natural functioning).[4] In a state of natural functioning adaptive skills and resilience emerge. Karen Horney (1950) described alienation from the 'true self' as the origin of most psychic distress and described the true self as "the 'original' force toward individual growth and fulfillment" (p. 158). According to Horney (1950), this true self is an "intrinsic potentiality" or "central inner force, common to all human beings" (p. 17) that is the core source of development. Similarly, Donald Winnicott contended that much of psychopathology is a "result of an inflation of the false self and a corresponding underdevelopment of a true self"

[3] Mindfulness-based intervention is a general term for mind–body interventions that focus on the power of "mental training" in regulating mental and physical health conditions. The category of mindfulness-based interventions includes mindfulness-based stress reduction (Kabat-Zinn, 2003) and mindfulness-based cognitive therapy (Segal, Teasdale & Williams, 2002).

[4] The notion of the metapsychological construct of the 'true self', as articulated by the I-System model, shares many commonalities with several other theoretical perspectives that embrace the "tradition of self-as-process theorizing, namely those that posit a "true," "real," or "core" self, for example the works of Jourard (1968) in humanistic psychology, Rank (1932) and Fromm (1955) in psychodynamic psychology, and Laing (1960) and Frankl (1959) in existential psychology" (Ryan and Deci, 2017, p. 62).

(Ryan & Deci, 2017, p 59). In short, MBB focuses on restoring the "motivational force or tendency" of the true self, and thereby unleashing its inherent resilience and "health-promoting force" (Ryan and Deci, 2017, p. 62).

How the I-System Hinders Resilience

MBB is based on the premise that an overactive I-System is a common bio-psychological mechanism underlying many emotional and behavioral disorders and diminished individual resilience (Block & Block, 2007; Block, 2018). According to Greeson, Garland, & Black (2014), "most psychological disorders involve a fundamental problem with inflexibility, lack of insight, or narrowed perspective" (p. 534) - which we assert are a result of I-System overactivity. These inflexible psycho-behavioral processes span cognitive rigidities such as rumination and worry (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008), and patterns of behavioral perseveration (e.g., addiction, compulsions). Therefore, by resting the overactive I-System an individual becomes more psychologically flexible and consequently better equipped to optimally handle life events in resilient ways (Du Plesssis, Webb & Tollefson, 2018a, 2018b, 2018c).

It is theorized that because the practice of MBB focuses solely on addressing an underlying transdiagnostic psychobiological mechanism (I-System) present in several emotional and behavioral disorders it has transtherapeutic efficacy (Block, 2018; Ho and Nakamura, 2017). Transtherapeutic interventions can be seen as those that apply the same underlying treatment principles across mental health disorders, without tailoring the protocol to specific diagnoses (Greeson, Garland, & Black, 2014). Emerging literature on transdiagnostic processes has illustrated the benefits of focusing on common psychological processes that underlie clinical syndromes rather than focusing on discrete diagnostic entities (McEvoy, Nathan, & Norton, 2009).

For example, in studies with veterans MBB practice improved sleep by reducing sleep disturbance via reducing/improving PTSD symptoms, increasing mindfulness, reducing depression, fatigue, pain, and composite sleep/general co-occurring symptoms (Nakamura, Lipschitz, Landward, Kuhn, & West, 2011; Lipschitz, Olin, & Nakamura, 2016; Nakamura et al., 2017). MBB has proven to be an effective intervention in the management of insomnia in Active-duty Military Personnel suffering from insomnia (Lipschitz, Olin, Nakamura, 2016). A study on cancer survivors showed that MBB reduced sleep disturbance symptoms and depression symptoms while improving overall levels of mindfulness, self-compassion, well-being, and attenuated waking salivary α-amylases levels, suggesting positive influences on

sympathetic activity in cancer survivors with sleep disturbance (Lipschitz, Kuhn, Kinney, Donaldson, and Nakamura, 2013). Another study found MBB was associated with increased levels of oxytocin, a neuropeptide hormone associated with affiliation, calmness and well-being (Lipschitz, Kuhn, Kinney, Grewen, Donaldson, and Nakamura, 2015). A study that used a sample of addicted individuals found that MBB significantly reduced drug/alcohol cravings, trauma-related thinking, and disturbed sleep while increasing mindfulness, self-compassion, and well-being (Nakamura, et al., 2015). Research with domestic violence perpetrators indicated that MBB reduced recidivism and increased treatment compliance (Tollefson et al., 2009; Tollefson & Phillips, 2015).

The I-System hinders optimal functioning when certain requirements held by the individual are violated. In essence, I-System requirements are mental rules about how we as individuals, others, events, and the world around us should be that maintain an overly rigid internalized self-image. In short, when the rigid internalized self-image is threatened (when requirements are violated) the I-System becomes overactive. According to the I-System model there are two primary states of being and functioning: I-System functioning and natural functioning. Natural functioning is our natural state of being with limited I-System activity. In I-System functioning our I-Systems become dominate, as a result of a violated requirement, and distorts/limits our view of the world in ways that limit or prevent resilient functioning and increase dysfunction (Block, 2018).

From a psychodynamic perspective one of the central aims of the I-System is to maintain coherence of the self and to prevent fragmentation and annihilation of the self. Heinz Kohut (1971, 1977) stated that the threat of fragmentation is ever-present as a potential - even in relatively healthy personalities. Thus, Kohut implied that even when a cohesive self has been established, the threat of fragmentation may remain, ever ready to invade when our self-identity is threatened. From this perspective, requirements can be seen as the 'rules' that maintain the integrity of our self-identity. Requirements are the I-System's fuel.

The I-System has two psychobiological subsystems; the depressor which gives rise to the experience of narcissistic mortification/shame, and the fixer which gives rise to energizing/euphoric narcissistic fantasy (variety of feelings and sensations including euphoria, ecstasy, elation, and exhilaration).

Depressor storylines are the thoughts generated by the depressor which revolve around the beliefs of not being 'good enough' and being 'damaged' (various feelings and sensations of embarrassment, humiliation, shame, and self-loathing). Consequently, depressor storylines

will point to what needs to be improved or 'fixed'. This is where the fixer storylines come online.

Fixer storylines are elaborate 'schemas' and 'action plans' regarding how this 'improvement' or 'damage repair' will happen. Fixer behavior is the implementation of these schemas or plans to secure the bio-psychic homeostasis of the self-system. The dialectical dynamic of the depressor and fixer is called the depressor/fixer dyad (see *figure 1*).

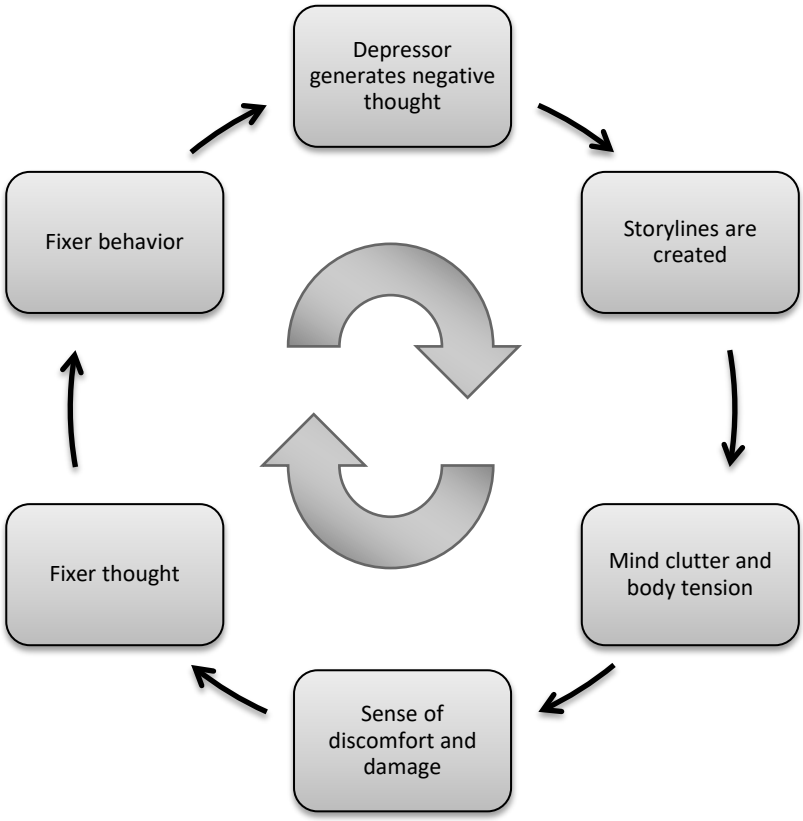

Figure 1. Depressor/Fixer Cycle

In summary, there is a threat of fragmentation of the self when an individual's requirements are violated. Simply put, the I-System's job is to counter-act perceived threats of fragmentation/annihilation of the self in effort to maintain bio-psychic homeostasis. When the I-System acts in concert with other mind-body systems its effect is helpful; when it is overactive or dominant over other systems, its impact hinders optimal functioning. MBB practice aims at loosening our rigid internalized self-images held in place by idealized standards of ourselves, others and the world and facilitating awareness of and reliance on the true self.

How Mind-Body Bridging Promotes Psychological Resilience

There is an array of theories and definitions about what constitutes psychological health and what factors lead to human flourishing (Fredrickson & Losada, 2005; Deci & Ryan, 2000; Vallerand et al., 2003; Peterson & Seligman, 2004; Deci & Ryan, 2017). We propose that the MBB skills can directly enhance psychological health and human flourishing by improving *foundational self-regulation skills*. Self-regulation skills are cognitive and emotional skills and personality factors that allow people to intentionally control their thoughts, emotions, and behavior, which are central in developing psychological resilience (Blair & Raver, 2015). MBB promotes foundational self-regulation skills by improving *metacognition* (the ability to reflect on one's own thinking and actions) and *psychological flexibility* (the extent to which a person can cope with changes in circumstances and approach daily life problems and tasks in creative and novel ways). We will now briefly discuss how MBB promotes metacognition and psychological flexibility.

Psychological flexibility is a central factor in determining an individual's psychological resilience (Kashdan & Rottenberg, 2010). In an article, *Psychological Flexibility as a Fundamental Aspect of Health,* Tod Kashdan and Jonathan Rottenberg (2010) propose that the relationship between our executive functioning ('top-down' processing), and default mental states ('bottom-up' processing) is pivotal in developing and maintaining psychological flexibility. Executive functioning refers to the activity of brain circuits (particularly in the frontal lobes) that prioritize and integrate cognitive capacities that provide critical neuropsychological support for self-regulation (Baumeister, 2002). Kashdan and Rottenberg (2010) state that we require attentional control to recognize the unique demands of any task. The content of our consciousness is determined by the focus of our intention, which includes "awareness of the situation being confronted, and being able to sustain and shift attention to the most critical aspects of the situation. Without these skills, we are at the mercy of relatively passive bottom-up strategies, which will often recruit our dominant behavioral tendencies" (p. 871). To conserve mental energy individuals often revert to stereotyping and habits. As with most psychological phenomena, sometimes automatic, bottom-up processes are helpful, and other times they are harmful because these automatic responses are easily activated and can lead one into a direction that is not optimal or even harmful for the situation at hand (Aarts & Dijksterhuis, 2000; Kashdan and Rottenberg, 2010). Information processing and behavior patterns that are driven by heuristics become overly fluent and when this happens, it can erode psychological flexibility. Psychological flexibility reflects the ability to be aware of and open to what any particular situation requires as well as the capacity to arrange and

prioritize strategies that are uniquely appropriate for the particular situation, rather than relying on dominant default strategies (Fleeson, 2001; Kashdan and Rottenberg, 2010). MBB practice promotes metacognition of dominate default strategies through the practice of various metacognitive strategies.

In their article, *Healing Dysfunctional Identity: Bridging Mind-Body Intervention to Brain Systems,* Ho and Nakamura (2017) present an affect-object generative inference and regulation model, that proposes a neuroscience foundation for the theory and practice of MBB. Their hypothesis is that a "hallmark of mind-body wellbeing can be characterized as a low-frequency anti-correlation between 1) the cognitive control system including the dorsal anterior/middle cingulate cortex, [executive functioning/top-down processing] and 2) the affect-object thought generation system including the ventromedial prefrontal cortex and posterior cingulate cortex [default states/bottom-up processing]" (Ho & Nakamura, 2017, p. 137). Their model suggests that MBB has the capacity to enhance mind-body wellbeing by affecting these systems (i.e., decreasing bottom-up, less flexible thought processes while increasing top-down, more flexible thought processes).

Ho and Nakamura (2017) state that various dysfunctions of the self and identity could be viewed as the result of an activated I-System. "When a situation involves a potential conflict between reality and an unrealistic expectation (Requirement), it may trigger early symptoms of mind-body dysregulation, e.g., anxiousness, urge to act, and body tension. A state of mind-body dysregulation may ensue if these early symptoms are not recognized….and thoughts are not inhibited, and original expectations are not updated" (Ho & Nakamura, 2017, p. 156).

They argue that in a natural functioning state (when the I-System is not overactive), an individual can possess healthy dynamics between the affect-object and cognitive control systems. In such a state, when there is a potential for a requirement to be violated, both the initial urge to react and the underlying requirement can be recognized and then can be defused (through the application of metacognitive strategies). In this natural functioning state, an anti-correlation between the ventral attention network (top-down processing) and default-mode network (bottom-up processing) is maintained, which is ideal state for optimal psychological flexibility.

Conversely, in an I-System functioning state (when the I-System is overactive), when "an individual encounters a failure in pausing thoughts and updating predictions that have been in conflict with reality, the thoughts perpetuated in a dysfunctional state are loaded with affect-objects viewed in a self-centered perspective. These can be identity-defining, similar to self-defining memories that are affect-loaded, vivid, repeatedly rehearsed, strongly associated with

similar memories or concepts, or motivationally connected with an enduring concern or unresolved conflict" (Ho & Nakamura, 2017, p. 155).

Elucidating MBB techniques in light of their affect-object generative inference and regulation model, Ho and Nakamura (2017) propose that "if early symptoms are monitored and Requirement are defused [through metacognitive strategies], dysfunctional thoughts and affective potentials will be inhibited to facilitate adaptive mind-body wellbeing [increased psychological flexibility]" (p. 155). Ho and Nakamura (2017) suggest that MBB techniques aim to develop a more optimal alternative response to prediction errors that have the potential to activate the I-System. "Furthermore, as MBB practitioners learn to defuse Requirements through the practice of cognitively mapping Requirements, Depressors, and Fixers related to urge-like tensions [metacognition], the initial activation of the caudate [nucleus][5] may not lead to excessive urge" (Ho & Nakamura, 2017, p. 157).

Conclusion

In the context of the above discussion the aim of MBB is to provide enough access to our top-down processing, through metacognition, so that the individual has the maximum capacity to make informed decisions based on the unique necessities of each situation, and be psychological flexible enough to not automatically respond according to well-worn heuristics (bottom-up processing).

In summary, we propose that MBB practice increases *foundational self-regulation skills* by (1) enhancing *metacognition* through the application of metacognitive strategies (techniques that enhance awareness and understanding of one's own thought processes), and (2) by promoting *psychological flexibility* that allow individuals to re-evaluate or reframe both negative and positive experiences, and adjust non-productive and limiting expectations of self, other and the world which lead to maladaptive responses.

[5] The caudate nucleus plays a pivotal role in learning, especially the storing and processing of memories. It influences decision making and behavior by using information from past experiences (Waxman, Padron & Gray, 2004).

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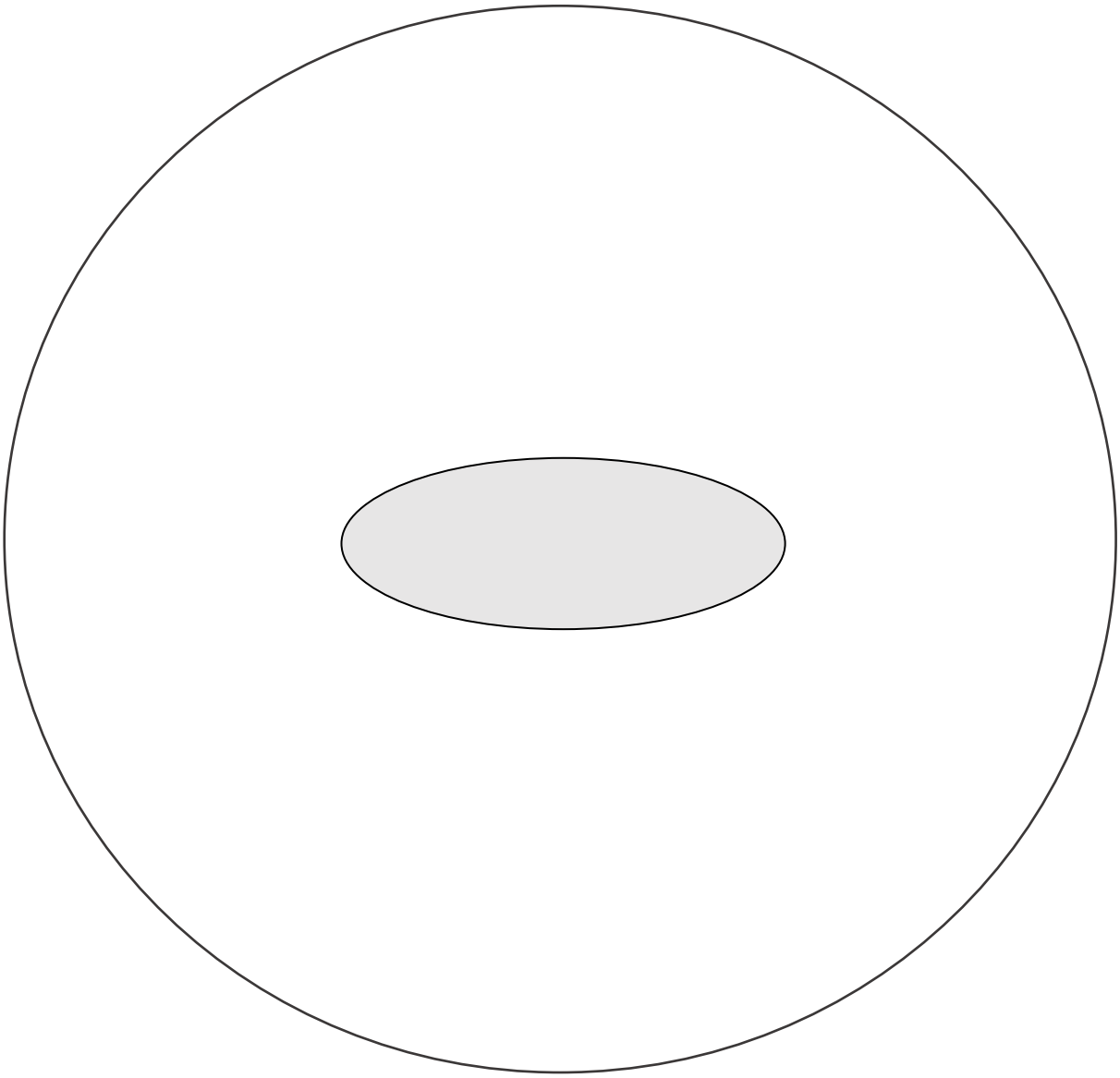
Appendix A
Mind-Body Bridging Mapping Templates

SITUATION MAP



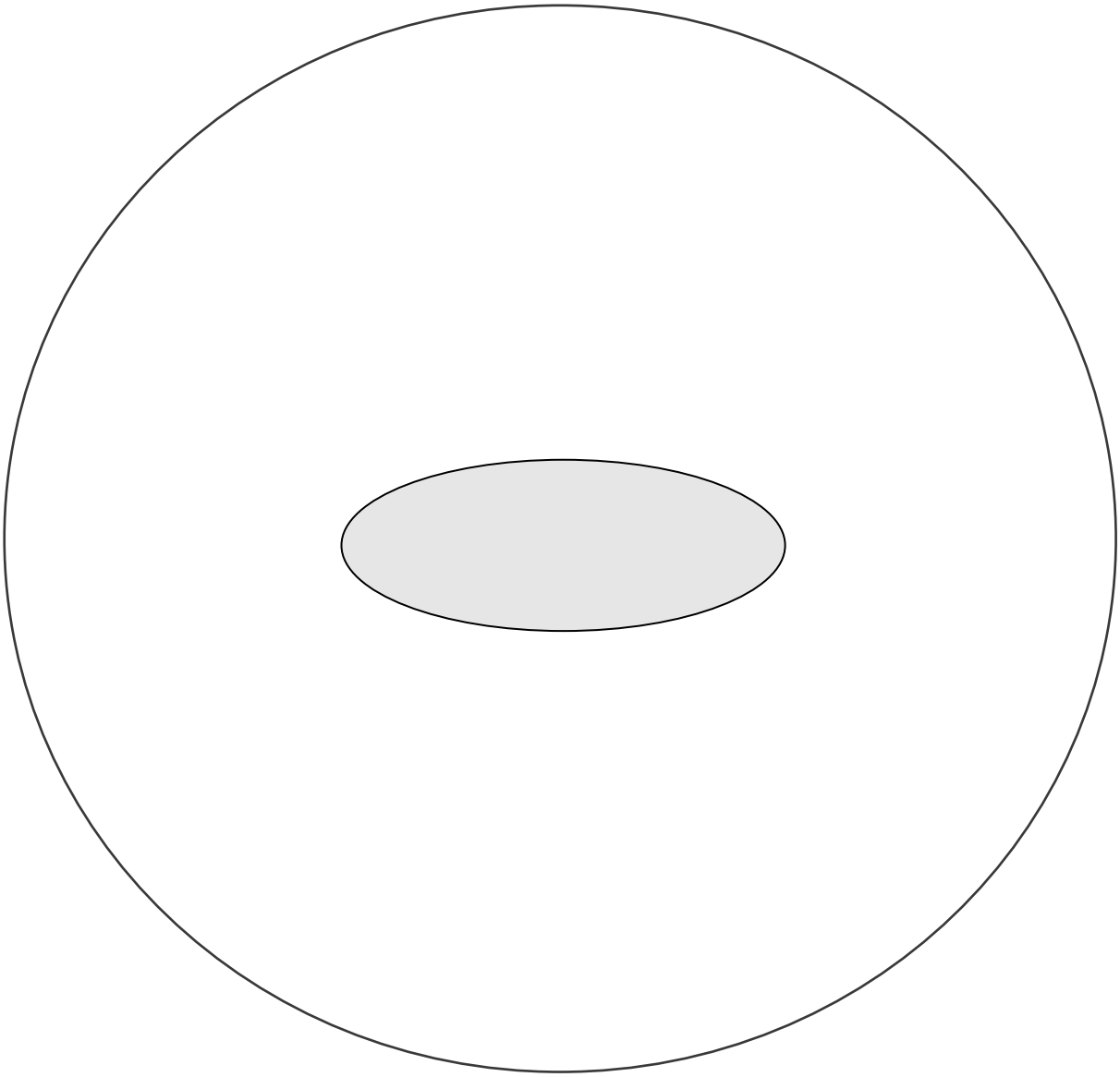
Your body: ☐ TENSE ☐ RELAXED Location of body tension: _____

Your mind: ☐ CLEAR ☐ CLUTTERED

How do you act in this state? _____

How active is your I-System?

SITUATION MAP WITH BRIDGING



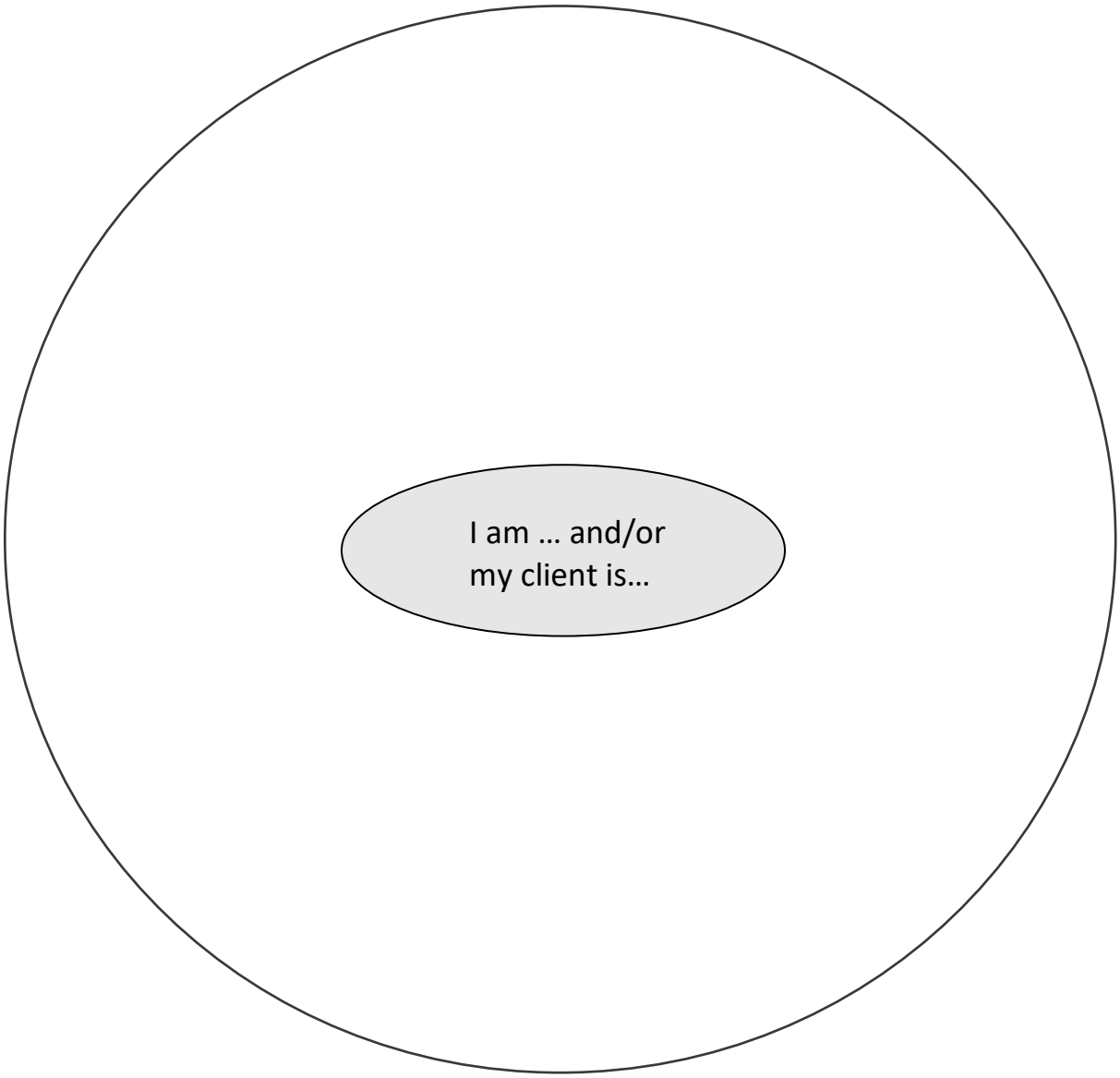
Your body: ☐ TENSE ☐ RELAXED Location of body tension: _____

Your mind: ☐ CLEAR ☐ CLUTTERED

How do you act in this state? _____

How active is your I-System?

NEGATIVE SELF TALK MAP

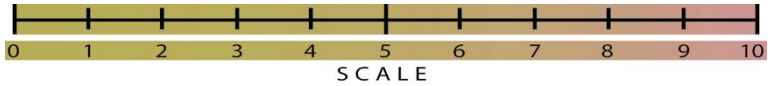


Your body: ☐ TENSE ☐ RELAXED Location of body tension: _____

Your mind: ☐ CLEAR ☐ CLUTTERED

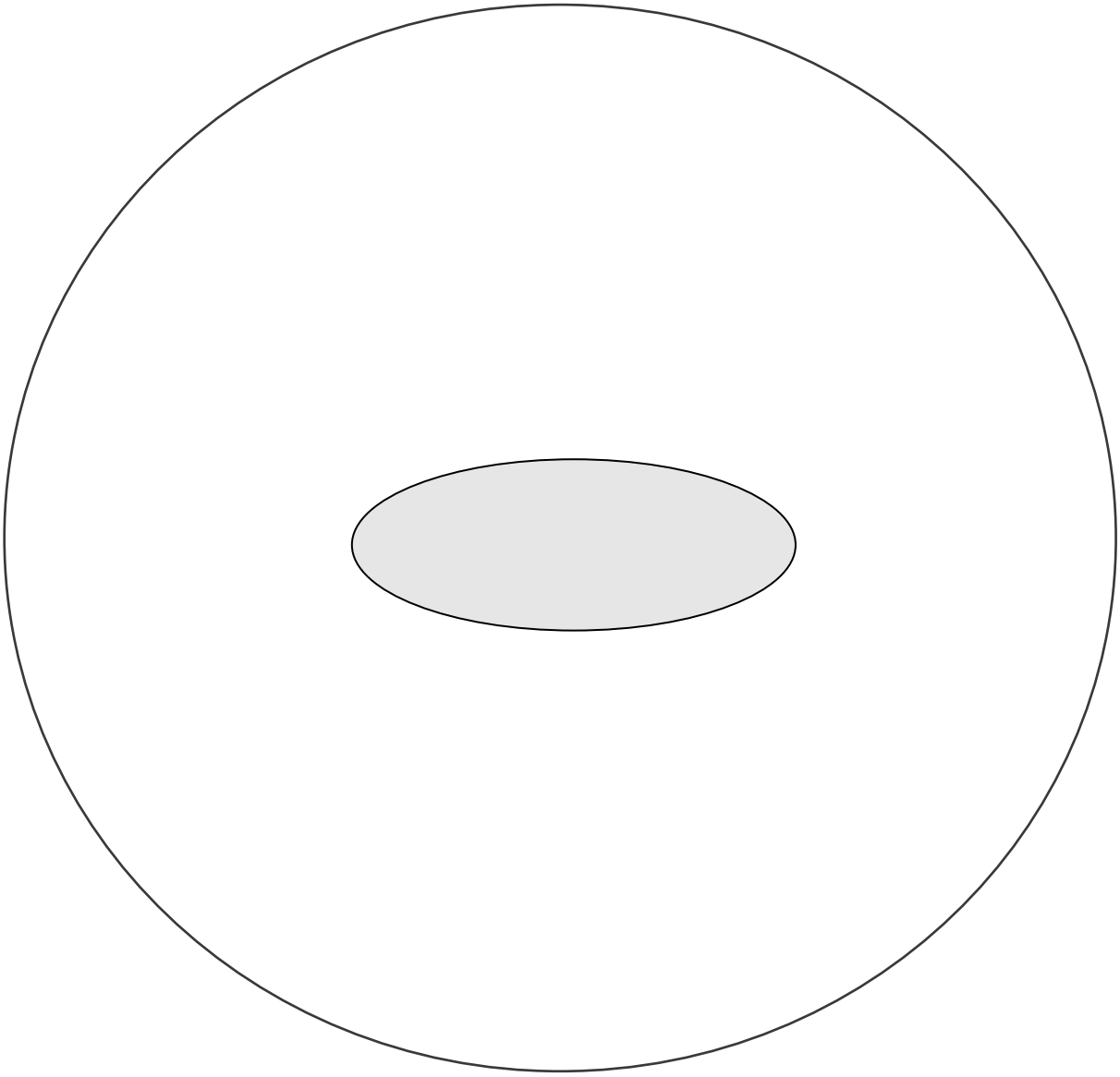
How do you act in this state? _____

How active is your I-System?



SECONDARY TRAUMA MAP

Traumatic Situation:_____



Your body: ☐ TENSE ☐ RELAXED Location of body tension: _____

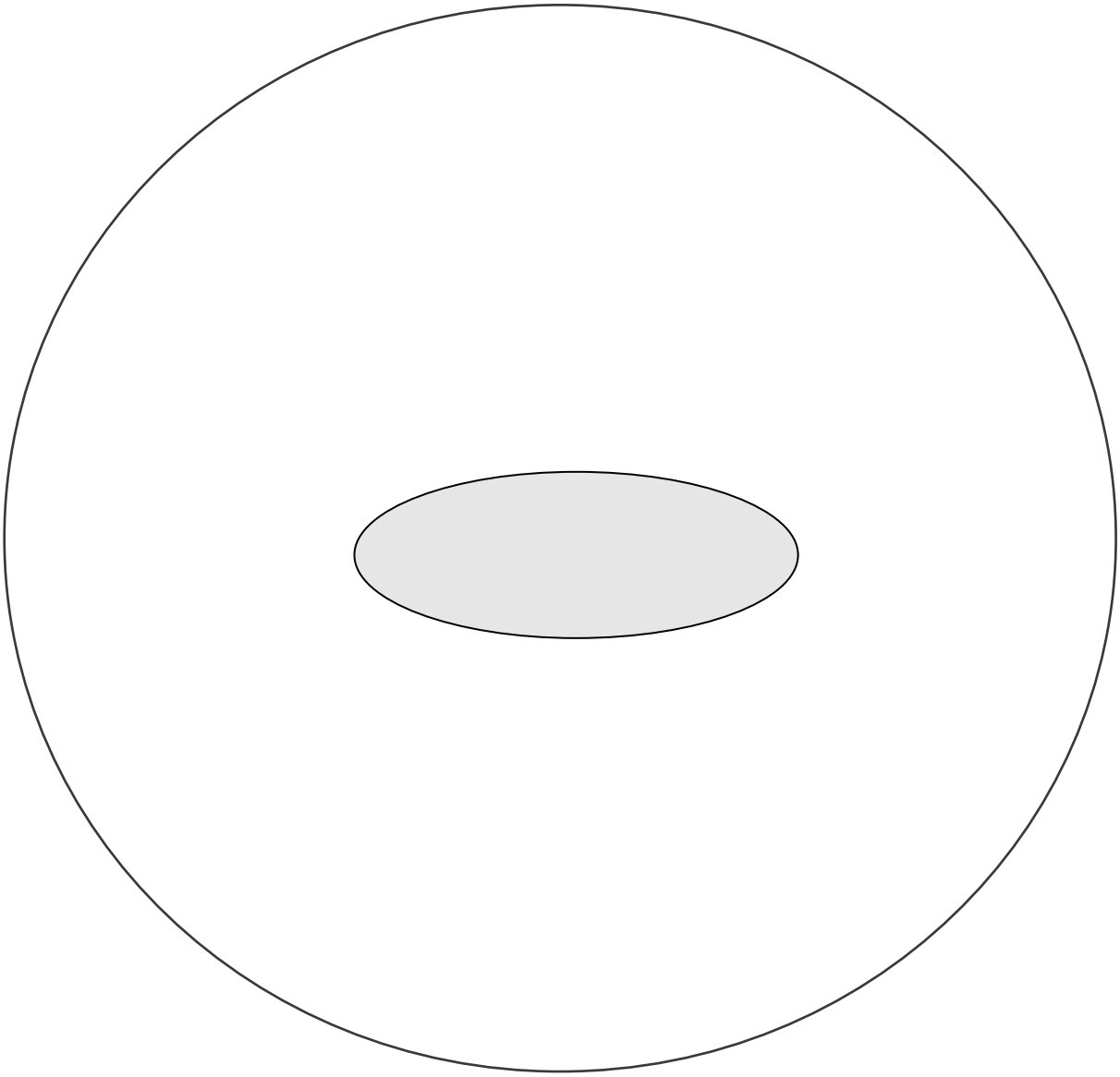
Your mind: ☐ CLEAR ☐ CLUTTERED

How do you act in this state? _____

How active is your I-System?

SECONDARY TRAUMA MAP WITH BRIDGING

Traumatic Situation:_____



Your body: ☐ TENSE ☐ RELAXED Location of body tension: _____

Your mind: ☐ CLEAR ☐ CLUTTERED

How do you act in this state? _____

How active is your I-System?

Appendix B
List of Mind-Body Bridging Skills

1. Mapping
2. Recognize Your I-System
3. Sensory Awareness Skills
4. Recognize & Defuse Requirements
5. Recognize & Defuse Your Depressor
6. Recognize & Interrupt Your Storylines
7. Recognize & Defuse Your Fixer