

Lesley University

DigitalCommons@Lesley

Expressive Therapies Capstone Theses

Graduate School of Arts and Social Sciences
(GSASS)

5-2024

Integration of Adverse Childhood Experiences in Adulthood Through Dance Movement Therapeutic Techniques

Kimberly Hoj
kimberlyhoj@gmail.com

Follow this and additional works at: https://digitalcommons.lesley.edu/expressive_theses



Part of the [Dance Movement Therapy Commons](#), and the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Hoj, Kimberly, "Integration of Adverse Childhood Experiences in Adulthood Through Dance Movement Therapeutic Techniques" (2024). *Expressive Therapies Capstone Theses*. 658.
https://digitalcommons.lesley.edu/expressive_theses/658

This Thesis is brought to you for free and open access by the Graduate School of Arts and Social Sciences (GSASS) at DigitalCommons@Lesley. It has been accepted for inclusion in Expressive Therapies Capstone Theses by an authorized administrator of DigitalCommons@Lesley. For more information, please contact digitalcommons@lesley.edu, cvrattos@lesley.edu.

**Integration of Adverse Childhood Experiences in Adulthood
Through Dance Movement Therapeutic Techniques**

Capstone Thesis

Lesley University

August 4, 2022

Kimberly Hoj

Dance Movement Therapy

Dr. Elizabeth Kellogg, Ph.D.

Abstract

Expanding knowledge about how to self-regulate when faced with challenging circumstances has the potential to benefit individuals and communities, especially in our post-pandemic environment with increasing needs for mental health support. This thesis provides a psychoeducational basis for use of dance movement therapeutic techniques to integrate adverse childhood experiences. The literature review refines an understanding of *big T* and *little t* trauma as it relates to mental illness, polyvagal theory, nervous system regulation, the window of tolerance, body armoring, somatic psychotherapy, trauma-informed care, adverse childhood experiences and post-traumatic growth.

This thesis culminates in a personal arts-based autoethnography informed by the theoretical framework summarized by Pierce (2014) to work with individuals through a three-phase dance movement therapy practice to process trauma-related content. The author collaborates with a photographer who used the “pop and blur” technique to capture a trail of light evident in the image to illustrate the somatic energy within the movement in a static, preserved and visually intriguing manner. Future applications of this arts ethnography will benefit therapists, educators and anyone who desires to process adverse childhood experiences.

Keywords: *Adverse Childhood Experiences, Dance Movement Therapy*

Author Identity Statement: The author identifies as a straight White-passing Jewish woman from California of mixed European and Hispanic ancestry.

Integration of Adverse Childhood Experiences in Adulthood Through Dance Movement Therapeutic Techniques

“When we don’t understand how our emotions shape our thoughts and decisions, we become disembodied from our own experiences...”- Brené Brown

Expanding knowledge about how to self-regulate when faced with challenging circumstances has the potential to benefit individuals and communities. This thesis is designed to provide a psychoeducational basis for exploration of dance movement therapeutic techniques and will culminate in a personal arts-based autoethnographic study that can be applicable to use within future workshops with individuals including teachers and therapists. This personal study of my own embodied challenges, known as *adverse childhood experiences* (ACEs) as described later in this paper, has the potential to increase my own somatic integration of such life events while also informing how I can be present for others as a therapist in my future work and therapeutically aware in my present work as an educator. This learning will inform future workshops for teachers as well as therapists who strive for an embodied presence within their work.

The need to understand the impact of trauma on humans is more essential each day for the collective health and well-being of our communities. There is much to be considered in the literature about how trauma may impact the development of mental illness; the literature review included in this paper will explore the difference between responses that indicate annoyance or distress from “an emotional response to a terrible event like an accident, rape or natural disaster” (American Psychological Association, 2022) as well as the link between childhood trauma and mental illness.

The need to support the mental health of individuals is significant in our culture.

The State of Mental Health in America report (Reinert, et al., 2021) key findings include:

- Nearly 50 million or 19.86% of American adults experienced a mental illness in 2019.
- More than half of adults with a mental illness do not receive treatment, totaling over 27 million U.S. adults.
- 4.58% of adults report having serious thoughts of suicide. This has increased every year since 2011-2012.

The pandemic has heightened a crisis in mental health; the concerns about the impact of indetermination experienced during pandemic home confinement and physical separation spotlighted by Moreno et al. (2020) make sense now in 2022, such as “social isolation, loss of income, loneliness, inactivity, limited access to basic services, increased access to food, alcohol, and online gambling, and decreased family and social support, especially in older and vulnerable people” (pg. 813). For instance, Joseph et al. (2022) identified preliminary data about a correlation between home quarantine with intensified symptoms of depression, anxiety, and loneliness; more research is needed to assess if this correlation is commensurate with typical experiences of the pandemic. The kaleidoscope of possible mental health impacts of the pandemic across various groups is evident in Thomeer et al. (2022) findings that “mental health of Black, Hispanic, and Asian respondents worsened relative to White respondents during the pandemic, with significant increases in depression and anxiety among racialized minorities compared to Whites;” this research included a prediction that the pandemic may have chronic mental health repercussions without systemic changes including improving access to health care.

Thus, it is even more essential to find innovative and accessible ways to help individuals process and integrate traumatic experiences, whether within the context of a therapeutic relationship or within arts-based educational settings. Creative arts therapies

such as dance movement therapy can help a client's self-awareness and self-expression while processing traumatic life events that caused them to originally leave their *window of tolerance* and to dysregulate (Perryman, et al., 2019) as described later in this paper.

I identify as a straight, White passing, Jewish-American fifty-two-year-old woman of mixed European and Hispanic ancestry living in California; my interest in the topic of childhood trauma stems from my awareness of the impact of adverse childhood experiences in my own life: my brother scores a 9 out of 10 on the ACEs quiz while I score at least a 6 on the same assessment (Harvard University Center for the Developing Child, n.d.). I have always been exceptionally curious about understanding how both he and I can strive for mental health given the challenging circumstances of our youth. Thankfully, my own brother is in recovery within the last six years after a time of alcohol and drug abuse earlier in his life.

As young children, we were told that we needed to live apart from each other after our parents' divorce because our father had health insurance that would pay for my open heart surgery needed to correct an atrial septal defect; during these years, my brother lived with my mother, was physically abused by her boyfriend and was consistently exposed to alcoholism and drug use until my mother refused to let my brother back in the house one day when he was seven years old. He came to live with me at that time; I was ten years old and lived with our kind workaholic attorney father and our emotionally and sometimes physically abusive stepmother who we later would realize likely had borderline personality disorder. Our mother eventually stopped seeing us entirely during our childhood and despite her formal objection in court, her desertion resulted in our stepmother's adoption of both of us as teenagers; hence, we were left with many

unspoken questions for which we have each spent much of our adult lives seeking answers. As young adults ourselves, we learned that our father was bisexual and at times clinically depressed; we later learned his parents sent him to conversion therapy as a young adult which failed. Our mother's death under questionable circumstances in 2006 was the catalyst for our willingness to learn more: our mother, the eldest of eight children, ran away at seventeen years old from the poverty-stricken remote town in Colorado where she was born and had endured ongoing abuse in her childhood as well as persistent issues of hunger, such as stealing food from the school cafeteria to share with her siblings and eating whatever she could find while picking in the fields. Learning about her childhood experiences steeped in a lack of safety and stability helped to explain the patterns of our mother's behavior that we witnessed: alcoholism, depression, and the abandonment of her children.

The nature of my upbringing meant that I was a restrained yet internally dysregulated and frightened individual within my own sphere at home; doing well academically, dancing alone in the garage in middle school and reading the book *I'm Ok, You're Ok* in sixth grade gave me some solace (Harris, 1967). Following open-heart surgery when I was eight years old, I remember many incidents in my upper elementary and middle school years of somatic concerns including frequent infections and fevers, headaches, stomach aches and what I now recognize as the physical manifestations of anxiety, low immune response and not feeling safe. School, however, was a safe place for me and I was able to thrive as a student. It makes sense that I became a psychology and dance teacher as well as a school counselor; eventually I served as a school district administrator exclusively for a period of time and attended a training about Adverse

Childhood Experiences where a group of principals, assistant principals and district office staff completed the ACES test. In the debrief, I was surprised that every person at my table had a score of six or more adverse childhood experiences, thus clarifying my deep interest in learning more on this subject while also recognizing the significance of needing to provide a larger conceptual and personal framework for educators and others who serve in caregiving roles. The need to support individuals to self-regulate emotionally is significant to ensure their ability to provide trauma-informed supports, whether in classroom, medical or other settings. These caregivers are the first line of interaction with children and adults within our schools, hospitals, and community centers.

Literature Review

I selected the capstone option of devising a community-based project specific to the thesis topic. This approach makes sense given the low profile that dance movement therapy has within my community; additionally, using dance movement therapeutic techniques within a group setting has the potential to surface meaningful discussion about supporting others and may normalize the expression of the energetic qualities of adverse childhood experiences from an adult perspective.

Trauma

The idea of trauma conjures images of physical trauma such as bruising and injuries and aligns with the historical use of the term within Greek culture (Haslam, 2016). When considering emotional trauma, it is important to acknowledge that an individual's emotional trauma may be invisible to others. Emotional trauma is also distinct from everyday challenges that might be annoying, difficult, or disheartening; that

said, it is possible that everyday challenges for adults can spark recall of emotional trauma from childhood.

However, distinguishing *big T trauma* from *little t trauma* is essential as the word *trauma* has become so frequently used that one need only do a Google search for “trauma overused” to find the collective concern about the potential for “turn(ing) every event into a catastrophe, leaving us helpless, broken, and unable to move on” (Haslam, 2016). Certainly, everyday challenges can have elements that are emotionally painful; however, “traumatized people become stuck, stopped in their growth because they can’t integrate new experiences in their lives,” as noted by clinician Bessel Van der Kolk (2014).

Trauma and Mental Illness

Van der Kolk’s *The Body Keeps The Score* (2014) recounted the history of the failed movement in 2005 to include a diagnosis of *developmental trauma disorder* within version five of the Diagnostic and Statistical Manual of Psychological Disorders. He acknowledged that a formal diagnosis in the DSM-5 would provide valuable opportunities for funding, research, and the development of broader interventions for those who have experienced big *T* trauma during developmentally sensitive periods of their lives.

Van der Kolk wrote that “if the people whom you naturally turn to for care and protection terrify or reject you, you learn to shut down and ignore what you feel...Managing your terror all by yourself gives rise to another set of problems: dissociation, despair, addictions, a chronic sense of panic, and relationships that are marked by alienation, disconnection, and explosions” (Van der Kolk, 2014, p. 213). He

wrote of Putnam and Trickett's twenty-year longitudinal study of 84 sexually abused girls whose average age was eleven years old:

Compared with girls of the same age, race, and social circumstances, sexually abused girls suffer from a large range of profoundly negative effects, including cognitive deficits, depression, dissociative symptoms, troubled sexual development, high rates of obesity, and self-mutilation. They drop out of high school at a higher rate than the control group and had more illnesses and health-care utilization. They also showed abnormalities in their stress hormone responses, had an earlier onset of puberty, and accumulated a host of different, seemingly unrelated psychiatric diagnoses" (Van der Kolk, 2014, p. 164).

Subsequent cycles within this longitudinal study asked participants to share the most awful event they had experienced in the year prior while researchers tracked physiological responses of the sexually abused girls for evidence of the stress hormone cortisol; over time, when asked the same question in later cycles of research, evidence showed that the abused girls were more likely to have less cortisol in their systems than the control group, indicative of an adaptive biological component of numbing when faced with sustained traumatic events.

Polyvagal Theory, Nervous System Regulation, and the Window of Tolerance

When considering the potential impact of trauma, whether big *T* or little *t*, it is essential to consider a somatic understanding of how the body manages when faced with a stressor. In Porges' presentation *The Science of Compassion* (2012), he described the phylogenetic and biological basis for the two-way connection between the brain and the viscera through the vagus nerve. The communication within the body through the vagus nerve informed Porges' *polyvagal theory* which "explains the functional relevance of the mammalian modifications of the autonomic nervous system and emphasizes the adaptive consequences of detecting risk (i.e., safety, danger, or life threat) on physiological state,

social behavior, psychological experience...and health” (Porges, slide 6). Polyvagal theory relies on the assumption that the human autonomic nervous system is programmed to adjust based on the evolution of “three neural circuits” to modulate behavior for one of three aforementioned risk conditions; the perception of any of these three conditions is based on “neuroception” to stimulate the neural pathways resulting in predictable patterns of behavior (Porges, slide 7) ranging from social engagement when safe, fighting or fleeing when in danger, or freezing when encountering life threat.

Porges acknowledged the nature of relationships between individuals as a means of “bidirectional neuroception” allowing for co-regulation or down-regulation of the nervous system when faced with stressors. Such neuroception is based on the hard wiring of the cortex and brainstem through the cranial nerves including the vagus nerve to the muscles of the face, neck, jaw, larynx, heart, and lungs within what Porges called the *Mammalian Social Engagement System* (slide 8). Further discussion in this paper will address how the social engagement system of co-regulation is connected to dance movement therapeutic techniques.

A conceptual understanding of the *window of tolerance* is helpful in explaining the process of down-regulation of the nervous system. Siegel (2012, p. 587) described the window of tolerance as

...the span of arousal within which a system can maintain the harmonious and adaptive flow of integration. At one end of the window the system moves toward rigidity; at the other end, the system moves toward chaos. The width of the window can be shifted, such that we can speak of “widening the window of tolerance,” which means broadening the span of arousal within which the person, pair, or group of individuals can function adaptively. Windows can also be narrowed under certain situations when the state being created is less tolerated, and the system of the person or pair or group is more likely to “burst through the window” into chaos or rigidity and become nonfunctional.

Siegel later noted that *response flexibility* – the ability to mindfully choose from a variety of options for how to respond to incoming stimuli rather than to reflexively act – is present while an individual is within their window of tolerance. Without the ability to self-regulate or co-regulate with another person, a person will dysregulate out of the window of tolerance given their own individual threshold for managing the sensory stimulation of arousal at any moment in time. It is important to note that individual histories, life experiences and context may play a role in establishing narrow or wide windows of tolerance across various people.

Body Armor and Somatic Psychotherapy

As a precursor to somatic psychotherapies supporting the alignment of mind-body connection, Wilhelm Reich distanced himself from his teacher, Sigmund Freud, as he believed that the founder of psychotherapy did not fully emphasize the impact of the soma or body within his approaches (Oofana, 2018). Reich (1972 as cited in Roncada, et al., 2018) theorized that a persistent state of physical tension could develop into “muscular armor as the experience-dependent development of a protective shell of muscle tension grown over time in response to a history of threat, anxiety and trauma.” The theory of body armoring is based on the assumption that an individual’s resistance to the expectations of greater culture along with an inability to authentically express oneself correlates with increased physical tightness within various muscles.

Somatic patterning, defined as “persistent unconscious movement habits of a body along with related tension and atrophy patterns in the tissues” (Foster, 2007, as cited in Long, 2020) relied more heavily on assorted biological theories (Roncada, et al., 2018). Furthermore, Roncada et al. indicated that body armor is a subset of somatic

patterning that overemphasizes the use of some muscles while other muscles wither from lack of use. More recent research (Long, 2020) in this area explored the potential for various somatic practices such as myofascial release to be helpful for individuals within a counseling relationship with a somatic psychotherapist. Further discussion of somatic practices through a lens of dance movement therapeutic techniques is referenced later in this literature review.

Trauma-Informed Care

Systemically, trauma-informed care as a standard in the medical profession evolved in the post-Vietnam era due to the physical and emotional wounds of those who fought in wars; growing awareness within the field of education of trauma-informed care has been cited since the impact of Hurricane Katrina in 2005 (Ohio Leadership, n.d.).

The federal Substance Abuse and Mental Health Services Administration (2014) describes six key principles of a trauma-informed approach for mental health clinicians when working with clients. In a therapeutic relationship, clients need to feel a sense of physical and psychological *safety*. The therapist must project *trustworthiness* and promote *transparency* in their interactions with the client. The therapist facilitates opportunities for *peer support* among individuals who have a shared lived experience; creating conditions receptive to *collaboration* and promoting *mutuality* with the client is a goal for the therapist. This foundation ensures that a client will experience *empowerment* based on respect for their *voice* and *choice* within the therapeutic relationship. Respect for *cultural, historical and gender issues* within this relationship are essential; therapists must aim to understand the worldview and intersectionality of each client to support their goals within therapy. Supporting a client's emotional wellness requires a nuanced

awareness from the therapist of trauma-informed principles as well as the ongoing application of these principles in the interactions within the therapeutic relationship.

The application of the principles of a trauma-informed approach more broadly is evident in the response to the COVID-19 pandemic within education systems since 2020. Current professional development for teachers and administrators is focused on the principles of trauma-informed care when working with students as well as self-care practices. For instance, the non-profit organization *Give An Hour* provided emotional wellness and trauma-informed care training to teachers at my school in October of 2021. This training included psychoeducation for staff members about emotional wellness and signs of emotional suffering that might be present within our classrooms and schools given the range of pre-existing little *t* and big *T* trauma.

Adverse Childhood Experiences

The concept of *adverse childhood experiences* emerged through the initial research study *Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults* (Felitti et al. 1998).

The adverse childhood experiences (ACEs) assessed in the original study included physical abuse, sexual abuse, emotional abuse, physical neglect, emotional neglect, violence against a mother, parental divorce, household member having problems with substances, household member having problems with mental illness, and incarceration of a household member (Dube et al., 2003; Felitti et al., 1998 as cited in Asmundson & Afifi, 2020). Felitti et al., (1998) found a “strong relationship between the number of childhood exposures and the number of health risks factors for leading causes of death in adults” (p. 250).

Further, the original research indicated that ACEs were pervasive with 52% of adults with at least one ACE with 6.2% indicating 4 or more types of ACEs. Substance abuse was the most dominant adverse childhood experience in the 1998 study. Crowder's (2021) review of the literature suggested that women and individuals from racial and ethnic minority groups have also been found to be at larger risk of having more ACEs than men or individuals from dominant racial and ethnic groups. Additionally, such research outcomes have been criticized for oversimplification of the complexity of trauma as the original ACEs assessment does not factor in the frequency or intensity of adverse experiences.

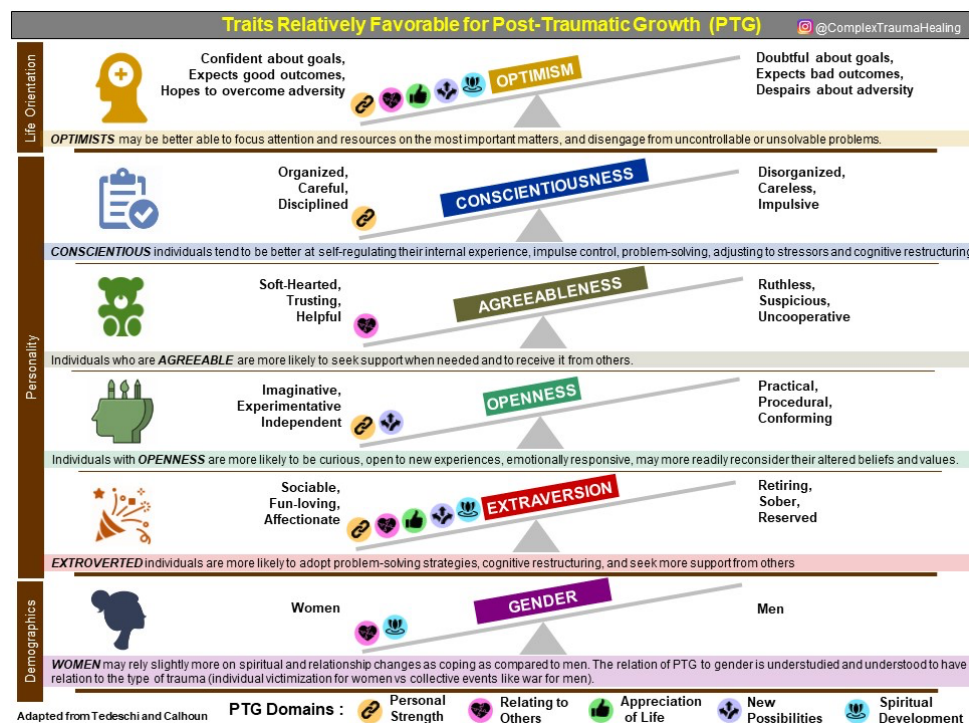
It is reasonable to consider if all ACEs are experienced as big *T* traumatic. While adverse childhood experiences may in fact all hold a degree of trauma, much depends on the nature of the person who is affected and their specific lived experience of their situation – the frequency, duration, and intensity of those experiences – and how each individual responds moving forward.

Post-Traumatic Growth

The process of *resilience* had been identified by Emmy Werner in a longitudinal study of babies born in 1955 on the island of Kauai. When considering why one individual's level of functioning was more negatively impacted by adversity than another person, the research demonstrated that resiliency developed over time with the presence of "supportive relationships and new opportunities" (Werner & Smith, 1992 as cited in *Emmy Werner: Resilience Pioneer*). Resiliency may be viewed as consistent with *posttraumatic growth*.

Tedeschi and Calhoun (1996) created the Posttraumatic Growth Inventory which identified five key domains including *new possibilities*, *relating to others*, *personal strength*, *spiritual change*, and *appreciation of life*; this inventory was administered along with the Traumatic Stress Schedule to distinguish which participants in the study had experienced a trauma within the past 12 months from those who had not experienced a traumatic event.

As seen below, the outcomes of Tedeschi and Calhoun's continued research suggest that there is a positive correlation across these five domains for posttraumatic growth for individuals with specific personality traits such as conscientiousness, agreeableness, openness, and extraversion, as well as for women (Complex Trauma Healing, 2019).



From *Complex Trauma Healing Infographics*, by Complex Trauma Healing, 2019 (<https://complextraumahealing.wordpress.com/2019/04/08/5-domains-of-post-traumatic-growth/comment-page-1/#comment-570>). Reprinted with permission.

Dance Movement Therapeutic Techniques

The core concepts of dance movement therapy are based on *kinesthetic empathy* – the idea that an individual can sense through their own body what a possible emotion feels like to another person. Homann (2010) integrated previous research from Hart and Panskepp in their description of the pathway of kinesthetic empathy:

As sensory information from the outside world is received, it travels first to the thalamus and then to the specific sensory association areas of the brain. In kinesthetic sensing, this area is called the parietal lobe, or somatosensory cortex. The somatosensory cortex receives neuronal input from each part of the body in proportion to the number of nerve endings in the body, making an internal body map in the brain. This region works closely with the limbic system, including the hippocampus and the amygdala, to imbue the sensory perceptions with affective or emotional value. Finally, the limbic system interfaces with cortical process areas and marks certain information as particularly relevant. Thus, emotional processing is first linked to the body's response to the environment and then continues as a complex system, which influences cortical processing by imbuing experience with meaning. (p. 84-85)

Dance movement therapeutic techniques such as attunement, meeting people where they are at, mirroring, and body scanning are effective in building a community of trust and safety. Such techniques are valuable when establishing a safe environment for co-regulation and down-regulation of the nervous system to take place for individuals within a group setting.

Social engagement within a dance movement-based environment allows for what Porges (2012) termed the *neural love code* to become unlocked between individuals; the typical vigilance against predators is released which is evident when the orbital eye muscles crinkle indicating relaxation in the middle ear muscles trained to sense the sounds of a predator. To the observer, this will appear as eye contact with a smile between two people.

Dance therapist Norma Canner's philosophy of meeting people where they are at within her work with individuals and groups was evident in her biopic *A Time to Dance* where she was profiled for her work with children with disabilities by focusing on what they could do rather than their restrictions (Bushy Theatre Films, 1998, 14:58); this dynamic acceptance allowed her to approach others in a manner that caused them to feel safe, welcomed and accepted, easing her ability to attune to their needs. Her active presence and attention to others allowed her to read the room and devise her own kinesthetic sensing. While dynamic acceptance may have challenges within a dance classroom setting in some cases, this type of energy promotes the continued unlocking of the *neural love code*.

When facilitating movement with my dance students, I frequently use the prompt "find a partner to mirror your movement with" while we are engaging in axial improv activities; alternatively, the prompt "pick up a movement or gesture from someone else that inspires you" while we are in locomotion encourages movers to notice and pattern their actions intentionally from what they see. Berrol (2006) referred to dance therapist Trudi Schoop's instinctive use of mirroring by following "strangers, imitating their gait and posture, and imagined, by taking in their manner of movement, that (she) was able to feel their state of mind" (p. 306) further supporting the value of kinesthetic empathy in dyad and group interactions. Homann (2010) wrote "the somatic attunement of the therapist, in face-to-face engaged interaction through embodied movement, activates the mirror neuron system, and, through consequential neuronal, hormonal, and chemical cascades connecting the limbic system, the autonomous nervous system and the right

hemisphere's orbitofrontal cortex, facilitates the experience of being with another, in a conscious manner.”

Somatic practices such as body scanning and progressive muscle relaxation have the potential to support greater mind-body connection. Awareness of the body can result in recognition of ineffective somatic patterns in the body such as holding one's breath, shallow breathing and unnecessary muscle gripping or tension. Further, “scientific methods have confirmed that changing the way one breathes can improve problems with anger, depression and anxiety” (Van der Kolk, p. 270-271). The mere act of breathing together with a group in synchronicity can invoke a larger sense of *entrainment* – “the synchronization of different rhythmic cycles that interact with each other” (Dictionary.com, 2022) between an individual and a group.

Integration

Integration is “the coordination or unification of parts into a totality...for example, the integration of personality denotes the gradual bringing together of constituent traits, behavioral patterns, motives, and so forth to form an organized whole that functions effectively and with minimal effort or without conflict” (American Psychological Association, n.d.). Ambivalence and inner conflict may be a factor for ACEs-affected adults given one's personal history, perspective, and emotional support such as access to counseling. Disintegration may be seen in the disconnection between body and mind that can surface in a variety of behavior including, but not limited to, anxiety, depression, and post-traumatic stress disorder.

Integrating the felt sense in the body with the language centers in the brain is a goal for helping individuals to name and process traumatic experiences. “The need for

varying forms of expression might be attributed to the fact that Broca's area and Wernicke's area, the parts of the brain that are responsible for speech, are uninvolved or offline during traumatic events, thus making it difficult for many people to verbally describe their traumatic experience" (Cozolino, 2010, as cited in Levine, et al., 2015, p. 45-46). In some cases, little *t* or big *T* traumas take place prior to the development of language to name and describe such events, leaving only a felt sense in the body reflecting one's lack of safety at that time.

Healing from trauma does not necessarily mean trauma is resolved as much as it means that one's relationship to trauma is shifted and eased. *Somatic experiencing* (Levine as cited in Elliott, 2019) is one means to support this process and includes a sequence within a therapy session for the therapist to: 1) establish embodied presence through grounding, self-regulation and attunement to the client, 2) invite the client to resource by identifying a neutral place in the body as a resource, 3) asking the client to track sensation and remain curious, 4) notice what elements might be coupled with sensations, 5) stay present in the body through sensation rather than in the details of the story, 6) titrate or pendulate from the sensations within the story to the resourced neutral sensation as needed, 7) pause as needed, 8) notice spontaneous movements from the client and support the client in working through them, 9) pendulate as needed and 10) conclude with inviting client to orient through visual focus and body awareness.

In summary, this literature review served as the basis for my own self-study process as described in the Methods section below. Understanding the research provides a foundation for the intention to create a community engagement project that allows for expression of the implicit emotional residue of adverse childhood experiences in a

manner that is somatically based, tangible, safe, respectful and reflects the potential for personal growth among the individual participants.

Methods

My self-study process relied on the exploration of dormant emotional content from my childhood that was further exacerbated by my mother's unexpected death under questionable circumstances in 2006.

To prepare for the self-study, I sifted through numerous ephemera from my childhood that I found in my mother's home after her death including photographs, letters, and personal documents and selected a limited number of items that I packed into a small duffle bag for a movement study (steps 2-5 below) as well as an Adverse Childhood Integration photography session.

Beyond the research referenced in the literature review, this process was informed by the theoretical framework summarized by Pierce (2014) to work with individuals through a three phase dance-movement therapy practice to process trauma-related content: establishing safety and stability through a felt sense in the body (*phase 1*), integration of traumatic memories to build capacity within one's *window of tolerance* (*phase 2*) and development of the relational self and rehabilitation for future growth (*phase 3*) (Pierce, 2014, pp. 9-10). This approach emphasized attunement, mirroring, grounding, breathing, and self-awareness of thoughts and feelings.

Procedure

Step 1: I secured a quiet, safe space for myself with ample uninterrupted time alone. I sat on the floor. The choice to sit on the ground was intentional to feel physically supported. I took time to breathe and feel the floor.

Step 2: I preset an iPad on the right side of myself to record my physical responses and reactions from a side perspective. I also set another iPad in front of myself to record my reactions from a different perspective.

Step 3: I held and looked at each item at a measured pace, removing it from the duffle bag, placed on the left of myself, eventually placing each item on the ground to my right. As I viewed each item, I welcomed whatever movement surfaced from my body.

Afterwards, I wrote a list of what thoughts and feelings surfaced in my mind and body.

Step 4: I viewed each of the videos to document my movement.

Step 5: I viewed each of the videos to mirror the movements. I noted what I felt in my body afterwards.

Step 6: Transition to photography studio. Photographer Dean Zatkowsky captured images of my movements while interacting with the ephemera, informed by the process outlined above, using the “pop and blur” technique.

Photographic Technique

The “pop and blur” technique in photography allows for a trail of light to be evident in the development of the photo to suggest the energy in the movement in a static, preserved manner. Photographer Dean Zatkowsky indicated that the approach “combines a slow camera shutter speed with a fast electronic flash; the camera shutter stays open long enough to capture blurred movement using ambient light and the flash fires a burst of light fast enough to freeze motion” (Zatkowsky, personal communication, July 17, 2022).

Results

The nature of the process described above was more therapeutic than I expected. While the process described above prepared me for the opportunity to move within the

context of the photographic space, I realized that in many ways, the experience is mediated by the interaction and creative dialogue with the photographer. Further commentary in the discussion will address this point of learning.

The timeframe of this project was impacted by COVID within my community as steps 1-3 were completed approximately one month prior to steps 4-6.

The one-hour long photography session produced approximately 25 images. The images range in terms of placement in space – seated or standing – as well as in the variance of emotional expression including anger, sadness, frustration, and contentment.



Figure 1. Anger. From Adverse Childhood Integration Photo Session, 2022. Photo Credit © 2022 Dean Zatkowsky with usage rights granted to Kimberly Hoj.

This image (*Figure 1*) captured the physical expression of internal somatic experience at that moment when thinking about memories of childhood represented in the ephemera. The action included raising arms and then stomping on the ground. The following images (*Figure 2, Figure 3*) illustrated the tossing of ephemera in the air as if it is a projection from my brain.



Figure 2. What's In My Head. From Adverse Childhood Integration Photo Session, 2022. Photo Credit © 2022 Dean Zatkowsky with usage rights granted to Kimberly Hoj.



Figure 3. What's In My Head II. From Adverse Childhood Integration Photo Session, 2022. Photo Credit © 2022 Dean Zatkowsky with usage rights granted to Kimberly Hoj.

Additional photos (*Figure 4 & Figure 5*) surfaced unexpected outcomes of childhood trauma such as the dropping of ephemera, symbolizing letting go of the past.



Figure 4. Letting Go. From Adverse Childhood Integration Photo Session, 2022. Photo Credit © 2022 Dean Zatkowsky with usage rights granted to Kimberly Hoj.



Figure 5. Releasing. From Adverse Childhood Integration Photo Session, 2022. Photo Credit © 2022 Dean Zatkowsky with usage rights granted to Kimberly Hoj.

The photo below (*Figure 6*) secured a moment of extension of the arms and a leg along with muscle tension in right foot and a peaceful expression on my face. This energy might be interpreted as a reflection of post-traumatic growth.



Figure 6. Satisfied. From Adverse Childhood Integration Photo Session, 2022. Photo Credit © 2022 Dean Zatkowsky with usage rights granted to Kimberly Hoj.

Discussion / Future Application

The process of creating the Adverse Childhood Integration arts ethnography revealed significant themes in terms of the need for safety, ambivalence, play and meaning making.

I learned firsthand how essential it is to feel safe while engaging with the sensitive tasks within this self-study. It is worth noting that a participant in an adverse childhood integration session with a photographer may react with comfort or discomfort with the process of being seen. In my own experience, I do not like having my pictures taken in most cases and prefer to take photographs or produce opportunities for others to be featured. Even though I am well-acquainted with the photographer, I felt a degree of anxiety about being seen in this manner; my body felt warmer than typical during the photographic process, and I was not hungry for hours before and during the session. In the weeks prior to the session, I felt ambivalent about revealing my personal struggles within this context; somatically, this feeling arose in my stomach with a sense of uneasiness. Throughout the process of preparing for and participating in the photography

session, I sensed varying degrees of resistance within my body and mind to being present which I addressed through continued effort to focus on my breathing and remain grounded.

The process surfaced my own ambivalence to engage with both positive memories and painful childhood experiences. However, what was most revealing about the process was the sense that the session was not simply about taking photographs in a traditional sense. The process itself was a dialogue in which I felt invited to explore movement based on what I had prepared in the earlier steps of the process – in addition to what surfaced for me somatically during the photo shoot. Over the course of the time with the photographer, I felt an inner sense of playfulness emerge within my energy and my movements consistent with Pliske et al. (2021) who wrote that “play offered permission to express any and all emotions and was juxtaposed to feeling nothing or to numbing emotions (p. 252).”

I can imagine that in any future iterations of this type of work, such inner conflict between being present and distancing from emotional pain is to be expected for a client or workshop participant. While a willingness to explore and ultimately to integrate painful memories in a meaningful manner must be expressed by a client or participant, the facilitator or therapist as well as the photographer need to interact with consent of the individual throughout the process and bring forth the spirit of Norma Canner to “meet the client (participant) where they are at” with the idea that everything in the integration of adverse childhood experiences process is an invitation, not a mandate (Shira Karman, personal communication, July 16, 2019). This tone for the interaction between therapist

and client or facilitator and participant is essential to ensure cohesion between the intention of adverse childhood integration and the outcome.

Through this process, I learned that the integration of adverse experiences does not mean forgetting what happened to me as a child; rather it has been an opportunity to shift my relationship with the sources of *big T* and *little t* traumas in my personal history. Healing is not a destination; rather, it is a continual process of managing internal somatic energy within one's varied contexts and interactions with others. The potential for one's troubled relationship to the past to remain present in the mind and body always exists (*Figure 7*) thus a therapist must balance the wisdom of life lessons learned in service of client needs while caring for self in a manner consistent with managing that internal somatic energy.



Figure 7. The Past Reaching Toward Me. From Adverse Childhood Integration Photo Session, 2022. Photo Credit © 2022 Dean Zatkowsky with usage rights granted to Kimberly Hoj.

As a function of this self-study, I found solace in the difficult experiences of my childhood correlated with the personal transformative growth in myself over many years and specifically in this year through this work. My ability to experience emotional discomfort somatically while at least adequately verbalizing what happened to me has

expanded beyond the silence of my youth when I could not talk about it whatsoever, reflecting a long-term tendency to freeze upon dysregulation. The ability to reflect upon my growth as it leads me toward therapeutic service for others reminds me of Viktor Frankl's (1946) work on *logotherapy* in which an individual can find meaning for the future from the suffering of the past.

This type of arts-ethnography project has the potential to expand knowledge about the field of dance movement therapy, the therapeutic impact of dance and arts-based research into contexts such as in the realm of education where it is less accessible and unknown to many. This contribution to the field of education - where dance can be seen as solely performative – has the potential to extend greater credibility to the positive impact of dance among school district leaders who are seeking the means to support student wellness and mental health. Future iterations of this process are possible within a therapeutic relationship or within a workshop setting with a small number of participants. Individuals impacted by adverse childhood experiences including educators, therapists, and community leaders may benefit from integration through dance movement therapeutic techniques to shift their relationship to the past while enhancing their capacity to serve others.

References

Adler, J. (1996). The Collective Body. *American Journal of Dance Therapy*, Volume 18 (No.2), pg. 83-94.

American Psychological Association. (n.d.) *Definition of Integration*.

<https://dictionary.apa.org/integration>

American Psychological Association. (n.d.) *Trauma*.

<https://www.apa.org/topics/trauma>

Asmundson, G. J., & Afifi, T. O. (2019). *Adverse Childhood Experiences: Using evidence to advance research, practice, policy, and prevention*. Academic Press.

Bernstein, B. (2019). Empowerment-Focused Dance/Movement Therapy for Trauma Recovery. *American Journal of Dance Therapy*, 41(2), 193–213.

<https://doi.org/10.1007/s10465-019-09310-w>

Berrol, C.F. (2006). Neuroscience meets dance/movement therapy: Mirror neurons, the therapeutic process and empathy. *The Arts in Psychotherapy*, 33(4).

Brown, B. (2021). *Atlas of the Heart*. Random House.

Bushy Theatre Films. (1998). *A Time to Dance: The Life and Work of Norma Canner*.

[Film]. Vimeo. <https://vimeo.com/206250642>

Centers for Disease Control. (2019). *CDC Vital signs: Adverse Childhood Experiences – Preventing Early Trauma to Improve Adult Health*.

<https://www.cdc.gov/vitalsigns/aces/pdf/vs-1105-aces-H.pdf>

Complex Trauma Healing - Infographics. (2019). *The 5 Domains of Post-Traumatic*

Growth. <https://complextraumahealing.wordpress.com/2019/04/08/5-domains-of-post-traumatic-growth/comment-page-1/#comment-570>

Crowder, M. A. P. (2021). *Overcoming Trauma: A Phenomenological Study of Adults Who Overcame Childhood Trauma*.

Dictionary.com. (2022). *Entrainment definition*.

<https://www.dictionary.com/browse/entrainment>

Elliott, W. (2019). *The Body Knows: Professional Training in Somatic Psychotherapy*.

[Training Workbook]. <https://www.thebodyknows.org>

Emmy Werner: Resilience Pioneer. (2012). *Reclaiming Children & Youth*, 21(1), 22–23.

Everett, B., & Gallop, R. (2000). *The link between childhood trauma and mental illness:*

Effective interventions for mental health professionals. SAGE Publications.

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V.,

Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and

household dysfunction to many of the leading causes of death in adults. The

Adverse Childhood Experiences (ACE) Study. *American journal of preventive*

medicine, 14(4), 245–258. [https://doi.org/10.1016/s0749-3797\(98\)00017-8](https://doi.org/10.1016/s0749-3797(98)00017-8)

Frankl, V. E. (1984). *Man's search for meaning: An introduction to logotherapy*. New

York: Simon & Schuster.

Harris, T.A. (1967). *I'm Ok – You're Ok*. Harper & Row.

Harvard University Center for the Developing Child. (n.d.) *Take the ACE Quiz and Learn*

What It Does and Does Not Mean. [https://developingchild.harvard.edu/media-](https://developingchild.harvard.edu/media-coverage/take-the-ace-quiz-and-learn-what-it-does-and-doesnt-mean/)

[coverage/take-the-ace-quiz-and-learn-what-it-does-and-doesnt-mean/](https://developingchild.harvard.edu/media-coverage/take-the-ace-quiz-and-learn-what-it-does-and-doesnt-mean/)

Haslam, N. (2016). *The Problem with Describing Every Misfortune as Trauma*. Chicago

Tribune. [https://www.chicagotribune.com/opinion/ct-trauma-microaggressions-](https://www.chicagotribune.com/opinion/ct-trauma-microaggressions-trigger-warnings-20160815-story.html)

[trigger-warnings-20160815-story.html](https://www.chicagotribune.com/opinion/ct-trauma-microaggressions-trigger-warnings-20160815-story.html)

- Hinz, L. (2009). *Expressive Therapies Continuum: A Framework for Using Art in Therapy*. Routledge.
- Homann, K.B. (2010). Dynamic Equilibrium: Engaging and Supporting Neurophysiological Intelligence Through Dance/Movement Therapy. *Am J Dance Ther* **42**, 296–310. <https://doi.org/10.1007/s10465-020-09337-4>
- Joseph, C.A., O'Shea, B.Q., Eastman, M.R. et al. (2022). Physical isolation and mental health among older US adults during the COVID-19 pandemic: longitudinal findings from the COVID-19 Coping Study. *Soc Psychiatry Psychiatr Epidemiol* **57**, 1273–1282. <https://doi.org/10.1007/s00127-022-02248-4>
- Ohio Leadership Council. (n.d.). *History of Trauma-Informed Care in Education*. Ohio Leadership. <https://ohioleadership.org/m/272>
- Levine, B., Land, H., & Lizano, E. (2015). The Elements of Dance / Movement Therapy Employed when Treating Women with Posttraumatic Stress Disorder. *Journal of Social Work*, *16*(1), 40-55. <https://doi.org/10.22329/csw.v16i1.5915>
- Long, E. C. (2020). Somatic Psychotherapeutic Fascial-Work. *International Body Psychotherapy Journal*, *19*(2), 89+.
https://link.gale.com/apps/doc/A650247202/AONE?u=les_main&sid=bookmark-AONE&xid=c11f3708
- McGarry, L. & Russo, F. (2011). Mirroring in Dance/Movement Therapy: Potential mechanisms behind empathy enhancement. *The Arts in Psychotherapy* **38**, 178–184.

- Moreno, C., Wykes, T., Galderisi, S., Nordentoft, M., Crossley, N., Jones, N., ... & Arango, C. (2020). How mental health care should change as a consequence of the COVID-19 pandemic. *The Lancet Psychiatry*, 7(9), 813-824.
- Perryman, K., Blisard, P., & Moss, R. (2019). Using Creative Arts in Trauma Therapy: The Neuroscience of Healing. *Journal of Mental Health Counseling*. 41 (1): 80–94. <https://doi.org/10.17744/mehc.41.1.07>
- Pierce, L. (2014). The integrative power of dance/movement therapy: Implications for the treatment of dissociation and developmental trauma. *Arts in Psychotherapy*, 41(1), 7–15. <https://doi.org/10.1016/j.aip.2013.10.002>
- Pliske, M. M., Stauffer, S. D., & Werner-Lin, A. (2021). Healing from adverse childhood experiences through therapeutic powers of play: “I can do it with my hands”. *International Journal of Play Therapy*, 30(4), 244–258. <https://doi.org/10.1037/pla0000166>
- Porges, S. (2012). Science of Compassion: Origins, Measures and Interventions https://www.youtube.com/watch?v=MYXa_BX2cE8
- Reinert, M., Fritze, D. & Nguyen, T. (2021). “The State of Mental Health in America 2022” Mental Health America, Alexandria VA. <https://mhanational.org/sites/default/files/2022%20State%20of%20Mental%20Health%20in%20America.pdf>
- Roncada, G., Vandeveld, B., & Calsius, J. (2018). The Human Body and Psychological Trauma: Biological Explanatory Models. A review. *International Body Psychotherapy Journal*, 17(1), 22+.

- https://link.gale.com/apps/doc/A695507259/AONE?u=les_main&sid=bookmark-AONE&xid=f7db8a67
- SAMHSA. (2014). *SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach*. Department of Health and Human Services, United States of America.
- https://ncsacw.acf.hhs.gov/userfiles/files/SAMHSA_Trauma.pdf
- Siegel, D. (2012). *Pocket Guide to Interpersonal Neurobiology*. Mind Your Brain, Inc. Apple Books.
- Starecheski, L. (2015). *Take the ACE Quiz – and Learn What It Does and Doesn't Mean*. NPR. <https://www.npr.org/sections/health-shots/2015/03/02/387007941/take-the-ace-quiz-and-learn-what-it-does-and-doesnt-mean>
- Tedeschi, R. G. and Calhoun, L. G. (1996). *The Posttraumatic Growth Inventory: Measuring the Positive Legacy of Trauma*. Journal of Traumatic Stress, 9(3), p. 455-471.
- Thomeer, M.B., Moody, M.D. & Yahirun, J. (2022). Racial and Ethnic Disparities in Mental Health and Mental Health Care During The COVID-19 Pandemic. *J. Racial and Ethnic Health Disparities*. <https://doi.org/10.1007/s40615-022-01284-9>
- van der Kolk, B. (2014). *The Body Keeps The Score: Brain, Mind, and Body in the Healing of Trauma*. Penguin Books.
- Walker, P. (2013). *Complex PTSD: From Surviving to Thriving: A Guide and Map for Recovering from Childhood Trauma*. CreateSpace Independent Publishing.
- Zatkowsky, D. (2022). *Images from Adverse Childhood Integration Photo Session*.

THESIS APPROVAL FORM

**Lesley University
Graduate School of Arts & Social Sciences
Expressive Therapies Division
Master of Arts in Clinical Mental Health Counseling: Dance/Movement Therapy, MA**

Student's Name: Kimberly Hoj

Type of Project: Thesis

Title: Integration of Adverse Childhood Experiences in Adulthood Through Dance Movement Therapeutic Techniques

Date of Graduation: May 20, 2022

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

Thesis Advisor: E Kellogg, PhD