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# Fostering Resilience Through Breath: A Literature Review

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Fostering Resilience Through Breath:

A Literature Review

Lesley University

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Mental Health Counseling: Dance/Movement Therapy

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**Abstract**

This literature review focuses on utilizing dance/movement therapy with mindfulness aligned to the Attachment, Self-regulation and Competency —framework. This paper highlights how each dance/movement therapy, mindfulness and the Attachment, Self-regulation and Competency - framework support one another. Research has shown that trauma significantly changes not only an individual's brain, body, but also how they are present in day-to-day life. This literature not only focuses on these effects, but also goes into details of how dance/movement therapy, mindfulness and the Attachment, Self-regulation and Competency - framework supports a child who has experienced a type of trauma or stressful life event. There is more research which needs to be done to continue supporting this specific population of children. Though, the information provided provides a positive outlook for the children involved within this type of treatment.

*Keywords: trauma, dance/movement therapy, ARC - Framework, mindfulness, breath*

### **Introduction**

Each child has several layers of possibilities, developmental pathways waiting to unwind. Every path a child takes in the course of their development leads to new pathways and possibilities. Although these paths are not infinite, it is nearly impossible to foresee the direction a child's life may take at birth, as a variety of factors influences each life. Such factors include experiences, relationships, temperament and biology; the several different challenges an individual faces, and conversely, the shields which protect them from these specific challenges.

One of the wonders of nature is that everyone learns to adapt and respond to their worlds in such a way that allows for survival. When individuals face stress, they learn from it. Research indicates that as many as one in four individuals will face serious adversity in childhood, stress so enormous that it taxes available resources that are key to survival (Blaustein & Kinniburgh, 2019). However, the capability for human resilience is extraordinarily exceptional, as everyday individuals, families, and even entire societies manage, process, and prevail or even transform from the most extensive experiences. Even so, what happens to the children from the environments that inhibit growth? How is growth affected for those children who are faced by more challenges than shields? Some of those children have still learned to adapt to their environments and what displays are the surface level behaviors: rage, academic issues, difficulties focusing, and even rigid control (Blaustein & Kinniburgh, 2019). It is imperative that this is recognized as a miracle at work, as the brain is displaying impeccable resilience to stress.

In the United States alone, nearly 35 million children have endured complex trauma (Blaustein & Kinniburgh, 2019). Trauma includes a range of stressful experiences, which are typically interpersonal and chronic, and may affect many different aspects of a child's life. The Attachment, Regulation, and Competency (ARC) Treatment Framework has one overarching goal: to work with children to actively process, explore, and integrate traumatic experiences into a coherent and comprehensive understanding of self in order to enhance a child's capacity to effectively engage in present life (Blaustein & Kinniburgh, 2019). By doing so, ARC focuses on three primary domains: attachment (which includes caregiver affect management, attunement, effective response), regulation (which includes identification, modulation, relational engagement), and competency (which includes executive functions and self-development and identity) (Blaustein & Kinniburgh, 2019). ARC involves the sequential development of the capacity to first survive and tolerate moments of overwhelming distress and arousal, as well as increasingly be within the present moment and then to make meaning about those moments, thus ultimately shifting and transforming them (Blaustein & Kinniburgh, 2019).

The practice of mindfulness can allow these children who have experienced trauma to be within this present growing moment. In essence, mindfulness is being consciously aware of one's thoughts and emotions. By nature, children are curious and inquisitive and tend to live in the moment by their eagerness to learn. However, similar to adults, children become too busy within their thoughts, fatigued, easily distracted, and restless. They become enmeshed in behavioral patterns that do not serve them. They are unable to stop surviving and begin thriving. Through mindful awareness, children can learn to end this cycle and find

their breath to thrive. They can develop the ability to sense what they need at this moment in time, recognize impulses, and learn to accept moments of distress.

Dance has natural therapeutic capabilities to accept moments of distress due to its emotional, spiritual, and physical components. Utilizing mindfulness within dance/movement therapy offers an individual an opportunity to be fully present within the moment and in their body and mind; this allows the opportunity to become more in touch with one's thoughts and feelings, making it possible to respond to internal and external stimuli adequately. This transformation through movement can be made possible by the attention to the breath. By listening and being present to an individual's inner rhythms such as breath, they are then able to react and anchor themselves within the present moment. They can foster resilience through breath. This authenticity allows for a time of incredible insight for both the individual moving and the therapist witnessing the movement. From this movement can elicit discussions, therapeutic processing, and overall integration of mind and body.

The ARC Framework, mindfulness, and dance/movement therapy have several commonalities. Each has themes of attunement, and self-awareness which is then anchored by the use of breath. What is missing from each is filled with the use of the other. Mindfulness within dance/movement therapy offers the chance to become engaged within trauma integration - ARC's main overarching goal - on a physical level. Utilizing the ARC treatment framework within dance/movement therapy while practicing mindfulness can allow a child to truly integrate their complex trauma experiences within their mind and body, giving an authentic opportunity for healing.

### **Trauma**

Trauma is not always caused intentionally - though when it is intentional, the consequences are even more detrimental. Through history, trauma has been utilized as a medical term to denote serious injury to the human body (Arnold & Fisch, 2011). Traumatic experiences are those that are overwhelming, invoke intense negative affect and involve some degree of loss of control and vulnerability (Blaustein & Kinniburgh, 2019). There are single experiences of trauma such as natural disasters, rape, or a car accident. There are also prolonged experiences of trauma which occur over an extended period as seen in events of war, ongoing domestic violence or emotional abuse. Complex trauma (also called developmental trauma), refers to children and adults who have experienced prolonged exposure to childhood interpersonal trauma (Blaustein & Kinniburgh, 2019). Traumatic exposure can also be secondary, which is when an individual is a witness to a traumatic experience that occurred to another person, whether that be a singular experience, prolonged experience, or a complex trauma (Arnold & Fisch, 2011). Van der Kolk (2014) noted: “trauma is not just an event that took place sometime in the past; it is also the imprint left by that experience on the mind, brain, and body” (p. 21). The experience of trauma is subjective and developmentally bound. The exposure to complex trauma has been linked to disruptions across a plethora of domains of development spanning from attachment, biological processes, self-regulatory capacity, cognition, as well as an individual’s self-conception (Hodgdon, H., Kinniburgh, K., Gabowitz, D., Blaustein, M., & Spinazzola, J., 2013).

### **The Effects of Trauma on the Brain**

Human development is complex as each enters into the world with their unique biological makeup and developmental potential. Humans are not born with a fully developed brain structure and neurologic connections. Our brains develop and change in response to experiences and maturation. Specific changes happen in the brain in response to repeated input, or patterns. The human brain develops and transforms in response to experience and maturation (Blaustein & Kinniburgh, 2019). At birth, the human brain has millions of potential synaptic connections. The connections used are strengthened and become increasingly efficient, while those connections that do not receive input are pruned away (Blaustein & Kinniburgh, 2019). There are several variables which can shape development - adversity and trauma are among these. The brain development in infancy and early childhood is the foundation for all future neural development. The experience of complex trauma in childhood can cause a plethora of adverse outcomes and risks (Blaustein & Kinniburgh, 2019). Several of these outcomes are stemming from core developmental deficits in many competencies. Such competencies include: intrapersonal, interpersonal, regulatory, and neurocognitive (Blaustein & Kinniburgh, 2019). Trauma also compromises the brain area that contributes to the physical, embodied feeling of being alive (Van der Kolk, 2014).

The limbic system - or the emotional brain - and the prefrontal cortex - or the smart/ thinking brain - are the primary areas of the brain which are active and affected during a stress response. The amygdala, thalamus, hippocampus are all included within the limbic system. The amygdala indicates if there is impending or imminent danger. The amygdala then activates the body's stress response, including the plethora of stress hormones and nerve

impulses that increase blood pressure, heart rate, and oxygen intake (Van der Kolk, 2014).

When a threat is detected the amygdala sends a signal to the hippocampus (Scaer, 2007).

The hippocampus then stores and retrieves the memory, thus beginning the cognitive and conscious threat-based information formation (Duros & Crowley, 2014; Scaer, 2007). After this occurs, it is sent to the orbitofrontal cortex for the purpose to further the information and memory processing (Duros & Crowley, 2014). The orbitofrontal cortex is known for recognizing if the information is significant enough to engage in involuntary survival behaviors such as fight, flight, or freeze responses (Scaer, 2007; Duros & Crowley 2014; Van der Kolk, 2014).

When dysregulation occurs within an individual, the orbitofrontal cortex was not dictating the reaction; the emotional and fight, flight, or freeze response is. This occurs between all populations - adult and children. Traumatized children tend to be in a hyper-vigilant state as they are focused on either defending themselves and others from potential threats or distracting and escaping from danger (Powell, 2018). Children engaged in a fight response are more assertive and aggressive (Blaustein & Kinniburgh, 2019). They will deny fear and name it as anger because anger is safer for them - anger motivates them forward to defend (Powell, 2018). Children in flight mode are more prone to avoid, therefore creating conflict. They will also deny their fear and describe themselves as feeling sad, as sadness is a safer emotion than anger (Powell, 2018). Children engaged in the flight mode can cry, act silly, manipulate, blame, be passive, or become fake-phony (Blaustein & Kinniburgh, 2019). When the fight and flight responses to threat fail, the stress response system is overwhelmed, and the system begins to shut down - the child begins to freeze, the brain shuts down, and the

body is at its most vulnerable state (Powell, 2018). In this state, children may experience symptoms of dissociation. When this occurs their pulse drops, blood pressure decreases, and breath becomes so shallow it is hardly noticeable (Blaustein & Kinniburgh, 2019).

### **The Effects of Trauma on the Body**

Trauma is an event that occurs in the core of both the brain and body. Therefore, the physiological consequences must also be a focus, along with the psychological torment a child may feel (Van der Kolk, 2014). The physiological consequence of a traumatic or stressful event can form in a plethora of cognitive and physical symptoms, as conditions may be felt in the body, but not integrated within a person's brain (Van der Kolk, 2014). The traumatic event has not ceased to exist within the individual's body, but it is unconnected to an individual's conscious awareness. This disconnection can lead to experiencing anxiety, depression, dissociation, and stress that continues within the body even after the threat has disappeared. This stress can lead to symptomology within the body that has no known medical reasoning (Scaer, 2007). This symptomology can be chronic pain without prior injury, or numbness of a limb that occurs without reason (Scaer, 2007; Van der Kolk, 2014). The 5th edition of the Diagnostic and Statistical Manual of Mental Disorders, DSM-5, has made it clear that the individuals who have experienced a complex trauma or a stressful event "exhibit a phenotype in which, rather than anxiety symptoms, the most prominent clinical characteristics are anhedonic and dysphoric symptoms externalizing angry and aggressive symptoms or dissociative symptoms (American Psychiatric Publishing, p. 265, 2013).

Studies have shown that a flashback can have significant changes in the brain's functioning. Within a flashback of a traumatic event, the limbic area of the brain becomes overly activated in the amygdala (Arnold & Fisch, 2011). A flashback of a traumatic event also significantly decreases the functioning of the Broca's area - one of the speech centers of the brain located in the left hemisphere of the brain (Van der Kolk, 2014). Without an operating Broca's area, an individual is unable to process thoughts and feelings into actual words. Deactivation of the left hemisphere has a direct impact on the capacity to organize experience into logical sequences and translate our shifting feelings and perceptions into words (Van der Kolk, 2014). Trauma by nature drives those who experience it to the edge of comprehension - having their bodies re-experience the trauma, terror, helplessness as well as the impulse to fight, flight or freeze, but it is nearly impossible to articulate these extreme feelings. When something reminds traumatized people of the past, their right brain reacts as if the traumatic event were happening in the present (Van der Kolk, 2014). However, since the left hemisphere becomes, in a sense fractured, one may not be aware that they are re-experiencing that past, and have feelings of being enraged, ashamed, frozen or terrified.

When an individual is having a flashback of their experience of trauma, it often is felt as fragmented pieces - particular images, sounds, and feelings rather than the entire story (Van der Kolk, 2014). In this way, the body stores traumatic experiences.

### **The Attachment, Self-Regulation, and Competency Framework**

The individuals who can survive traumatic experiences in their childhood bear lifelong scars. The Attachment, Regulation, and Competency Framework (ARC) was created to

identify critical targets of intervention for children who have survived traumatic experiences, as well as including the caregiving systems within their lives (Blaustein & Kinniburgh, 2019). The development of the targets of ARC was from a thorough review of the literature on the impact of complex trauma and attachment stress on an individual's development, as well as factors leading to resilient outcomes within this specific population. The ARC framework is a component-based model that focuses on three core domains of intervention for youth who have endured trauma. These domains are attachment, regulation, and competency (Blaustein & Kinniburgh, 2019). Within these three domains are eight core targets of intervention. Each of these interventions has one overarching goal: trauma experience integration (Blaustein & Kinniburgh, 2019). Trauma experience integration applies the critical skills from the primary domains to the processing of traumatic event(s) (Hodgdon et al., 2013). ARC is designed for children ranging from early childhood to young adulthood and their caregiving systems while allowing for adaptation to particular settings, i.e., school, a residential treatment center, or outpatient clinic (Hodgdon et al., 2013).

Literature has shown that having a good support network constitutes the single most potent protection against becoming traumatized or re-traumatized. A safe attachment or caregiving system can buffer the impact of highly traumatic stressors, while a stressed attachment system can create significant risk for the child (Blaustein & Kinniburgh, 2019). This caregiving system can be the biological parents of the child, relatives, foster/adoptive parents, school systems, residential programs, caseworkers, and the plethora of professionals who interact with that child (Blaustein & Kinniburgh, 2019). Within the attachment block there are two key factors:

1. The building of a safe and healthy relationship(s) between the child and their caregiving system
2. Building skills and offering psychoeducation to the caregiving system to support the child's healthy development (Blaustein & Kinniburgh, 2019).

This building block includes educating the caregiver/support network on affect management, effective responses, and attuning to the child's needs.

Trauma in general and complex trauma explicitly has had a significant impact on the child's ability to regulate physiological, emotional, behavioral, and cognitive experience (Blaustein & Kinniburgh, 2019). Children are affected by failures of the attachment system. These are our earliest context for learning the lessons of self-regulation; this impacts significant stress on regulatory systems (Hodgdon et al., 2013). As a result, the children who have experienced a traumatic or stressful event often have significantly dysregulated internal experiences and a limited ability to understand, tolerate, and manage that experience. Therefore, the regulation building blocks focus on a child's awareness and understanding of their internal experience. This focus within ARC allows them to build up a tolerance for frustration and extreme emotions, and their ability to modulate and shift from extreme emotions effectively (Blaustein & Kinniburgh, 2019). This building block includes identification in self (connection of emotions, body sensations, behavior, and cognition), identifying others emotional expressions, and modulation of extreme emotions. This is where mindfulness and dance/movement therapy can lead to a better-integrated sense of self. Overall, the goal within the ARC framework is building the necessary resources, both internal and external, which allow for ongoing healthy development and positive functioning,

and academic engagement (Blaustein & Kinniburgh, 2019). These interventions target the importance of children achieving felt mastery and success, and developing and consolidating a confident and coherent sense of self (Achenbach & Rescorla, 2001). Although the structure of developmental competency is often a focus of supportive therapy, within trauma-focused therapy, building competency is a core component specifically with the treatment of children exposed to early complex trauma (Blaustein & Kinniburgh, 2019). Developmental competencies are associated with resilient outcomes in future life stages. Therefore, it is crucial that interventions with children whose development has been impacted by trauma targets achievement of essential developmental tasks as a primary goal (Blaustein & Kinniburgh, 2019). This competency foundation includes relational connections and resources, executive functions, and self and identity.

A cross-site assessment of the National Child Traumatic Stress Network's core data set determined that ARC is the second more frequently used treatment among national clinical sample of youth throughout several treatment settings who have experienced a wide range of traumatic events such as emotional, physical abuse, exposure to community and/or domestic violence, sexual abuse, traumatic grief, or neglect (ICF International, 2010). Within this evaluation the use of the ARC framework over a six- month intervention period with youth ages six to eighteen, there was a significant decrease in PTSD symptoms as well as a decrease in overall scores on the Child Behavior Checklist (Achenbach & Rescorla, 2001). Another evaluation of Alaskan children ages three to twelve, all of whom have experienced complex trauma, indicated that 92% of children who completed the ARC framework treatment achieved permanent placements compared with a less than 40% yearly permanency

rate for the state of Alaska overall (Arvidson et al., 2011). Notably, utilizing the ARC framework within a residential treatment center over six months displayed a 54% reduction in restraint use, in comparison with a 20% increase in restraint use among other residential programs administered by the same organization that did not receive the ARC intervention (Hodgdon et al., 2013). Furthermore, the youth who completed the ARC framework displayed a 17.2 point drop in the Child Behavior Checklist Total T-Scores, with also a reduction from 85th to 49th percentile in Behavioral Concerns within the Checklist (Hodgdon et al., 2013).

Ultimately the goal within the ARC framework is to work with children to actively explore, process, and integrate historical experiences into a coherent and comprehensive understanding of self in order to enhance the child's capacity to engage in present life - trauma experience integration. By practicing presence and utilizing mindfulness, this is achievable. Trauma experience integration is defined as: "the sequential development of the capacity to first survive and tolerate moments of overwhelming distress and arousal, which is brought on by both real and perceived experiences of danger. In order to build an ability to engage curiosity and reflect upon those states, and ultimately to be able to engage developmental capacities in service of purposeful action in the present moment," (Blaustein & Kinniburgh, p. 44, 2019).

### **Mindfulness**

A primary principle of recovery is self-awareness. Practicing mindfulness decreases the reactivity of the sympathetic nervous system; therefore, one is less likely to be thrown into a

fight, flight, or freeze response (Kabat-Zinn, 2013). Mindfulness has been shown to have several positive effects on psychiatric, psychosomatic, and other stress-related symptoms, i.e., depression and chronic pain (Hofmann, 2010). It has broad positive effects on physical health, including improvements in immune response, blood pressure, and cortisol levels (Van der Kolk, 2014). Mindfulness has also been shown to activate the brain regions which are involved in emotional regulation and leads to changes in the regions related to body awareness and fear. Practicing mindfulness even decreases the activity of the amygdala, therefore decreasing the reactivity of potential triggers (Van der Kolk, 2014).

Jon Kabat-Zinn, one of the forerunners in mind-body medicine, founded the Mindfulness-Based Stress Reduction (MBSR) program in 1979 at the University of Massachusetts Medical Center to help patients manage stress-related disorders and chronic pain conditions. He describes mindfulness as: “one way to think of this process of transformation is to think of mindfulness as a lens, taking the scattered and reactive energies of your mind and focusing them into a coherent source of energy for living, problem-solving and healing,” (Kabat-Zinn, p. 20, 2013). MBSR teaches individuals to bring attention to thoughts, feelings, and body sensations that influence our experiences.

The challenge of trauma treatment is not only dealing with past trauma but also enhancing the quality of day-to-day experiences. A reason that traumatic memories become dominant within an individual who has experienced trauma is that it is hard to feel genuinely alive within right now. If a person is unable to be fully present, then they often go to the places where they did feel alive - even if those places are full of horror and misery (Van der Kolk, 2014). For instance, an individual may have a flashback, reacting to the slightest cue

such as a hitting a bump in the road or a particular smell. This stimulus may cause the individual's brain to react as if they were there when the original trauma(s) occurred. As stated previously, during a flashback of a traumatic event, the limbic area of the brain becomes overly activated in the amygdala (Arnold & Fisch, 2011). Because the amygdala processes the information it receives from the thalamus quicker than the frontal lobes do, it dictates whether or not the incoming information is a threat to an individual's survival, before they are even aware of the danger (Van der Kolk, 2014). By the time it is realized what is occurring, our body may already be responding in a fight, flight, or freeze reaction. While reliving trauma can be intense, frightening, and possibly self-destructive, over time a lack of self-presence and awareness can be even more detrimental. The children who tend to act out, retorting to a fight or flight response, tend to get attention; while those who blank-out and freeze do not bother anyone and are sadly left to lose their future because they are not present in the now. Many treatments for traumatic stress focus on desensitizing individuals to their past, with the hope that being re-exposed to their past traumas will reduce emotional outbursts and flashbacks. However, research has indicated that perhaps desensitization may make an individual reactive, but not able to feel complete satisfaction in ordinary everyday life and experiences (Van der Kolk, 2014). Therefore, therapists in general and dance/movement therapists, in particular, can assist these individuals to mindfully observe their emotions and sensations and help them get in touch with the context from which they emerged. Through this awareness, individuals have the opportunity to live entirely within the present moment.

Eline Snel conducted a program of mindfulness training for school children, with a basis of Jon Kabat-Zinn's eight-week mindfulness program for adults (Snel, 2013). There were a total of three hundred children and twelve teachers at five schools which took part in the eight-week pilot study (Snel, 2013). Each school had a thirty-minute mindfulness session once a week and then did ten - minutes of practice every day to develop and practice what they had learned - this continued through the entire school year (Snel, 2013). Teachers and students responded with enthusiasm as they noticed positive changes, calmer atmospheres in the classroom, better concentration, and more openness overall (Snel, 2013). The children became kinder to not only others but also to themselves, more confident and less judgmental (Snel, 2013). With mindfulness, they were able to attune to other's needs, practice regulation and modulation, and become more positively self-aware. Though this study does not explicitly state that the participants have had an experience of trauma or a stressful event. However, this study did conclude that these students were able to build a sense of self which integrated their past and present experiences.

Thich Nhat Hanh, a Vietnamese Buddhist monk and peace activist, once stated, "breath is the bridge which connects life to consciousness, which unites your body to your thoughts." (Studd & Cox, p. 27, 2013). When the mind is scattered, breath can be the medium in which one anchors into the present moment. Breathing is one of the few body functions under both conscious and autonomic control. Breath allows us to be engaged in a constant conversation between the internal stimuli, and the outer world. Sharing breath with another, bonds humans in intimate relationships, and can allow for one to utilize the application of attunement and self-regulatory practices (Studd & Cox, 2013). This practice can allow for the foundations of

attachment to become adherent within the treatment of an individual who has experienced trauma. Breath can tell someone whether they are tense, restless, and calm; if someone is holding their breath or letting it flow freely. By paying particular attention to breath, one can become more aware of not only their inner world, but also to the here and now.

Dr. Bessel van der Kolk spoke of utilizing breath with acupressure points – thus allowing one not to become overwhelmed (Van der Kolk, 2014). Dr. van der Kolk identified that because this individual was able to keep her mind alive while allowing her body to feel the feelings she had come to dread, allowed her to stand back and observe her experience, rather than being immediately hijacked by her feelings (Van der Kolk, 2014). She gained ownership over her physical sensations and began to be able to tell the difference between past and present (Van der Kolk, 2014). Breath enabled this individual to be fully present in the here and now – mentally and physically. This intervention of learning to breathe calmly and remaining in a state of relaxation, even while accessing painful and horrifying memories is a vital and essential tool for recovery. While deliberately taking a few slow, deep breaths, the effects of the parasympathetic break the arousal one may feel while the sympathetic system is gearing to react to the perceived danger (Van der Kolk, 2014). The more focus on breathing, the more one can learn to tolerate physical sensations for what they are – sensations within the present movement with a beginning, middle, and end, as each breath has an in-breath, pause, and an exhale.

### **Dance/Movement Therapy**

The American Dance Therapy Association defines dance/movement therapy as:

*The psychotherapeutic use of movement to promote emotional, social, cognitive, and physical integration of the individual, to improve health and well-being. Dance/movement therapy began to emerge in the 1940s. Several of the dance/movement therapy pioneers were successful dancers who taught self-expression, and psychotherapeutic movement through the medium of their bodies. Dance/movement therapy is a “bottom-up” therapeutic approach that utilizes body-based therapeutic interventions before cognitive processing. Dance/movement therapy relies on the premise that movement is a tool for assessment, movement serves as a means for communication and that the mind, body, and spirit are interconnected (American Dance Therapy Association, 2016, para. 1).*

The ideologies of dance/movement therapy focus on the idea that the mind, body, and spirit are interconnected and that movement is an innate human foundational system of communication. All elements and components of a human are a set of related systems - the mind is part of the body, and the body affects the mind. By utilizing this connection between the body and mind, the body and mind can cohesively work as one exchanging a flow of information and process as a bidirectional circuit to regulate the internal systems of the individual (Tortora, 2006).

Dance/movement therapists have a unique set of interventions which help reach deeply into the complex web of the human personality. Some of these interventions are 1. Kinesthetic empathy, 2. Attunement, 3. Facilitation of presence/engaging within mindfulness (Levy, 1995). Dance/movement Therapy then offers a direct reflection of the client’s internal response in a non-threatening indirect manner. Such interventions are imperative to be mindful of within the ARC framework as well as within dance/movement therapy, as they

allow for a client to become present within their mind and body, while also integrating their trauma experience - which is ARC's overarching goal.

A crucial aspect of dance/movement therapy is the therapist's willingness to set their personal biases out of the therapeutic relationship. By doing so, this allows for an exchange of information between the therapist and client while meeting the therapeutic needs of the client. This ability to set aside the therapist's personal biases foster empathy for the client on a body level is kinesthetic empathy. Through this kinesthetic empathy, trust develops. Kinesthetic empathy also relates to the concept of synchronization - a human's inborn ability to synchronize with other individuals emotional and physiological state (Bentzen, 2015). Kinesthetic empathy can gain an understanding of other individuals authentic lived experience. Kinesthetic empathy is the awareness of the dance/movement therapist's body sensations which occur within the therapeutic relationship (Chaiklin & Wengrower, 2009). The kinesthetic empathy of the therapists focuses on the intersubjective experience rooted within the body (Chaiklin & Wengrower, 2009). This process of kinesthetic empathy, as well as synchronization, offers the opportunity for the therapists to attune to their client's feelings.

Attunement allows the therapist and client to interact with a shared feeling and inner experience. Attunement can be defined as the capacity of caregivers and children to accurately read one another cues and respond in a way that maintains rhythm, supports a co-regulated state and meet needs (Blaustein & Kinniburgh, 2019). It is a dynamic and ongoing process. This process can allow an individual to repair their ability to self-regulate their emotions and body sensations, through the introduction of the new movement which can

create a new emotional response (Bentzen, 2015; Chaiklin & Wengrower, 2009). The human nervous system organizes itself through attunement, missed attunement, the repair of attunement to establish a healthy response to feelings of pain or hurt (Bentzen, 2015). Mental flexibility and strength can be established and further developed through this process.

Relational trust is stronger through attunement. If a traumatic event has made an individual unable to repair the missed attunement, then relational trust is damaged or even lost. Through the therapeutic relationship within dance/movement therapy, the therapist aims to repair the moment of missed attunement by creating moments of presence utilizing mindfulness, which go from positive effect to negative and back to positive (Bentzen, 2015). This enables dance/movement therapists to facilitate within the client a sense of self-development - as the therapeutic relationship grows so does the client's self-perception as a whole, mind, and body (Bentzen, 2015).

By paying particular attention to client's use of space, time, weight and kinesphere, while utilizing mindfulness within dance/movement therapy, a client can bring awareness to their body. The dance/movement therapist are also able to bring awareness to the client's interactions with others (environment and persons). Within dance/movement therapy an individual can practice mindfulness through their body and mind within the present moment, allowing one to become in touch with one's thoughts and feelings, thus making it possible for them to begin to respond to internal and external stimuli. Within body-centered therapeutic approaches in general, and dance/movement therapy in particular, utilizing a mindful approach with one's breath can allow a client to become anchored within the present moment, thus having the potential to expand the whole of ones being. By being mindful of

one's breath, a client has the opportunity to become more aware of not only their inner world but also to the here and now.

Focusing on the body of the client and therapist within dance/movement therapy can produce a change in the client's unconscious body response, as well as responses in conscious cognitive processes. Bentzen (2015) stated, "in order to reach our full personality potential stimulation is needed - we need to be synchronized, mirrored, and contained in communication with other people, as this develops, the brain's emotional and personality potential" (p. 214). However, during developmentally sensitive periods this process can fail due to a singular traumatic experience, or developmental trauma.

The experience of trauma impacts neurological processing and resides within the body through repetitive patterns that continuously replay the traumatic or stressful event (Scaer, 2007). However, studies have indicated that the Broca's area of the brain significantly decreases when an individual becomes triggered and or experiences a flashback. This experience then makes an individual unable to formulate thoughts into words. Therefore, someone is always in this endless loop of re-experiencing their trauma, and quite literally are unable to verbalize this. Here is where dance/movement therapy can become one of the major interventions for an individual who has experienced complex trauma, as dance/movement therapists are particularly skilled at repairing the internal chaos of clients, caused by traumatic experiences (Scaer, 2007). It is no longer the perpetrator who is causing such harm to these individuals but instead their physical sensations.

Body-centered approaches can be valuable for most individuals who have experienced trauma, and integrating the mind and body is specifically helpful for children who have

experienced trauma. Dance/movement therapy works to heal the trauma survivor's internal processing by bridging the damaged mind-body connection. This repairing occurs while engaging an individual in non-threatening social interactions, providing space for the individual to reestablish their defensive system response, or their fight, flight, or freeze response.

Focusing on the body of the client and therapist in dance/movement therapy can produce a change in the client's unconscious body response, as well as responses in conscious cognitive processes (Bentzen, 2015). Increasing the range of movement patterns within the body is a way of introducing new behaviors within dance/movement therapy. If the body is continually replaying what the mind has repressed, then new movement patterns can allow the mind to re-focus and calm the aroused response systems (Van der Kolk, 2014, Levy 2005). Dance/movement therapists offer a unique opportunity to increase the range of action and interaction (Levy, 2005).

By utilizing interventions of kinesthetic empathy, attunement and the facilitation of presence, dance/movement therapists can work together within the therapeutic relationship, which mirrors the relationship between infants and caregiver. Such forms and deregulates the nervous system in a traumatized individual. The debilitating pendulum of the "trauma-vertex" is fractured (Scaer, 2007; Bentzen, 2015; Blaustein & Kinniburgh, 2019). Similar to the ARC framework, the therapeutic relationship between the client and therapist's provides safety as the therapist leads the client from an aroused state back to a baseline.

### **Conclusion**

Dance/movement therapy and dance/movement therapists hold unique and authentic capabilities to make permanent changes in the lives of individuals who have experienced trauma. Mindfulness can lead to greater self-awareness and self-presence, which then allows an individual to practice and identify their self-regulatory coping mechanisms. Sharing breath with another individual leads to attunement. Literature reveals that dance/movement therapy focuses on establishing safety and reconnecting the client to their body to then be able to identify patterns and conditioned responses (Levy 1995; Chaiklin & Wengrower, 2009; Bentzen, 2015).

The topic of trauma and treatment is vast. Therefore further research is required. This paper focuses on the ARC-framework, mindfulness, and dance/movement therapy, and how these support one another. If a person is not aware of what their body needs, then they are unable to take care of it. Trauma can cause brain circuits to reroute, the prefrontal cortex to be compromised by an overactive limbic brain and the amygdala to be hyper-vigilant, causing nervous systems to secrete a continual flow of stress hormones into the bloodstream (Van der Kolk, p. 2014). Even though the trauma is in the past, the emotional brain keeps generating sensation which makes the sufferer feel scared and helpless. Research has discovered that individuals who have experienced trauma often find it difficult to be completely relaxed and physically safe in their bodies (Scaer, 2007; Van der Kolk, 2014; Blaustein & Kinniburgh, 2019). Therefore, dance/movement therapy is the ideal medium to help in recovery with these specified individuals. Utilizing dance/movement therapy, and mindfulness, with the ARC-framework, is vital for children who have experienced trauma, so

that they feel physically safe within their bodies, in a relationship with others, while being present in the here and now. Few lives are perfect, as it is a rarity in this world to never have faced a challenge or stress. Small children are particularly skillful at compartmentalizing experiences – i.e., a child's natural love for their caregiver but also the dread of their assaults are held in separate states of consciousness. The ARC-framework allows for a wraparound opportunity with service providers, mindfulness offers the chance for these individuals to become comfortable and present within the current moment, and dance/movement therapy leads to a better overall self-awareness and gaining self-knowledge. By utilizing these three interventions together, a child who has experienced a type of trauma may begin trauma integration and start to develop into the authentic individual they deserve to become.

## References

- Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA school-age forms and profiles*. Burlington, VT: the University of Vermont, Research Centre for Children, Youth and Families
- American Dance Therapy Association, (2016). Para 1-2. *Frequently asked questions*.  
<https://adta.org/faqs/>
- American Psychiatric Association, (2013). *Diagnostic and statistical manual of mental health disorders: DSM-5 (5th ed.)*. Washington, DC: American Psychiatric Publishing.
- Arvidson, J., Kinniburgh, Howard, K., Spinazzola, J., Strothers, H., Evans, M., et al. (2011). Treatment of complex trauma in young children: Developmental and cultural considerations in applications of the ARC intervention model. *Journal of Child and Adolescent Trauma, 4*, 34-51.
- Arnold, C., & Fisch, R. (2011). *The impact of complex trauma on development*. Retrieved from <https://ebookcentral-proquest-com.ezproxyles.flo.org>
- Bentzen, M. (2015). Dances of connection: Neuroaffective development in clinical work with attachment. *Body, Movement, and Dance in Psychotherapy, 10(4)*, 211-226. doi: 10.1080/17432979.2015.1064479
- Blaustein, M. and Kristine, K. (2019). *Treating traumatic stress in children and adolescents: How to foster resilience through attachment, self-regulation, and competency*. Second edition. New York, N.Y.: The Guilford Press.
- Chaiklin, S., & Wengrower, H. (2009). *The art and science of dance/movement therapy: Life*

- is dance*. New York: Routledge.
- Duros, P., & Crowley, D. (2014). The body comes to therapy too. *Clinical social work journal*, 42(3), 237-246. Doi:10.1007/s10615-014-0486-1
- Hodgdon, H., Kinniburgh, K., Gabowitz, D., Blaustein, M., & Spinazzola, J. (2013). Development and Implementation of Trauma-Informed Programming in Youth Residential Treatment Centers Using the ARC Framework. *Journal of Family Violence* 28(7), 679–692. <https://doi-org.ezproxyles.flo.org/10.1007/s10896-013-9531-z>
- ICF International. (2010). Evaluation of the national child traumatic stress initiative: FY 2010 Annual Progress Report, Executive Summary.
- Kabat-Zinn, J. (2012). *Mindfulness for Beginners: Reclaiming the present moment- and your life*. Boulder, C.O.
- Kabat- Zinn, J. (2013). *Full catastrophe living: using the wisdom of your body and mind to face stress, pain, and illness*. New York.
- Levy, F. J. (1995). *Dance and other expressive art therapies: When words are not enough*. New York: Routledge,.
- Levy, F. J. (2005) *Dance movement therapy: A healing art*. Reston, VA: National Dance Association and Association of the American Alliance for Health, Physical Education, Recreation, and Dance,.
- Powell, B. (2018). *Fun games and physical activities to help heal children who hurt: Get on your feet!* London: Jessica Kingsley.
- Scaer, R. C. (2007). *The body bears the burden: Trauma, dissociation, and disease*. New

York: Haworth Medical.

Snel, E. (2013). *Sitting like a frog: Mindfulness exercises for kids*. Boulder, C.O.: Shambhala Publications.

Tortora, S. (2006) *The dancing dialogue: Using the communicative power of movement with young children*. Baltimore, M.D.: Paul H. Brookes.

Van der Kolk, B. A. (2014). *The body keeps the score: brain, mind, and body in the healing of trauma*.

***THESIS APPROVAL FORM***

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In the judgment of the following signatory this thesis meets the academic standards that have been established for the above degree.

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