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# The integrative power of dance/movement therapy: Implications for the treatment of dissociation and developmental trauma

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ABSTRACT

Chronic and compounding exposure to traumatic events, especially within the context of early attachment relationships, can result in symptoms of dissociation commonly seen in dissociative disorders, personality disorders, and post-traumatic stress disorders. This theoretical article proposes an application of dance/movement therapy as facilitative of right brain integration in adult clients who present with trauma-related dissociative symptoms. Findings from trauma psychology, neuroscience, and dance/movement therapy literature are used to create an attachment-oriented theoretical foundation for how dance/movement therapy might support the integration of dissociated somatic, emotional, and psychological experiences. A model for case-conceptualization and treatment planning is proposed according to a trauma treatment framework consisting of three phases: safety and stabilization, integration of traumatic memory, and development of the relational self. Within this phase-oriented theoretical framework, dance/movement therapy interventions such as body-to-body attunement, kinesthetic mirroring, interactive regulation, self-awareness, symbolism and expression, and interactional movement are examined as applications that may support bottom-up integration and resolution of psychological trauma. Limitations and suggestions for future research are also discussed.



It is becoming widely accepted in the field of trauma psychology that trauma is a phenomenon that affects the physiological, neurological, and psychological organization of the human organism (Rothschild, 2000; Scaer, 2007; Schore, 2009, 2012; Van der Kolk, 2006a). In particular, the long-term experience of trauma within an attachment relationship primarily affects the regulatory functions of the right brain (Schore, 2012). Many survivors of developmental or attachment trauma present with symptoms of dissociation that significantly impair their capacity for present-oriented and adaptive functioning (Allen & Coyne, 1995; Cloitre et al., 2009). Because dissociation is, by definition, the dis-association of components of bodily and psychic experience, comprehensive treatment approaches will aim to support physiological and psychological integration and cohesion (International Society for the Study of Dissociation (ISSD), 2005). The science and practice of dance/movement therapy (DMT) is uniquely situated to contribute to the field in this way by offering a framework for providing direct access to and vertical integration of the right brain. Although dance/movement therapy (DMT) champions the integrative function of creative movement and dance, the field lacks a comprehensive and systematized approach to treating the sequelae of developmental trauma. This theoretical paper aims to expand the field's repertoire by offering a discourse that surveys the respective contributions of trauma psychology and dance/movement therapy on dissociation. The author also offers a framework for developing interventions that may be applied to support dance/movement therapists in harnessing the integrative power of DMT to potentially re-wire dysregulated neural networks related to dissociation.

## A developmental model of dissociation

The concept of psychological dissociation has a long and tumultuous history. From origins in Freud's hysteria to the recent debate over the diagnostic categories of the DSM-V, the mechanism of dissociation has intrigued clinicians and scientists for over a century (Dell & O'Neil, 2009; Herman, 1992; van der Hart & Dorahy, 2009). The term, *dissociation*, for the purposes of this article, will be used to describe states that "[involve] the alteration of consciousness, memory, personal information, and identity, items that are normally associated and integrated" (American Psychiatric Association, 2000, p. 519). This includes, but is not limited to, the symptoms of depersonalization, derealization, amnesia, identity confusion, and identity alteration typically found in the *Diagnostic Statistical Manual of Mental Disorders* (DSM-IV-TR) dissociative disorder (DD) classifications: Dissociative Amnesia, Dissociative

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Fugue, Dissociative Identity Disorder (DID), Depersonalization Disorder, and Dissociative Disorder Not Otherwise Specified (DDNOS) (APA, 2000; ISSD, 2005). Used here, the term includes negative dissociative symptoms (e.g., alterations in memory, perception, affect, or time/space orientation), as well as positive symptoms (e.g., intrusive memories or perceptions such as voices), all symptoms that co-occur in Posttraumatic Stress Disorder (PTSD), Complex Posttraumatic Stress Disorder (CPTSD), and Disorders of Extreme Stress Not Otherwise Specified (DESNOS), among others (Curtois, 2004; Van der Hart, Nijenhuis, & Steele, 2006; Van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). All varieties of attachment, developmental, complex, betrayal, and relational traumas will be collectively referred to as the disruptions of normal neurobiological development that result from chronic childhood physical, emotional, and sexual abuse, neglect, and maltreatment (Ford, 2005, 2009).

From a psycho-neurobiological view, trauma-related dissociation is seen as a state of parasympathetic dominance that becomes active when first line or social engagement defenses, such as crying or vocalizations, fail to elicit a regulating response from an attuned caregiver (Perry, Pollard, Blakley, Baker, & Vigilante, 1995; Porges, 2001; Schore, 2012). Dissociation is highly adaptive, serving to conserve the costly impacts of sympathetic nervous system arousal when attempts at higher-order regulation have failed (Porges, 2001; Schore, 2012). However, when one is exposed to chronic and prolonged states of distress, such as in cases of child abuse or neglect, these mechanisms become hard-wired into the brain as strategic and automatic mechanisms of self-regulation (Bremner & Brett, 1997; Nash, Hulsey, Sexton, Harralson, & Lambert, 1993; Schore, 2012; Van der Kolk, 2006a).

The experience-dependent nature of neurological development provides support for the notion that "states become traits" (Perry et al., 1995, p. 271), carrying far-reaching sequelae of maltreatment into adulthood and throughout the lifespan (Brand, Classen, McNary, & Zaveri, 2009; Cloitre et al., 2009; Andrea, Ford, Stolbach, Spinazzola, & van der Kolk, 2012; Nash et al., 1993). For example, correlative studies have shown a significant relationship between the occurrence of chronic childhood trauma and increased incidence of complex posttraumatic stress symptoms including depression, dissociation, disruptions in self-perception and identity, impulse control, interpersonal problems, and behavioral and affect dysregulation (Brand et al., 2009; Cloitre et al., 2009; D'Andrea et al., 2012). These results are corroborated by findings that individuals with insecure and disorganized attachment styles may be more prone to posttraumatic and dissociative disorders (Liotti, 2004; Stovall-McClough & Cloitre, 2006).

Schore (2012) made the case that dissociation primarily involves and affects the vertical axis of the right brain, which encompasses the autonomic functions of the brainstem, regulatory functions of the limbic system, and the cortical processing of imagery. When functioning fluidly, this axis provides the sense of "ongoingness" that serves as the seat of the implicit relational self (Schore, 2009, p. 124). Schore suggested that dissociation is a failure of the right brain to "recognize and process external stimuli... and on a moment-to-moment basis integrate them with internal stimuli" and suggested that this breakdown produces "an instant collapse of both subjectivity and intersubjectivity" (2009, p. 126). Brain imaging studies have substantiated this theory with evidence of right hemisphere dominance during traumatic memory recall and dissociation (Lanius et al., 2005; Schiffer, Teicher, & Papanicolaou, 1995) as well as showing significantly smaller hippocampus and amygdalar volumes in patients with DID compared to normative participants (Vermetten, Schmahl, Lindner, Lowenstein, & Bremner, 2006). From this view, dissociation represents a dis-integration of right brain regulatory functions that serves to protect against intolerable and dysregulated emotional states (Schore, 2009).

*Evidence-based models for adult trauma treatment*

Currently, phase-oriented treatment models are considered best practice for the treatment of complex trauma-related disorders, including DDs (Curtois, 2004; Herman, 1992; ISSD, 2005; Steele, van der Hart, & Nijenhuis, 2005; Steele & van der Hart, 2009). Outcome studies suggest that cognitive-behavioral therapy (CBT) and eye-movement desensitization and reprocessing (EMDR) approaches have been successful in treating symptoms of PTSD (Bisson & Andrew, 2009; Davidson & Parker, 2001; Resick, Nishith, & Griffin, 2003). Skills-based training programs such as dialectical behavioral therapy (DBT) have been shown to be effective for clients presenting with more complex posttraumatic symptoms, such as borderline personality disorder (Koons et al., 2001). In a naturalistic and longitudinal study of patients diagnosed with dissociative disorders, Brand et al. (2012) demonstrated the effectiveness of individual outpatient phase-oriented treatment, citing that patients demonstrated fewer self-harming behaviors and hospitalizations and higher levels of general functioning (GAF) after completion. Gantt and Tinnin (2007) found significant improvements in clients diagnosed with PTSD and dissociative disorders after a brief intensive outpatient model that included art therapy. In one controlled outcome study for clients diagnosed with DESNOS, Kaiser, Gillette, and Spinazzola (2010) found that sensory integration treatment in combination with psychotherapy was associated with significant improvements in self-perception and affect-regulation. A review of dissociative disorder case studies and treatment outcome studies (Brand et al., 2009) cited correlative evidence for the benefit of treatment that "focuses on dissociative pathology" (p. 652) for dissociative disorders, though the authors noted that the lack of control conditions and selection bias limited the generalizability of such findings.

*Dance/movement therapy in adult trauma treatment*

Due to the ubiquity of trauma in mental health populations and the natural inclination of dance/movement therapy toward working with and through the body, dance/movement therapists have worked with survivors of trauma since the inception of the field (cf. Marian Chace in Koch & Weidinger-von der Recke, 2009). However, direct approaches to the treatment of dissociation have only recently been mentioned in the dance/movement therapy literature (Koch & Harvey, 2012). Much of the existing literature concerning the treatment of trauma in DMT consists of case studies or interviews with survivors of torture (Gray, 2001; Koch & Weidinger-von der Recke, 2009), domestic violence (Devereaux, 2008; Leventhal & Chang, 1991), and childhood sexual abuse (Ben-Asher, Koren, Tropea, & Fraenkel, 2002; Frank, 1997; Mills & Daniluk, 2002; Weltman, 1986). Ambra (1995) presented a qualitative interview with dance/movement therapists who work with adult survivors of incest. There are no controlled treatment outcome studies regarding the use of dance/movement therapy specifically with dissociative disorders.

Several themes have emerged from the recent literature regarding dance/movement therapy interventions with trauma survivors. The establishment of safety and trust was paramount, generated by many therapists through strong therapeutic rapport and by offering clients a sense of overt control over the pacing and content of their process (Ambra, 1995; Frank, 1997; Gray, 2001; Koch & Weidinger-von der Recke, 2009; Weltman, 1986). Many authors discussed the confrontation of traumatic material by working directly with body memory, imagery, symbolism, and metaphor (Ambra, 1995; Frank, 1997; Koch & Harvey, 2012; Koch