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Trauma-Informed Stabilization Treatment (TIST): a New Approach to Treating Unsafe Behavior

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Neuroscience research has repeatedly demonstrated that traumatic experiences result in chronic dysregulation of the autonomic nervous system, overwhelming emotions without an obvious connection to specific events, and tendencies toward impulsivity. Unaware that the intense, overwhelming symptoms are memory states, traumatized individuals instinctively act to suppress them, using self-harm to generate adrenaline and endorphin effects, suicidal ideation to restore a sense of control, and eating disorders, addictive behavior, or substance abuse to numb emotion and alter consciousness. Often, these individuals require in-hospital treatment for weeks, months and even years, ensuring their safety at the cost of limiting opportunities to grow developmentally, socially, and occupationally. The Trauma-Informed Stabilisation Treatment (TIST) model was developed to address the treatment of unsafe and addictive behavior from a trauma-related perspective. The goal was to increase patient safety, reduce reliance on institutional containment, and facilitate development of increased autonomic regulation, affect tolerance, and ability to manage normal stress.

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Trauma and Self-Destructive Behavior

Numerous studies over the past twenty years have established a consistent association between exposure to trauma and suicidality (Krysinska & Lester, 2010), self-harm (Swannell et al, 2011), addictive behavior (Koury et al, 2011; Min et al, 2007), and borderline personality disorder (Herman, Perry & van der Kolk, 1993). Despite this strong evidence base, however, the treatments for suicidal ideation and behavior, self-harm, and addiction most widely employed worldwide tend to be abstinence, harm-reduction, and/or behavior management models (Saunders & Smith, 2016; Linehan, 1993). Most treatment models assume that clients have the mental ability to learn, retrieve and apply cognitive-behavioral skills even when severely affectively dysregulated. A neurobiological understanding of trauma, however, suggests that there is an inherent flaw in models that rely on information retrieval to treat traumatized clients who are dysregulated and impulsive.

Neurobiological Consequences of Traumatic Exposure

Neuroscience research on the sequelae of trauma and on traumatic remembering has consistently demonstrated that exposure to "threat" (both immediate danger and trauma-related stimuli) leads to a sequence of events in the brain (Van der Kolk, 2014; LeDoux, 2002; Ogden et al, 2006), including sympathetic nervous system mobilisation and inhibition of non-essential organ systems, including the prefrontal cortex (LeDoux, 2002).

Moreover, repeated exposure to danger lowers the threshold for threat detection, increasing sensitivity to subtle trauma-related stimuli and exacerbating automatic emergency stress responses. Each time trauma-related neural networks are stimulated, these individuals experience a sudden escalation of sympathetic arousal (rapid heartrate, increased energy and muscle strength), a subjective sense of threat to life, and animal defense responses of flight or fight, as if the danger were occurring again in present time (Ogden & Fisher, 2015). Confused and overwhelmed by the intensity of their responses and driven by adrenaline-fueled impulses to run or fight back, traumatized clients instinctivly take action to halt or disconnect from the emotions and body sensations. Lacking an external danger, the instinct to fight is often turned against the body, and individuals harm themselves, inducing an adrenaline response, or they use addictive substances (alcohol, drugs, overdoses of prescription medication) to regulate the autonomic nervous system. Others restrict or binge (which numb emotion and sensation) or impulsively act on suicidal fantasies and impulses (Fisher, 2009; Evans & Sullivan, 1995; Fisher, 1999). Each episode of self-destructive behaviour results in immediate short-term relief followed by a rebound effect, negative social consequences, or traumatic exposure, thereby increasing the likelihood that the same impulsive behaviours will be stimulated again (Van der Kolk, 2014). A cycle of re-traumatizing self-destructive responses to trauma-related stimuli has been set in motion.

And because the body gradually develops tolerance for addictive behaviour, increased use of the regulating behaviour or substance is necessary to achieve the same degree of relief. Over time, then, clients with self-destructive tendencies also experience increases in the intensity and frequency of their impulsive actions. Despite the best efforts of mental health professionals, the fear of risks entailed in self-destructive behavior pales in comparison to clients' fear of their trauma responses. It is the latter, not the former, that conveys the feeling of life threat.

The Structural Dissociation Model

The attachment research demonstrates an association between 'frightened and frightening' parenting and increased risk of splitting or fragmentation (Liotti, 2011; Lyons-Ruth et al, 2006; Liotti, 2004). When attachment figures are 'frightening' or appear 'frightened' attachment-related proximity-seeking becomes associated with danger. The impulse to cling is in conflict with the instinct to flee or fight. Danger or potential danger simultaneously increases proximity-seeking behaviour and aggressive or distancing impulses, requiring splitting or fragmentation so that each instinct can be evoked independently of the other. The Structural Dissociation model proposes that splitting occurs because of the brain's innate 'fault lines' dictated by its differentiated structures and their functional specialization (Van der Hart et al, 2006). Though children are born with both hemispheres intact, they are right brain dominant for most of childhood (Schore, 2010; Cozolino, 2002). In addition, the corpus callosum, the brain structure that makes possible right brain-left brain communication, only becomes fully elaborated after age twelve (Luders et al, 2010; Teicher et al, 2002; Cozolino, 2002). Thus, in the early years of childhood, right brain experience occurs relatively independent of left brain experience, a hypothesis supported by research (Teicher, 2002) demonstrating a correlation between abuse and/or neglect in children and under-development of the corpus callosum compared to normal controls. This finding would support the view that adaptation to trauma necessitates a longer period of parallel development of right and left brains, resulting in deficits in integration between the two hemispheres.

A Language for Splitting and Fragmentation

Extrapolating from the observations by Charles Myers of ‘shell-shocked’ World War I veterans, Steele and colleagues (Steele, Van der Hart, & Nijenhuis, 2004) described the split-off aspects of self as “part(s) of the personality (p. 15).” Although ‘part of the personality’ remains a very controversial term in the mental health world, it has certain advantages: first, use of the word ‘part’ clearly suggests that there is a whole person and personality—of which we are studying just one piece. Secondly, it is a word so commonly used to describe normal ambivalence or inner conflicts (e.g., Part of me badly wants to eat that piece of cake, but another part won’t let me’) that it is easily adopted by clients.

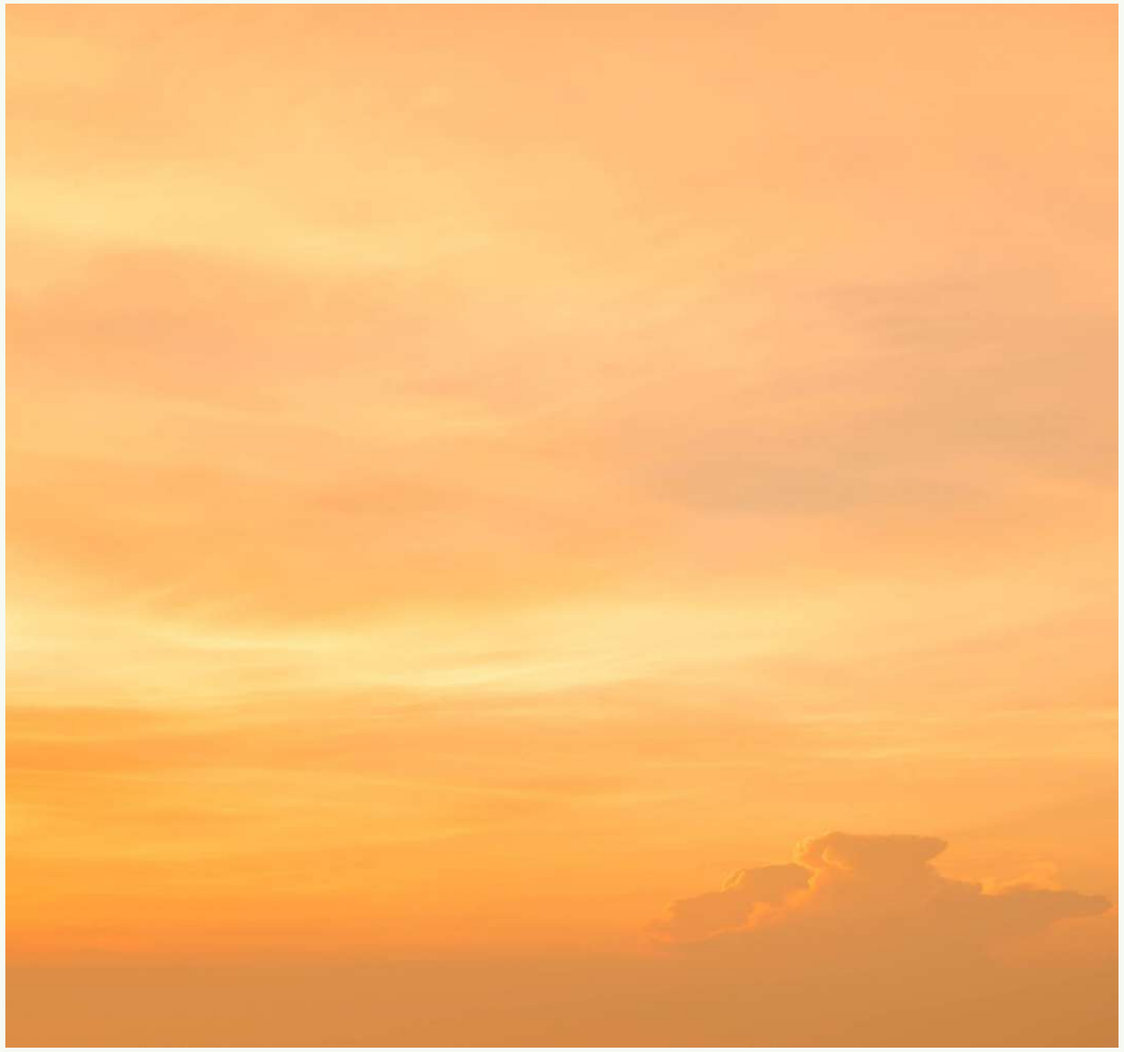
Van der Hart et al (2006) borrowed the language of Charles Myers in describing the left-hemisphere dominant aspect of self-driven by daily life priorities as the ‘apparently normal part of the personality’ and parts driven by animal defense responses the ‘emotional parts of the personality,’

or, individually, the fight, flight, freeze, submit, or attach for survival parts. In the TIST model, the left brain self is named the ‘Going on with normal life part’ and the right brain-driven parts are termed “trauma-related parts” of the personality. In avoiding the words, ‘apparently normal’ the goal is to emphasize the positive evolutionary function of drives to persevere and challenge client tendencies to see the ability to function as a ‘false self’ and trauma-related responses as the ‘true self’.

Clinical Advantages of a Fragmentation Model

By conceptualizing unsafe behavior as an expression of animal-defense related ‘parts’ of the personality, the TIST model challenges clients’ automatic identification with self-destructive tendencies and helps them to externalize these behaviours as ‘other’. The concept that each ‘part’ represents a way of surviving dangerous conditions, that each represents a different approach to self-protection, gives meaning and dignity to a client’s symptoms while changing the relationship to self-destructive urges.

Another advantage of the TIST approach is its applicability to a broad range of attachment-related and temperamental styles within different diagnostic groups. With clients who could be categorized as avoidant or dismissive in their attachment patterns, the model emphasizes the relationship between the client's normal life self and trauma-related parts, and de-emphasizes the client-therapist relationship.



Without the pressure to "be relational," many dismissing clients find it easier to tolerate psychotherapy (Brown & Elliott, 2016). TIST is also helpful with clients who exhibit insecure ambivalent or preoccupied tendencies.

Rather than feeling "abandoned" by a CBT or DBT skills approach or overly stimulated by a psychodynamic or relational approach, preoccupied clients tolerate TIST well, and its focus on parts dynamics tends naturally to limit the degree of preoccupation with the therapist and therapeutic relationship.

Trauma-Informed Stabilisation Treatment

TIST has been piloted in several different psychiatric settings (Westborough State Hospital, Massachusetts; Connecticut Valley Hospital, Middletown, Connecticut; Khiron House, UK) where it was utilised to address the specific challenges posed by certain high-risk clients with diagnoses of complex PTSD, borderline and other personality disorders, bipolar disorder, addictive and eating disorders, and dissociative disorders. Altogether, 5 clients participated at Westborough (Bodner, 2010); 12 clients at Connecticut Valley Hospital (Fredine, 2015); and 10 clients at Khiron House (Morten, 2017). Because TIST contextualizes self-destructive behavior as trauma-related, these clients expressed a more positive response to it compared to CBT or DBT approaches. They reported feeling less pathologized, which increased motivation to learn the model, and more hopeful that overcoming their self-destructive impulses would be a step toward overcoming the traumatic past.

Psychoeducation

In the initial phase of treatment, clients are taught basic information about the effects of trauma on the brain and nervous system, why traumatic memory may be absent or fragmented, and how a dysregulated nervous system perpetuates the symptoms and disrupts the ability to tolerate emotion or stress. Because cortical functioning is a prerequisite for new learning and retrieval of even well-learned skills, it is essential that any treatment model for trauma include an emphasis on re-instating prefrontal activity. In addition, psychoeducation provides updated meaning-making that challenges automatic assumptions of defectiveness.

Differentiation and Mindfulness:

Next, clients are introduced to the Structural Dissociation model and asked to collaborate in mindfully noticing self-destructive or addictive impulses and actions as the manifestations of parts activity. Therapists using TIST are trained to translate clients' "I" statements into parts language to assist in assigning their self-injurious actions and reactions as those of fragmented parts. Especially when patients are suicidal or have severe addictive or eating disordered behaviour, it is crucial for the success of the model for the therapist to insist on linking unsafe tendencies to either the flight or fight parts. Externalizing a 'suicidal part' reduces the risk of harm, while identifying with suicidal ideation ("I feel suicidal—I don't want to live") increases risk by exacerbating impulsivity.

Clients are asked to assume, for the purposes of their treatment, that all distressing thoughts, feelings, and physical reactions (including impulses) represent communications from trauma-related structurally-dissociated parts. They are also asked to observe preparatory impulses to high-risk behaviours triggered by trauma-related emotional reactions. Because each intense emotion or impulse is ascribed to a fragmented, split off 'part' or aspect of the personality, it can be differentiated and observed, decreasing automatic impulsive action-taking. For affect-avoidant clients, the model provides practice in 'dual awareness, a mindfulness skill that facilitates increased affect tolerance. Dual awareness refers to the ability to observe one's thoughts, feelings, and bodily responses as they occur moment-by-moment without losing a felt connection to them. Clients are asked to 'notice' the signs and symptoms associated with each split-off emotion or aspect of self with heightened curiosity and interest, the hallmark of mindfulness. Neuroscience research on mindful consciousness has consistently demonstrated that mindful concentration is associated with increased activity in the medial prefrontal cortex and reduced activity in the amygdala (Creswell et al, 2007), supporting modulation of affect.

Differentiating parts' feelings and impulses:

next, clients are asked to label what they observe using the language of parts. Impulses to violence or suicide, for example, are consistently associated with the fight part because the fight response includes the capacity for aggressive behaviour, whether directed internally or externally. Impulses to distance, avoid, or engage in behaviour that supports avoidance of emotion are consistently connected to the part driven by the flight response. Fear of abandonment is linked to the cry for help or attach part, while fears of attack, harm, or annihilation are assumed to be communicated by the freeze or fear part. Depression, shame, hopelessness, self-loathing, and compliance are the hallmarks of the submit part as each facilitates 'giving in' to others as a survival strategy.

Learning to dis-identify from the parts:

Most human beings tend to automatically identify with whatever emotion or reaction they may be experiencing. This tendency is built into our language: individuals rarely say, 'I'm noticing some anxiety'. They say, 'I'm feeling anxious'. When emotions, thoughts, or physical reactions are expressed in 'I' language, however, most individuals identify with them as 'mine'. In mindfulness-based psychotherapies (Segal et al, 2013), clients are taught to use language that promotes dis-identification. 'I'm anxious' becomes 'I notice an anxious feeling in my chest right now'.; and 'I'd like to hurt myself' becomes 'There's a part of me who'd like to harm the body'. Dis-identification is an important tool in the treatment of impulse control disorders because it promotes interjecting curiosity between emotion and impulse. Identification with an emotion intensifies it and thus generates stronger impulses to action.

But dis-identification does not imply rejection or suppression of any feeling state. In fact, dis-identification as a term from the mindfulness-based psychotherapy world implies acceptance of and connection to each feeling or impulse while, at the same time, not being controlled by it. In the TIST model, the goal is to help clients dis-identify with their unquestioned assumptions or action impulses so as to increase their ability to refrain from self-destructive behavior and to tolerate trauma-related emotional states. Having differentiated and externalized self-destructive tendencies as 'parts' and the wish for stability as 'the Normal Life self', clients were more easily able to use CBT or DBT skills 'on behalf of the parts' to soothe potentially overwhelming emotions.

Summary and Conclusions

Although TIST or Trauma-Informed Stabilisation Treatment has yet to develop a formal evidence base through efficacy research, the initial pilot studies have been very promising based on reports from both clinicians and clients who participated. The clinicians in the pilot projects report feeling less frustrated by the differing presentations of their clients from session to session, more
confident that their interventions will prevent suicide attempts and other unsafe actions, and encouraged by the therapeutic alliance TIST allows them to develop. The clients report that working with the TIST model helped them feel less ashamed and defective, less confused by their symptoms, and increasingly able to feel in control of their impulses. Most importantly, clients and therapists alike observed an increase in the number of days without self-harm or eating disordered behaviours and a decreased number of visits to emergency departments and days in hospital. Many clients were able to return to the community and consistently maintain their safety without the necessity for a 24-hour environment or support, but this effect was observed only when the community outpatient therapist continued to use TIST (Fredine, 2015).

To establish an evidence base for TIST as a method for treatment of self-destructive, addictive, and eating disordered symptoms would require a formal pre-post treatment effectiveness study with a control group option. In the meantime, preliminary validity could be ascertained using a qualitative approach, including client interviews and consistent record-keeping to compare unsafe
incidents, need for crisis services, and hospital visits or days inpatient before and after implementation of Trauma-Informed Stabilization Treatment.

The initial results using the TIST model have been very encouraging, however, especially with chronically mentally ill clients who have had a lengthy history of institutional dependence. The fact that chronically suicidal clients for whom the clinicians held out little hope of recovery could overcome their self-destructive tendencies is a very encouraging sign for both these clients and the mental health systems that care for them. The risk of suicide or death in this population takes a toll on psychotherapists and drains budgets of funds that might otherwise be used to improve the quality of treatment for a greater number of individuals. Most of all, by stabilizing high-risk, incapacitating symptoms, Trauma-Informed Stabilisation Treatment restores the ability to live a normal life after trauma without losing additional years or decades to the effects of early abuse and neglect.

References

Bateman, A.W. & Fonagy, P. (2004). Psychotherapy for borderline personality disorder: Mentalization-based treatment. Oxford: Oxford University Press.

Bodner, A. (2010). Personal communication.

Brown, D. P. & Elliott, D. (2016). Attachment disturbances in adults: Treatment for comprehensive repair. New York: W.W. Norton.

Cozolino, L. (2002). The neuroscience of psychotherapy: Building and rebuilding the human brain. New York: W. W. Norton.

Creswell, J.D., Way, B.M., Eisenberger, N.I. & Lieberman, M.D. (2007). Neural correlates of dispositional mindfulness during affect labeling. Psychosomatic Medicine, 69, 560-565.

Epstein, M. (1998). The deconstruction of the self: ego and “egolessness” in Buddhist insight meditation. Journal of Transperson-al. Psychology, 20, 61–69.

Fisher, J. (1999). Addictions and trauma. Paper presented at the 2000 Annual Conference of the International Society for the Study of Dissociation, San Antonio, Texas.

Fisher, J. (2009). Self-harm and suicidality. Interact: Journal of the Trauma and Abuse Group UK, 9,2.

Fisher, J. (2017). Healing the fragmented selves of trauma survivors: Overcoming internal self-alienation. New York: Routledge.

Fredine, N. (2015). Personal communication.

Frederick, C. & Phillips, M. (1995). Healing the divided self: Clinical and Eriksonian hypnotherapy for dissociative conditions. New York: Guilford Press.

Gazzaniga, M. S. (2015). Tales from both sides of the brain: a life of neuroscience. New York: Harper-Collins.

Gazzaniga, M. S. (1985). The social brain: Discovering the networks of the mind. New York: Basic Books.

Hanson, R. (2014). Hardwiring happiness: The new brain science of contentment, calm, and confidence. New York: Harmony Publications.

Hartmann, H. (1958). Ego psychology and the problem of adaptation (2nd ed.). (D. Rapaport, Trans). New York: International Universities Press, Inc. Herman, J., Perry, C., & van der Kolk, B. (1989). Childhood trauma in borderline personality. American Journal of Psychiatry, 146 (4), 490-495.

Hetrick, S.E., Robinson, J., Spittal, M.J. & Carter. G. (2016). Effective psychological and psychosocial approaches to reduce repetition of self-harm: a systematic review, meta-analysis and meta-regression. British Medical Journal Open, 2016; 6:e011024. doi:10.1136/bmjopen-2016-011024.

Khoury, L., Tang, Y.L., Beck, B., Kubells, J. F., & Ressler, K.J. (2010). Substance use, childhood traumatic experience, and Posttraumatic Stress Disorder in an urban civilian population.

Depression and Anxiety, 27(12), 1077-1086. Krysinska, K. & Lester, D. (2010). Post-traumatic stress disorder and suicide risk: a systematic review. Archives of Suicide Research, 14(1), 1-23.

LeDoux, J.E. (2002). The synaptic self: How our brains become who we are. New York: Viking Press.

Linehan, M. (1993). Cognitive-behavioral therapy of borderline personality disorder. New York: Guilford Press.

Liotti, G. (1999). Disorganization of attachment as a model for understanding dissociative psychopathology. In J. Solomon & C. George (Eds.). Attachment disorganization. New York: Guilford Press.

Liotti, G. (2004). Attachment, trauma and disorganized attachment: three strands of a single braid. Psychotherapy: Theory, Research, Practice, Training, 41, 472-486.

Liotti, G. (2011). Attachment disorganization and the controlling s trategies: an illustration of the contributions of attachment theory to developmental psychopathology and to psychotherapy integration. Journal of Psychotherapy Integration, 21(3), 232-252.

Luders et al (2010). The development of the corpus callosum in the healthy human brain. Journal of Neuroscience, 30(33), 10985-10990.

Lyons-Ruth, K. et al (2006). From infant attachment disorganization to adult dissociation: Relational adaptations or traumatic experiences? Psychiatric Clinics of North America, 29(1). Min, M., Farkas, K., Minnes, S., & Singer, L.T. (2007). Impact of childhood abuse and neglect on substance abuse and psychological distress in adulthood. Journal of Traumatic Stress, 20(5), 833-844.

Morten, C. (2017). Personal communication.

Ogden, P., Minton, K. & Pain, C. (2006). Trauma and the body: A sensorimotor approach to psychotherapy. New York: W.W. Norton.

Ogden, P. & Fisher, J. (2015). Sensorimotor Psychotherapy: Interventions for trauma and attachment. New York: W. W. Norton.

Saunders, K. E. & Smith, K. A. (2016). Interventions for self-harm: what does the evidence say? Evidence-Based Mental Health, 19(3), 69-72.

Schore, A.N. (2011). The right brain implicit self lies at the core psychoanalysis. Psychoanalytic Dialogues, 21, 75-100.

Schore, A.N. (2010). Relational trauma and the developing right brain: the neurobiology of broken attachment bonds. In T. Bardon (Ed), Relational trauma in infancy: Psychoanalytic, attachment and neuropsychological contributions to parent-infant attachment. London: Routledge.

Schore, A.N. (2009). Attachment trauma and the development of the right brain: Origins of pathological dissociation. In P. Dell & J. O'Neil (Eds.) Dissociation and the dissociative disorders: DSM-V and beyond. New York: Taylor & Francis.

Schwartz, J. & Begley, S. (2002). The mind and the brain: Neuroplasticity and the power of mental force. New York: Harper-Collins.

Schwartz, R. (2001). Introduction to the internal family systems model. Oak Park, Ill.: Trailhead Publications.

Segal, Z.V., Williams, J.M.G., & Teasdale, J.D. (2013). Mindfulness-based cognitive therapy for depression (2nd ed.). New York: Guilford Press.

Siegel, D.J. (2007). The mindful brain: Reflection and attunement in the cultivation of well-being. New York: W. W. Norton.

Steele, K., Van der Hart, O., & Nijenhuis, E.R.S. (2004). Phase-oriented treatment of Structural Dissociation in chronic traumatization: overcoming trauma-related phobias. Journal of Trauma & Dissociation, (6)3, 11-43.

Swannell, S., Martin, G., Page, A., Hasking, P., Hazell, P., Taylor, A., & Protani, M. (2011). Child maltreatment, subsequent non-suicidal self-injury and the mediating roles of dissociation, alexithymia and self-blame. Child Abuse & Neglect, 36(7), 572-584. Retrieved from http://doi.org/10.1016/j.chiabu.2012.05.005

Teicher, M.H. et al (2002). Developmental neurobiology of childhood stress and trauma. Psychiatric Clinics of North America, 25(2), 397-426.

Tryer, P., Thompson, S., & Schmidt, U. (2003). Randomized controlled trial of a brief cognitive-behavioural therapy versus treatment as usual for recurrent deliberate self-harm: The POMPACT study. Psychological Medicine, 33, 969–996.

Van der Hart, O., Nijenhuis, E.R.S., & Steele, K. (2006). The haunted self: Structural dissociation and the treatment of chronic traumatization. New York: W. W. Norton.

Van der Kolk, B.A. (2014). The body keeps the score: Brain, mind and body in the treatment of trauma. New York: Viking Press
Fisher, J. (2009). Self-harm and suicidality. Interact: Journal of the Trauma and Abuse Group UK, 9,2.

Fisher, J. (2017). Healing the fragmented selves of trauma survivors: Overcoming internal self-alienation. New York: Routledge.

Fredine, N. (2015). Personal communication.

Frederick, C. & Phillips, M. (1995). Healing the divided self: Clinical and Eriksonian hypnotherapy for dissociative conditions. New York: Guilford Press.

Gazzaniga, M. S. (2015). Tales from both sides of the brain: a life of neuroscience. New York: Harper-Collins.

Gazzaniga, M. S. (1985). The social brain: Discovering the networks of the mind. New York: Basic Books.

Hanson, R. (2014). Hardwiring happiness: The new brain science of contentment, calm, and confidence. New York: Harmony Publications.

Hartmann, H. (1958). Ego psychology and the problem of adaptation (2nd ed.). (D. Rapaport, Trans). New York: International Universities Press, Inc.

Herman, J., Perry, C., & van der Kolk, B. (1989). Childhood trauma in borderline personality. American Journal of Psychiatry, 146 (4), 490-495.

Hetrick, S.E., Robinson, J., Spittal, M.J. & Carter. G. (2016). Effective psychological and psychosocial approaches to reduce repetition of self-harm: a systematic review, meta-analysis and meta-regression. British Medical Journal Open, 2016; 6:e011024. doi:10.1136/bmjopen-2016-011024.

Khoury, L., Tang, Y.L., Beck, B., Kubells, J. F., & Ressler, K.J. (2010). Substance use, childhood traumatic experience, and Posttraumatic Stress Disorder in an urban civilian population. Depression and Anxiety, 27(12), 1077-1086.

Krysinska, K. & Lester, D. (2010). Post-traumatic stress disorder and suicide risk: a systematic review. Archives of Suicide Research, 14(1), 1-23.

LeDoux, J.E. (2002). The synaptic self: How our brains become who we are. New York: Viking Press.

Linehan, M. (1993). Cognitive-behavioral therapy of borderline personality disorder. New York: Guilford Press.

Liotti, G. (1999). Disorganization of attachment as a model for understanding dissociative psychopathology. In J. Solomon & C. George (Eds.). Attachment disorganization. New York: Guilford Press.

Liotti, G. (2004). Attachment, trauma and disorganized attachment: three strands of a single braid. Psychotherapy: Theory, Research, Practice, Training, 41, 472-486.

Liotti, G. (2011). Attachment disorganization and the controlling strategies: an illustration of the contributions of attachment theory to developmental psychopathology and to psychotherapy integration. Journal of Psychotherapy Integration, 21(3), 232-252.

healthy human brain. Journal of Neuroscience, 30(33), 10985-10990.

Lyons-Ruth, K. et al (2006). From infant attachment disorganization to adult dissociation: Relational adaptations or traumatic experiences? Psychiatric Clinics of North America, 29(1).

Min, M., Farkas, K., Minnes, S., & Singer, L.T. (2007). Impact of childhood abuse and neglect on substance abuse and psychological distress in adulthood. Journal of Traumatic Stress, 20(5), 833-844.

Morten, C. (2017). Personal communication.

Ogden, P., Minton, K. & Pain, C. (2006). Trauma and the body: A sensorimotor approach to psychotherapy. New York: W.W. Norton.

Ogden, P. & Fisher, J. (2015). Sensorimotor Psychotherapy: Interventions for trauma and attachment. New York: W. W. Norton.

Saunders, K. E. & Smith, K. A. (2016). Interventions for self-harm: what does the evidence say? Evidence-Based Mental Health, 19(3), 69-72.

Schore, A.N. (2011). The right brain implicit self lies at the core psychoanalysis. Psychoanalytic Dialogues, 21, 75-100.

Schore, A.N. (2010). Relational trauma and the developing right brain: the neurobiology of broken attachment bonds. In T. Bardon (Ed), Relational trauma in infancy: Psychoanalytic, attachment and neuropsychological contributions to parent-infant attachment. London: Routledge.

Schore, A.N. (2009). Attachment trauma and the development of the right brain: Origins of pathological dissociation. In P. Dell & J. O'Neil (Eds.) Dissociation and the dissociative disorders: DSM-V and beyond. New York: Taylor & Francis.

Schwartz, J. & Begley, S. (2002). The mind and the brain: Neuroplasticity and the power of mental force. New York: Harper-Collins. Schwartz, R. (2001). Introduction to the internal family systems model. Oak Park, Ill.: Trailhead Publications. Segal, Z.V., Williams, J.M.G., & Teasdale, J.D. (2013). Mindfulness-based cognitive therapy for depression (2nd ed.). New York: Guilford Press.

Siegel, D.J. (2007). The mindful brain: Reflection and attunement in the cultivation of well-being. New York: W. W. Norton.
Steele, K., Van der Hart, O., & Nijenhuis, E.R.S. (2004).

Phase-oriented treatment of Structural Dissociation in chronic traumatization: overcoming trauma-related phobias. Journal of Trauma & Dissociation, (6)3, 11-43.

Swannell, S., Martin, G., Page, A., Hasking, P., Hazell, P., Taylor, A., & Protani, M. (2011). Child maltreatment, subsequent non-suicidal self-injury and the mediating roles of dissociation, alexithymia and self-blame. Child Abuse & Neglect, 36(7), 572-584. Retrieved from http://doi.org/10.1016/j.chiabu.2012.05.005

Teicher, M.H. et al (2002). Developmental neurobiology of childhood stress and trauma. Psychiatric Clinics of North America, 25(2), 397-426.

Tryer, P., Thompson, S., & Schmidt, U. (2003). Randomized controlled trial of a brief cognitive-behavioural therapy versus treatment as usual for recurrent deliberate self-harm: The POMPACT study. Psychological Medicine, 33, 969–996.

Van der Hart, O., Nijenhuis, E.R.S., & Steele, K. (2006). The haunted self: Structural dissociation and the treatment of chronic t raumatization. New York: W. W. Norton.

Van der Kolk, B.A. (2014). The body keeps the score: Brain, mind and body in the treatment of trauma. New York: Viking Press.

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