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Graduate School of Education and Psychology

THE USE OF DANCE AND MOVEMENT FOR THE EMBODIED HEALING OF INTERPERSONAL TRAUMA IN WOMEN AND GIRLS: A SYSTEMATIC REVIEW

A clinical dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Psychology

by

Catherine Xinyu Liang

August, 2023

Thema Bryant, Ph.D. – Dissertation Chairperson

This clinical dissertation, written by

Catherine Xinyu Liang

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

Doctoral Committee:

Thema Bryant, Ph.D., Chairperson

Shelly Harrell, Ph.D.

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DEDICATION

This dissertation is dedicated to survivors all over the world. Your hope, courage, and strength uplift us all. Your liberation gives rise to the world's liberation. Continue to thrive.

I would also like to dedicate this dissertation to all of those who have helped create safety in my journey to liberation. Thank you.

VITA

EDUCATION

Pepperdine University, Graduate School of Education and Psychology (GSEP), Los Angeles, CA
June 2023
Doctor of Psychology, Psy.D.
Dissertation: *The use of dance and movement for the embodied healing of interpersonal trauma in women and girls*
Advisor: Thema Bryant, Ph.D.

Pepperdine University, Graduate School of Education and Psychology (GSEP), Malibu, CA
June 2019
Master of Arts in Clinical Psychology with an Emphasis in Marriage and Family Therapy

University of Southern California, Los Angeles, CA
May 2015
Bachelor of Arts in Psychology with a minor in **Applied Theatre Arts**
Awarded *Magna Cum Laude, Renaissance Honors,* and *Departmental Honors*

LANGUAGES

Fluent in spoken Mandarin Chinese

RESEARCH PUBLICATIONS

Stolzenberg, S. N., Williams, S., McWilliams, K., Liang, C., & Lyon, T. D. (2021). The utility of direct questions in eliciting subjective content from children disclosing sexual abuse. *Child Abuse & Neglect*, *116*, 103964.

CLINICAL EXPERIENCE

Pacific Clinics (APA Accredited) August 2022 – August 2023
Pre-doctoral Intern
Primary track: **Asian Pacific Family Center**, Rosemead, CA
Supervisors: Elizabeth Chang, Psy.D., Valeria Romero, Ph.D., Charles Chege, Psy.D., Laura Waters, Psy.D.

- Provide weekly individual and family psychotherapy, individual rehabilitation, and case management for Mandarin-speaking and English-speaking clients in the community mental health setting.
- Present during staff meeting and conceptualize cases using primarily a Liberation Psychology theoretical orientation, integrated with Solution-Focused Therapy, Dialectical Behavioral Therapy, and Motivational Interviewing techniques.
- Provide didactic training for staff members and colleagues on the physiological effects of trauma and how to use Trauma-Sensitive Yoga as an intervention for trauma recovery.
- Conduct comprehensive psychological assessment batteries and targeted testing for client-specific needs.
- Provide weekly supervision to an MFT practicum trainee, consult monthly with the trainee's primary supervisor, to help answer clinical questions, address trainee's training goals, and foster trainee's professional development.

Secondary track: **Research and Consultation**, Arcadia, CA
Supervisor: Kristopher Stevens, Ph.D.

- Develop a survey assessing the cultural competency of all staff members around working with LGBTQ+ consumers.
- Distributed the survey to all staff members at Pacific Clinics and Heritage Uplift Family Services.
- Analyze data gathered from the survey in order to identify the training gaps in working with the LGBTQ+ community, develop solutions, and implement solutions to the agency.
- Consult with the LGBTQ+ Education and Development of Services group (LEADS) bimonthly to construct the survey and develop an analytics project to enhance their vision and mission.

Institute For Girls' Development, Pasadena, CA June 2021- July 2022
Doctoral Trainee
Supervisor: Vicki Chiang, Psy.D.

- Delivered weekly individual and family psychotherapy for culturally diverse adolescents and young adults using Multicultural and Liberation Psychology, Family Systems Therapy, and mindfulness interventions.
- Provided group therapy for adolescents identifying with the LGBTQ+ community to help with identity development and foster community.
- Provided parent coaching for parents of adolescent and child clients using empirically driven techniques.
- Conducted integrated psychological assessments for adolescent clients presenting with academic, psychological, and emotional difficulties.
- Lead didactic presentations on the use of Trauma Sensitive Yoga for clients presenting with trauma.
- Attended monthly trainings (e.g. Using Expressive Arts With Children, Gaps and Gains in the Time of Covid, Working with Nonbinary and Transgender Youth) to build upon current therapeutic skillset.
- Attended weekly individual and group supervision to increase quality of care.
- Attended biweekly case conference with other clinicians within the practice for consultation and support.

Los Angeles Job Corps, Los Angeles, CA July 2020 - July 2021
Doctoral Trainee
Supervisors: Jacquelyn Johnson, Psy.D. & Kandice Timmons, Psy.D.

- Provided weekly individual psychotherapy for transitional aged youth (16-24) from diverse backgrounds to facilitate communication, reduce symptomology, and co-construct a better life.
- Developed outreach programs for all students at Los Angeles Job Corps to improve learning during COVID, promote engagement for the mental health department, and strengthen the community.
- Provided group therapy using Trauma-Sensitive Yoga to help clients regulate their nervous systems
- Developed culturally sensitive treatment plans to help increase clients' employability.
- Conducted ADHD assessments comprised of the WAIS-IV, Connors CPT3, BREIF-A, BAI, and BDI.
- Participated in weekly didactic training, individual supervision, and group supervision to improve clinical skills.

Pepperdine West Los Angeles Clinic, Los Angeles, CA September 2019 – July 2022
Doctoral Trainee
Supervisors: Aaron Aviera, Ph.D., Bruce Rush, Ph.D., Carissa Gustafson, Psy.D. & Brandie Boghosian, Psy.D.

- Conduct intakes to gather information, assign diagnoses, and create treatment plans for clients to address major depression, anxiety, borderline personality disorder, posttraumatic stress disorder, and other diagnoses.
- Provide weekly individual and couples psychotherapy.
- Develop culturally sensitive treatment plans using a mix of Multicultural Psychology and mindfulness interventions.
- Provide psychoeducation to clients regarding trauma, coping skills, mindfulness, and family systems.
- Participate in weekly case conference, presenting cases and giving feedback to peers' cases.
- Manage the "emergency pager" in two-week shifts for clients experiencing a non-life-threatening crisis.
- Participate in weekly group and individual supervision to increase quality of care.

Southern California Counseling Center, Los Angeles, CA September 2018 - July 2019
MFT Trainee
Supervisor: Leyla Sanford, LMFT

- Provided weekly individual psychotherapy with an emphasis on social justice issues for adults in an out-patient, low-fees clinic at both the Pico location and the Watts satellite location.
- Co-facilitated a weekly Relationships Process Group with 9 diverse clients at Pico and a weekly open Co-parenting Group for mandated clients at Watts.
- Developed culturally sensitive individual treatment plans using Narrative therapy and mindfulness interventions.
- Collaborated with staff psychiatrists and relevant providers as needed to improve treatment planning and outcomes.

OPICA Adult Day Care, Los Angeles, CA May 2018 - July 2018
MFT Trainee
Supervisor: Anne Galbraith, LMFT

- Provided psychotherapy for older adults with memory loss, utilizing art therapy, music therapy, and dance therapy in individual and group settings.
- Delivered therapeutic conversations and activities with clients in milieu.
- Developed culturally sensitive treatment plans utilizing a Rogerian perspective.

CLARE Foundation, Santa Monica, CA January 2018 - March 2018
MFT Trainee
Supervisor: Matthew Healy, LMFT

- Provided psychotherapy in a residential treatment program for substance abuse and dependence for demographically diverse adults dually diagnosed with substance abuse disorders and mental health disorders.
- Developed culturally sensitive individual treatment plans utilizing a mix of Motivational Interviewing and DBT.
- Provided crisis intervention for clients as needed.
- Facilitated weekly DBT group skills training.
- Collaborated with a team of therapists, psychiatrists, social workers, and Certified Alcohol & Drug Counselors.

RESEARCH EXPERIENCE

USC Child Interviewing Laboratory, Los Angeles, CA

Lab Director July 2015 - July 2017

- Coordinated the development and execution of 15 co-occurring research projects.
- Collaborated with local elementary schools and Children's Dependency Court to facilitate experimental studies
- Produced and implemented coding schemes for research projects.
- Assisted faculty, postdoctoral researchers, and other collaborating researchers in writing publications.
- Supervised daily responsibilities for 16 undergraduate research assistants.

Forensic Interviewer July 2015 - July 2017

- Conducted forensic interviews with children aged 4-12 regarding allegations of sexual abuse utilizing empirically based techniques that elicit reliable and productive narratives.
- Collaborated with a multidisciplinary team consisting of law enforcement, child protection agencies, social workers, and researchers to accomplish the common goal of protecting children from further harm.
- Peer reviewed colleagues' forensic interviews with children alleging abuse in a group educational setting.

Undergraduate Research Assistant June 2013 – May 2015

- Conducted simulated forensic interviews for children aged 4-9 for research investigating children's responses to adult transgressions.
- Transcribed interviews with children to determine development of honesty in children.
- Consolidated and organized data for analysis in SPSS and Excel.

SUPERVISORY EXPERIENCE

Pacific Clinics August 2022 – August 2023

Doctoral Supervisor

- Provide weekly supervision to an MFT trainee to discuss clinical concerns, training goals, and professional development.
- Consult with trainee's primary supervisor on a monthly basis to ensure good coordination of care.
- Attend weekly supervision of supervision led by Dr. Charles Chege to discuss matters arising in supervisions, assigned readings, and provide feedback to other doctoral supervisors.

Pepperdine West Los Angeles Clinic August 2021 – July 2022

Peer Supervisor

- Provided peer-to-peer supervision for first- and second-year students in the PsyD program by meeting once per week to discuss clinical caseload and any issues that are arising in practicum.
- Read initial drafts of intake evaluations before they are submitted to the primary supervisors.
- Provided initial constructive feedback on report writing, diagnosing, and treatment planning.
- Attended seminars on providing supervision by Dr. Edward Shafranske and Dr. Carol Falender.

TEACHING EXPERIENCE

Pepperdine University, Graduate School of Education and Psychology August 2020 – December 2020

Teaching Assistant for Dr. Eldridge's Couples and Family Therapy II

- Graded and provided feedback on student assignments.

- Prepared test questions and create tests online using the "Courses (powered by Sakai)" platform.
- Supported students taking online classes throughout the semester.

University of Southern California, Gould School of Law July 2015 – July 2017
Teaching Assistant for Dr. Lyon's Child Interviewing Seminar

- Facilitated weekly discussions in law seminar class discussing child interviewing techniques, focusing on the application of child development theory in legal and research contexts.
- Collaborated with staff, parents, and students at local elementary schools to provide law students the experience of interviewing children.
- Graded weekly assignments from law students.

VOLUNTEER EXPERIENCE

Peace Over Violence
Counselor Advocate for Domestic Abuse Response Team March 2016 – April 2017

- Worked on a multidisciplinary team with LAPD to respond to emergency calls for domestic violence.
- Provided crisis counseling and advocated for the victim while law enforcement investigated.
- Provided emotional support, legal information, emergency housing, restraining orders, and resources to reduce risk of continued violence in survivors' lives.

LEADERSHIP EXPERIENCE

Pepperdine University PsyD Program
Student Government Association, Steering Committee September 2019 – July 2021

- Met with peers in SGA to discuss issues pertinent to the student body and PsyD program.
- Met with the PsyD program's Executive Committee once per semester to act as a liaison between the SGA and the Executive Committee.

OTHER EXPERIENCE

Pepperdine Counseling Center, Malibu, CA
Graduate Assistant September 2017 – July 2019

- Assisted counselors with developing curriculum for group counseling, organizing data collected from clients, collecting and organizing data for various research projects.
- Assisted staff with office support.
- Spearheaded a qualitative research project regarding online adjunctive therapy programs for student use.

TRAININGS

Pacific Clinics
Spousal or Partner Abuse Assessment, Detection, and Intervention Strategies (Matthew Hardwood, LCSW)
March 2023

- 15-hour training, prerequisite for CA psychologist licensure *(BPC § 2914(f) & CCR § 1382.5*)

Child Abuse Assessment and Reporting (Marietta Watson, LMFT)
October 2022

- 15-hour training, prerequisite for CA psychologist licensure *(BPC § 28 & CCR § 1382.4)*

Trauma-Focused Cognitive Behavioral Therapy (Daniel Smith)
September 2022

- 11-hour continuing education contact hours

Institute For Girls' Development (Susan Landon, LMFT)
September 2021
Effective and Compassionate Clinical Work for Transgender and Nonbinary Children, Teens and Families

- 16-hour training on clinical and case management work with gender-expansive youth and families

Trauma Resource Institute (Kim Cookson, PhD and Mallory Leitner, LMFT)
Community Resiliency Model®
November 2018

- 16-hour skills training on the biology of traumatic stress reactions, returning the body back to balance after experiencing traumatic events, instilling hope, and expanding resiliency

Trauma Resiliency Model®, Level 1
January 2019

- 16-hour advanced skills training expanding on Community Resiliency Model skills, focusing more specifically on healing trauma response

Southern California Counseling Center
Gestalt Therapy Summer School (Friedemann Schulz, LMFT)
June 2019

Brené Brown: The Daring Way (Jennifer Burton, LMFT)
September 2019

Peace Over Violence Intervention Division
Crisis Intervention Sexual Assault and Domestic Violence Training
March 2016

- 70.5-hour state certified training on crisis counseling for survivors of domestic violence and sexual assault

PRESENTATIONS

Liang, Catherine (2015, September). *You Said Sad, Tell Me More About That: Exploring the Subjective Reactions of Children Disclosing Sexual Abuse.* Presentation at 17th Annual Dr. Hershel Swinger Memorial Partnership Conference at California State University, Los Angeles, CA.

Liang, Catherine (2015, April). *You Said Sad, Tell Me More About That: Exploring the Subjective Reactions of Children Disclosing Sexual Abuse.* Presentation at University of Southern California's Undergraduate Symposium for Scholarly and Creative Work, Los Angeles, CA.

CERTIFICATIONS, HONORS & AWARDS

Evelyn B. Blake Scholarship

- Scholarship awarded to students attending Pepperdine's Doctor of Psychology program based on academic achievement

Colleague's Merit Grant

- Merit-based scholarship offered to students attending Pepperdine's Master of Arts in Clinical Psychology (Day Format) program

Phi Beta Kappa

- Honor society for top 10% of graduates in liberal arts and sciences in select distinguished institutions

Psi Chi

- International honor society in Psychology
-

USC Psychology Honors Program

- Conducted independent research and wrote an honors thesis under the mentorship of Dr. Thomas D. Lyon

Research Grants

- USC Student Opportunities for Academic Research, USC Summer Undergraduate Research Fund, USC Provost's Undergraduate Research Fellowship

PROFESSIONAL ASSOCIATIONS

American Psychological Association (APA) 2019 - *present*
Student Member

Asian American Psychological Association (AAPA) 2019 - *present*
Student Member

Association for Women in Psychology (AWP) 2019 - *present*
Student Member

ABSTRACT

Interpersonal trauma is a serious and devastating problem for women and girls from all walks of life. Research has shown that there are physiological consequences for experiencing trauma, and as such, treatment for trauma may need to target the body. Dance/Movement Therapy (DMT) has been emerging in the current literature as one body-oriented treatment approach that is effective in helping women and girls heal from interpersonal trauma. This review examines how practitioners are currently using DMT for this population, what treatment outcomes have been observed, and what the racial/ethnic identities and international contexts are for survivors who have benefited from DMT. Through textual narrative evidence synthesis, this review systematically examined recent literature to find that the characteristics and structure of DMT vary greatly between different practitioners, the participants of DMT are very diverse, and there are many commonly observed outcomes: increased physical ability, increased emotional capacity, mind-body integration, safety, aid with trauma processing, empowerment, social support, and fun. This review also gives recommendations for practitioners who wish to utilize this treatment method: conduct DMT in groups; use the body to create metaphor, imagery, and symbolism; give survivors choices in how they participate in DMT; use music purposefully; and don't forget to have fun.

Keywords: dance/movement therapy, expressive arts therapy, interpersonal trauma, women, girls

Chapter 1: Background and Rationale

Statement of the Problem

Interpersonal trauma remains one of the most pervasive problems that affect women and girls across the globe. According to the World Health Organization, one in three women worldwide have experienced physical or sexual violence by an intimate partner or sexual violence by a non-partner (WHO, 2017); and one in five women have been sexually abused as a child (WHO, 2020). Experiencing interpersonal trauma can have life-long deleterious effects. Research has shown that exposure to interpersonal trauma can lead to consequences such as posttraumatic stress disorder (PTSD; Kessler et al., 2017), depression (Gradus et al., 2015; Vibhakar, 2019), anxiety (Briere & Elliott, 2003), substance abuse (Briere et al., 2010), subsequent victimization (Briere & Elliott, 2003), and suicidality (Briere et al., 2010; Gradus et al., 2010). Given the prevalence of interpersonal trauma, and the devastating consequences that follow, it is important for both researchers and health care providers to examine the methods currently being used to help survivors heal. The present dissertation will outline the physiological impact of trauma and examine the use of Dance/Movement Therapy (DMT) as a somatic approach to healing interpersonal trauma.

Defining Interpersonal Trauma

In this review, interpersonal trauma is defined as the consequences following trauma that was caused by other people. Ford and Curtois (2020) highlighted the particularly complex and damaging impact of interpersonal trauma: when people harm other people, the rights and integrity of the victim is intentionally violated for the intent of meeting a particular need (e.g. domination, power, sex, etc.) of the perpetrator. These intentional, interpersonal acts are a willful disregard for the safety, dignity, integrity, and well-being of another human being, which can

cause a survivor to question what made them the target of victim of the trauma (Ford & Curtois, 2020).

It is important to note that, in this review, the definition of interpersonal trauma also encompasses all forms of systemic oppression. The present dissertation will specifically address racism and violence against sexual and gender minority (SGM) individuals, as there exists more literature on these topics as compared to ableism, religious intolerance, or classism. Racism has been long acknowledged in clinical and empirical literature as a type of interpersonal trauma that results in long-term psychological and physiological effects (Comas-Díaz et al., 2019). Racial trauma refers to "events of danger related to real or perceived experiences of racial discrimination" (p. 1), including threats of harm and injury, humiliation, shame, and witnessing racialized harm to other Black Indigenous and People of Color (BIPOC; Comas-Díaz et al., 2019). There is robust research showing that racial discrimination has a significantly negative impact on both mental and physical health (Carter et al., 2017). Research has additionally found that in comparison to cisgender and heterosexual individuals, SGMs are found to experience higher levels of depression, anxiety, posttraumatic stress disorder, and suicidal ideation and attempts (Schnarrs et al., 2020). The intersection of race, gender, and sexual identity puts individuals identifying with both the BIPOC and SGM communities at the highest risk for experiencing adverse social and psychological outcomes (Hailey et al., 2020).

Due to the relational – and often intimate – context in which interpersonal trauma occurs, this type of trauma can be particularly damaging for survivors. Studies on the sequelae of interpersonal trauma demonstrate that survivors are at risk of chronic and severe problems with emotion regulation, impulse control, attention and cognition, dissociation, interpersonal relationships, and attributions (D'Andrea et al., 2012). Currently, no single psychiatric diagnosis

accounts for the cluster of symptoms shown in research to occur following interpersonal trauma. The *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5; APA, 2013) has only two diagnoses that identify exposure to one or more traumatic events as an antecedent to the diagnosis: Acute Stress Disorder and PSTD. Although these diagnoses are sometimes helpful for some survivors, they do not adequately capture the full spectrum of symptoms that many individuals experience following interpersonal trauma (D'Andrea et al., 2012). Therefore, throughout this review, the term interpersonal trauma will be used to refer to the consequences of maltreatment, abuse, assault, and neglect experiences encountered by women and girls, including familial physical, sexual, psychological, and emotional abuse; severe familial physical, medical, and emotional neglect; intimate partner violence or dating violence; gender-based violence; racism, racialized discrimination, or race-based violence; heterosexism, homophobia, transphobia, or violence against SGM individuals; and commercial sexual exploitation. Non-interpersonal trauma is identified as medical trauma, natural disasters, sudden loss, and severe accidents.

The Physiological Impact of Trauma

The human body has an innate ability to maintain a state of balance and homeostasis (Ikegami & Suzuki, 2008), and this optimal state is constantly challenged by threat and stressors (Agorastos et al., 2018). Most stressors in everyday life are processed by the central nervous system in an adaptive and unremarkable manner; however, when stressors become severe and exceed a certain threshold, the central nervous system initiates a complex stress response to promote survival (Agorastos et al., 2018). Repeated exposure to severe stressors can lead to chronic problems in the functioning of the central nervous system (Chrousos, 2009). These physical and psychological effects caused by severe stressors are known as a trauma response.

There is a growing body of literature that demonstrates the physiological consequences of traumatic stress and the need for treatment to address these trauma responses. For instance, traumatic stress has been shown to change the functioning of hypothalamic-pituitary-adrenal (HPA) axis (Tarullo & Gunnar, 2006). The HPA axis is responsible for releasing hormones when the body is exposed to high levels of stress. These hormones are helpful and adaptive in the short term; this is a response that typically promotes survival when the body is exposed to stressors (Tarullo & Gunnar, 2006). However, there can be long lasting, deleterious effects when the body is repeatedly exposed to stressors, and the response of the HPA axis to these stressors is activated over a prolonged period time.

Cortisol, also known colloquially as the "stress hormone," is secreted during the HPA axis stress response. In some individuals, chronic stress is shown to result in sustained increases of cortisol. One adaptive function of cortisol is stopping metabolic and immune response of the body (Meewisse et al., 2007); however, when the body undergoes chronic stress, cortisol is released at a rate that can ultimately weaken the immune system (Tsigos & Chrousos, 2002).

Research has found that while some individuals experience an increase in HPA activity following chronic stressors, others experience a decrease in HPA axis responsiveness (Schumacher, 2019). In these individuals, the HPA axis may have become tonically inhibited due to a chronic adaptation to the stressor, resulting in lower-than-normal cortisol levels (Yehuda, 2001). Therefore, experiencing prolonged stress can cause either a decrease or increase in responsiveness of the HPA system to future stressors, both of which can potentially result in the survivor adopting maladaptive response patterns to stressors (Tarullo & Gunnar, 2006).

Children are especially vulnerable to traumatic stress because the HPA axis is not fully mature at birth, and a child's developing brain is shaped by these experiences (Tarullo &

Gunnar, 2006). Research has shown that children who are in good medical health, but who have experienced childhood maltreatment, produce more cortisol than children who have not experienced maltreatment (De Bellis et al., 1999). Another function of cortisol is maintaining blood pressure in the body; in excess, cortisol increases risk for hypertension and cardiovascular disease (Whitworth et al., 2005). Researchers have found that there is a graded relationship between maltreatment in childhood and risk factors such as heart disease, cancer, and chronic lung disease in adulthood (Felitti et al., 2019). In other words, the more maltreatment a child experiences, the more likely that child is to experience chronic physical health problems in adulthood that are the leading causes of death.

Beyond Traditional Talk Therapy

Researchers have developed many talk therapy interventions to help survivors of trauma process their experiences and heal. Currently, cognitive treatment approaches are considered in the field to be "gold standard" treatments for adults with PTSD (Gallagher et al., 2015). For instance, the American Psychological Association (APA, 2017) published a 139-page guideline that strongly recommends, for the treatment of PTSD in adults, the use of cognitive behavioral therapy (CBT), cognitive processing therapy (CPT), cognitive therapy (CT), and prolonged exposure therapy (PE)—all of which are cognitive approaches. It has been acknowledged in the literature that this guideline makes a fundamental assumption that PTSD is a universal trauma response that is not affected by culture, and that the interventions promoted by these guidelines largely ignore the sociocultural context of the individual (Bryant-Davis, 2019). In fact, this guideline explicitly states that "complementary or alternative" interventions such as yoga was excluded from their review and were not evaluated (APA, 2017). The arts are central to many BIPOC cultures and should be considered as part of culturally informed treatment (Drake-

Burnette et al., 2016; Lee et al., 2023; Shapiro, 2020). Excluding “alternative” interventions excludes non-Eurocentric ways of thinking, promotes a color-blind perspective, and erases the experience of ethnically diverse survivors whose experiences of trauma are colored by their experiences of cultural oppression (Bryant-Davis, 2019).

Cognitive therapies have also been shown in research to not be successful in decreasing PTSD symptoms for some people (Gallagher et al., 2015). Based on recent literature about the physiological effects of traumatic stress, researchers have called for treatments to go beyond talking and consider the neurobiological systems of the body (McFarlane, 2010). Brain scans have revealed that when reminded of their trauma, participants diagnosed with PTSD have increased activation of their amygdala, the part of the brain responsible for threat recognition, and decreased activation of the Broca’s area, the part of the brain responsible for speech (Rauch et al., 1996). Furthermore, MRI scans have revealed that the volume of the hippocampus – the part of the brain responsible for memory consolidation and retrieval – in those diagnosed with PTSD are significantly smaller than those without a PTSD diagnosis (Karl et al., 2006; Logue et al., 2018; Nelson & Tumpap, 2017). These findings suggest that those who have experienced trauma may not be able to optimally engage in talk therapy approaches like CBT, wherein the method of healing relies completely on conscious cognition.

Additionally, traumatic memories are often recalled in a disorganized way; some details can be vivid while others are forgotten, making it difficult to recall the accurate sequence of events (van der Kolk, 2014). This is perhaps caused by impaired hippocampal functioning, as people diagnosed with PTSD are found to exhibit poor associative learning, a process that centrally involves the hippocampus (Lambert & McLaughlin, 2019). Another reason that could explain the disorganized nature of traumatic memories is that during a traumatic event, the

integration of cognitive, emotional, physiological, and sensory information processing is often compromised (Ogden et al., 2006). Cognitive approaches may not be the best option for those seeking help with processing disorganized or confusing memories.

The emerging research on the neurobiology of trauma has called for more attention on body-oriented treatment approaches (Brown & Courtois, 2019). For example, yoga is now commonly used to treat mental health disorders such as PTSD (Jeter et al., 2015; Nguyen-Feng et al., 2019) and is shown in research to promote healing from traumatic experiences by cultivating arousal tolerance and regulation, improving emotional regulation, and helping survivors stay oriented in their present moment experiences (Salmon et al., 2009; Arch & Craske, 2006). Another example of a body-oriented approach shown to improve psychological functioning is tai chi, a Chinese martial art comprised of several self-defense movements. Research (Niles et al., 2016) has demonstrated the effectiveness of tai chi with veterans diagnosed with PTSD by reducing physiological arousal, increasing awareness of body positions, and increasing positive associations with a warrior identity.

DMT is another modality that includes the body into mental health treatment. DMT has many similarities with yoga and tai chi, as it addresses the connection between the body and the mind and aims to improve emotional regulation (more on the effects of DMT below). The current systematic review will synthesize the recent literature on the use of dance and movement for women and girls who have survived interpersonal trauma to help current trauma therapists understand the best-known practices for embodied healing.

History of Dance/Movement Therapy

Dancing as Healing

Humans have used dance and movement as a way of expression and communication since prehistoric times. Anthropologists studying the use of dance have concluded that earlier than 100,000 years ago, dancing was used between individuals for courting and mating (Garfinkel, 2018). Around 40,000 years ago, dancing started to be used on the community level for rites of passage and religious ceremonies (Garfinkel, 2018). It was only around 5,000 years ago that dancing became a profession (Garfinkel, 2018).

Dancing has been used as a spiritual healing practice in many cultures in history. For instance, *Ndeup*, a Senegalese dance ritual, has been used for generations to heal individuals who have been possessed by the spirits (Monteiro & Wall, 2011). Similarly, the *Zar* ceremony, a practice originating from Ethiopia, uses dancing, singing, and drumming to heal from spirit possession (Monteiro & Wall, 2011). In Korea, people believed that dancing allowed shamans to connect with the spirit world with rituals such as the *Ssikkim-kut* (Park, 2003). In Japan, *Kagura* is a shamanistic dance ritual performed in celebration for the gods, expressing gratitude for the blessings of fertility, longevity, and prosperity (Goff, 1996).

Although dance has been used throughout history as a tool for healing, it was not until the late 19th century, after the founding of the American Psychological Association, that dancing has been used in psychotherapy. Wilhelm Reich, an analyst who trained under Sigmund Freud, is widely considered to be the founder of Body Psychotherapy (Geuter et al., 2010). Reich (1972) emphasized the importance of the body in analysis, stating “the role of the somatic core of the neurosis” (p. 15) was at the center of his framework (Reich, 1972).

Psychoanalysis, as a talk therapy, centers around the verbal communication and expression between patient and analyst; however, it is widely accepted that nonverbal communications, sometimes conceptualized as enactments, are also important pieces of information to consider (Sandberg & Tortora, 2019). Many analysts in the mid-20th century were interested in the body. It was a common belief that gaining knowledge through movement of the body increases knowledge and insight into the self (Rossberg-Gempton & Poole, 1992). Early analysts also believed that body movements are manifestations of subconscious emotional processes. It was thought that because the mind and body are a unit, an individual's personality can be revealed through movements orchestrated by the ego (Rossberg-Gempton & Poole, 1992).

American Dance Therapy Association

In 1966, the American Dance Therapy Association (ADTA) was founded. The ADTA brought forth a definition for DMT: "the psychotherapeutic use of movement to promote emotional, social, cognitive and physical integration of the individual" (ADTA, 2020, para. 2). The ADTA was started by Marian Chace, who studied modern dance and realized as she worked with students, she was using dance as a means for therapy and communication (Chaiklin, n.d.). Chace also started to realize that traumatic experiences can cause a body to become tense and distorted, and from this realization, she used dance as a way to non-verbally heal trauma in her students (Chaiklin, n.d.). Chace realized the significance of dance in therapy and started the ADTA so that the work can be legitimized and continued (Chaiklin, n.d.).

Since the advancement of technology in the field of neuroscience, and the emergence of fMRI studies in the 1990's, research has found that DMT is a bottom-up approach that emphasizes the body and right-brain functions (Pierce, 2014). The right side of the brain is the site of processing socioemotional information and bodily states, and the long-term experience of

trauma within an attachment relationship is shown to affect the regulatory functions of the right brain (Schore, 2001). DMT is theorized to be an effective intervention that integrates right-brain functions in order to reduce the symptomology of traumatic stress.

DMT is a small but well-established field with its own training and accreditation. The ADTA gives graduates of approved programs the Registered Dance/Movement Therapist (R-DMT) credential (ADTA, 2020). Although practitioners have used this treatment modality since the 1940's, there has been limited research on the effectiveness of this intervention (Payne, 2008). One reason for the lack of empirical research on the use of DMT is because the intervention is not easily quantifiable (Berrol, 2000). There does not yet exist a set of objective tools to measure the intervention, and it is therefore difficult to evaluate its impact on participants. However, there has been an increasing number of research studies on the use of DMT in recent years, including many studies using a qualitative research methodology.

Current Literature on Dance/Movement Therapy for Trauma

Characteristics and Structure of Dance/Movement Therapy for Trauma

There is a range in perspectives on how DMT can be used to help survivors of trauma heal. Some researchers have found that 4 (Verreault, 2017) or 5 weeks (Ho, 2015) of DMT, with structured sessions that included a warm-up at the beginning, an intervention, and a closing ritual at the end, is effective in helping clients overcome trauma responses. Other studies have found that DMT can be used broadly, without a specific structure, for 6 months (Gray, 2001), 1 year (Harris, 2019), 2 years (Callaghan, 1993), or 7 years (Colace, 2017) to treat trauma survivors. There does not appear to be a consensus currently on what is the best or most effective way to structure DMT interventions.

Effects of Dance/Movement Therapy for Trauma

Mind-Body Connection. Many survivors of trauma report feeling disconnected from their bodies, something that can be remedied by DMT (Mills & Daniluk, 2002; Verreault, 2017). Empowerment and healing happen when survivors begin to tune into their body sensations and learn that they have control over their bodies (Verreault, 2017). This reconnection can also facilitate positive feelings a survivor has about their body through paying attention to and caring for the body (Mills & Daniluk, 2002).

DMT can also teach survivors to be present with their bodies during times when trauma is resurfaced and painful feelings are experienced (Mills & Daniluk, 2002). Trauma survivors often vacillate between hyperarousal, feeling too much, or dissociation, feeling too little (Levine, 2010). Through DMT, a survivor can learn to be mindful of their present experience and to regulate themselves through painful memories (Dieterich-Hartwell, 2017). It can be healing for a survivor to cultivate their capacity for tolerating intense sensations, slowly increasing the amount of time they mindfully pay attention to their somatic discomfort (Levine, 2010).

Affect Regulation. A common consequence of repeated traumatic stress is difficulty within the survivor to self-regulate, the conscious effort to maintain stability of the nervous system by managing affective responses to threat or adversity (Sullivan et al., 2018). Research has shown that common trauma responses such as re-experiencing or avoiding distressing memories lead to emotion dysregulation (Lanius et al., 2005). DMT can help survivors learn how to regulate their nervous systems by focusing on and monitoring the breath (Dieterich-Hartwell, 2017; Leventhal & Chang, 1991). Muscle activation in all movements trigger an increase in heart rate and a need for the body to take in more oxygen. The skill of breath control is used by some

DMT therapists to help clients stay in the present moment, maintain a steady heart rate, and regulate the nervous system (Dieterich-Hartwell, 2017; Leventhal & Chang, 1991).

Another way to teach survivors of trauma how to self-regulate is by using repetitive rhythmic movement, such as swaying back and forth in synchrony to the music (Dieterich-Hartwell, 2017; Ho, 2015; Monteiro & Wall, 2011). Such repetitive movements can provide positive feedback to the amygdala and provide a sense of mastery within the survivor (Dieterich-Hartwell, 2017). Further, movement can allow survivors to shift emotional states, which can range from reducing arousal and becoming calmer to increasing arousal and having a cathartic release (Monteiro & Wall, 2011). Rhythmic movement can also provide a survivor a sense of stability from the contact with the ground and the bodily sensation of predictability (Ho, 2015). A sense of stability and predictability plays a crucial role in helping a survivor feel safe, and a sense of safety is essential in treatment.

Emotional Connection with Others. Since interpersonal trauma invariably causes damage to relationships, the response from people in a survivor's social world has the potential to rebuild a sense of trust within the survivor (Herman, 2015). It is found that when DMT is implemented in a group setting, the intervention can facilitate trust, intimacy, and emotional connection between group members (Pierce, 2014; Mills & Daniluk, 2002; Verreault, 2017). Survivors in a DMT group can support one another through the process of healing by witnessing and accepting one another, as well as struggling together (Mills & Daniluk, 2002).

Cultural Diversity of Participants in Dance/Movement Therapy for Trauma

The initial studies reviewed on the use of DMT with female survivors of interpersonal trauma show that the participants seem to vary widely in cultural identity and international context. There are several case studies conducted in the United States documenting the use of

DMT with survivors of torture or human rights abuse from Africa (Gray, 2001; Harris, 2019) as well as India (Fargnoli, 2017). One study conducted in the Netherlands examined the use of DMT with refugees and asylum seekers from Afghanistan, Armenia, Democratic Republic of Congo, Kosovo, Sierra Leone, Somalia, and Togo (Verreault, 2017). One case study conducted in Germany described the use of DMT with refugees from Albania, Togo, and Democratic Republic of Congo (Koch, 2008). In a mixed-methods study, the use of DMT was assessed with childhood sexual abuse survivors in Hong Kong (Ho, 2015). Finally, several studies were conducted in Western countries with participants native to that country (Colace, 2017; Devereaux, 2008; Margolin, 2019; Mills & Daniluk, 2002). From the preliminary review of the literature, it seems that DMT can be an appropriate intervention for clients who have immigrated to another country as well as clients living in their home country, with a wide variety of cultural identities.

Rationale

Interpersonal trauma among women and girls is pervasive and prevalent (WHO, 2017; WHO, 2020). Treatments for survivors may need to go beyond traditional talk therapy since the neurobiological effects of trauma can make it difficult for a survivor to engage with cognitive information processing (Karl et al., 2006; Lambert & McLaughlin, 2019; Logue et al., 2018; Nelson & Tumpap, 2017; Rauch et al., 1996). There are a variety of non-verbal treatments that have been utilized to work with trauma, and DMT is one of such. This systematic review examined findings from recent literature on the use of DMT for female survivors of interpersonal trauma. Importantly, people of all gender identities are victimized by interpersonal trauma, but the present review focuses on the experience of women and girls.

The present dissertation aims to make recommendations for therapists who wish to use this modality and to inspire further research on the topic by answering these key questions:

- RQ1. What are the characteristics, qualities, and structure of DMT interventions for interpersonal trauma in women and girls?
- RQ2. In studies of DMT for female survivors of interpersonal trauma, what outcomes are observed or assessed?
- RQ3. How effective is DMT for female survivors of interpersonal trauma?
- RQ4. In studies of DMT for female survivors of interpersonal trauma, what is the racial/ethnic representation or international context of the participants?

Positionality

The researcher identifies as a cis-gender, queer, woman of color. She was born in Harbin, China, and lived there for five years before immigrating to Canada. She immigrated to the United States at age 18 to pursue her undergraduate studies. The researcher has been a dancer almost her entire life; at age three, her mother enrolled her in baby ballet, and throughout grade school and college, she participated in her schools' recreational and competitive dance teams. She started teaching dance at local dance studios in her early twenties and is still teaching today.

As a survivor of interpersonal trauma herself, the researcher has found profound healing through dance. She has also seen, as a dance instructor, how dancing has helped her students heal. The researcher was raised with Traditional Chinese Medicine woven into the fabric of her upbringing, so she has always known that the body and the mind are connected. She decided to explore the present dissertation topic to further understand what she already intuitively knew: dance and movement is healing. The researcher acknowledges that her personal experience with, and passion for, dance may influence how the present dissertation has been conducted.

Chapter 2: Methodology

Systematic Review Approach

A systematic review with narrative synthesis was conducted to provide a comprehensive review of current literature on the use of Dance/Movement Therapy (DMT) for female survivors of physical and sexual interpersonal trauma. Since this is an emerging field of research, data from quantitative and qualitative studies were included to maximize the scope of this review. This study synthesizes how DMT is currently being conducted with this population, what the outcomes of DMT interventions are for survivors, and how effective DMT interventions are in healing from interpersonal trauma. Additionally, this study describes the racial/ethnic representation or international context of the survivors for whom DMT is effective.

Eligibility Criteria

Inclusion Criteria

Source Eligibility Criteria. Studies that were included in this systematic review were published in the English language in a peer-reviewed journal. Studies could have been conducted in any country. Only studies published between the years 2000-2022 were considered, as this systematic review aimed to synthesize the most current data.

Study Eligibility Criteria. Any study in which dance or movement was used to help women and girls heal from interpersonal trauma were included. The intervention could have been a formal DMT intervention conducted by a licensed Dance/Movement Therapist, or a less formal use of dance or movement. In other words, any study that described the use of dance or movement for the healing of interpersonal trauma in women and girls was included; theoretical studies were not included. Eligible studies included participants who identify as women or girls and who have survived interpersonal trauma at any age. Since teen dating violence and sexual

assault is a prevalent problem, and DMT could be one intervention to use with teen survivors, the current review included adolescent as well as adult participants, aged 12 and above at the time of the intervention. No research settings were excluded from this review. Studies of all methodology type were considered as long as the data from the study answers one or more of the present review's research questions.

Exclusion Criteria

Since this review aimed to examine dancing as a therapeutic tool to help survivors of trauma heal, studies that investigated other mind-body movement interventions, such as yoga, tai chi, or chi gong, were excluded from this review. As previously mentioned, theoretical studies were also excluded, as studies needed to include the actual use of dance or movement in the embodied healing of interpersonal trauma. Additionally, studies with participants who have experienced non-interpersonal trauma, such as disaster trauma, were excluded. Studies with only male participants, or child participants aged 11 and under, were also excluded.

For studies with male and female participants, children and adult participants, or survivors of interpersonal trauma and non-survivors, only the data pertinent to this dissertation's target population (women and girls aged 12 and up who experienced interpersonal trauma) were extracted. Studies were excluded if the data about the target population could not be extracted.

Search, Screening, and Selection Processes

Information Sources

Eligible studies were searched from the following electronic databases: PsychInfo and PILOTS/PTSDPubs. In addition to these large databases, the *American Journal of Dance Therapy* was also searched for relevant studies. The reference lists of existing systematic reviews on the same topic were reviewed for articles that fit the inclusion and exclusion criteria. The

present dissertation focused on the discipline of psychology, which was why other large electronic databases, such as ProQuest, were not searched. The author recognizes that there may be articles published in journals in the arts and humanities field that were missed due to the disciplinary focus on psychology.

Search Terms

The four primary search terms for this review were: (a) interpersonal trauma, (b) dance/movement therapy, (c) women, and (d) adolescent (see Appendix A). Synonyms and other appropriate terms were identified to maximize the productivity of each search. For interpersonal trauma, terms included "trauma," "complex trauma," "PTSD," "post traumatic," "interpersonal trauma," "interpersonal violence," "intimate partner abuse," "intimate partner trauma," "intimate partner violence," "domestic violence," "sexual assault," "dating violence," "child abuse," "child sexual abuse," "molestation," "sex trafficking," "human trafficking," "commercial sexual exploitation," "racism," "sexism," "heterosexism," "homophobia," "racial trauma," "racialized interactions," "race-based trauma," "race-based violence," "gender-based trauma," and "gender-based violence." For dance/movement therapy, terms included "dance," "dance/movement," "dance/movement therapy," "dance therapy," "movement therapy," "expressive arts," and "expressive arts therapy." For women, terms included "woman," "female," and "girl." For adolescent, terms included "teen" and "teenage."

As previously described, the date limit applied to these searches was 2000-2022. Only peer-reviewed articles published in English were considered. The last search was conducted on April 30, 2022.

The search and selection processes were carefully recorded in a shared spreadsheet saved on a cloud storage service to allow collaboration between the present author and a research

assistant. The research assistant identifies as a 24-year-old, Gen Z, heterosexual, cis-gendered, Asian woman, born in the United States.

Studies were searched using the search terms previously listed in each electronic database, as well as within the American Journal of Dance Therapy. Each term was given an identification (ID) number, and the different combinations of different terms searched together were documented in the Comprehensive Search Plan (see Appendix B). This document also gathered information on the type of search, the database or source in which the search was conducted, the combination of search term IDs, a comprehensive list of search term syntax, and the parts of the article that were searched from. After different combinations of searches were made, the results were documented in the Search Documentation Record (Appendix C). Each search was given a Full Search ID. This document also reported the date the search was conducted, the type of search, which database or source the search was conducted in, the search term ID, the parts of the article that were searched from, and specifying details that were part of the search, such as year published restrictions and publication type restrictions. The Search Documentation Record also documented how many articles were yielded in each search.

Selection of Studies

The searches were completed in each of the chosen databases by the present author and a research assistant. Titles and abstracts were screened for every result found with the specified search terms to verify that the study met inclusion and exclusion criteria. The majority of the exclusions were done at this stage; duplicate articles, articles that were not empirical studies, articles that used another creative arts intervention that was not dance, articles that had participants who were not women or girls, and articles that had participants who were not

survivors of interpersonal trauma were excluded. This was tracked using the Shared Document (see Appendix D).

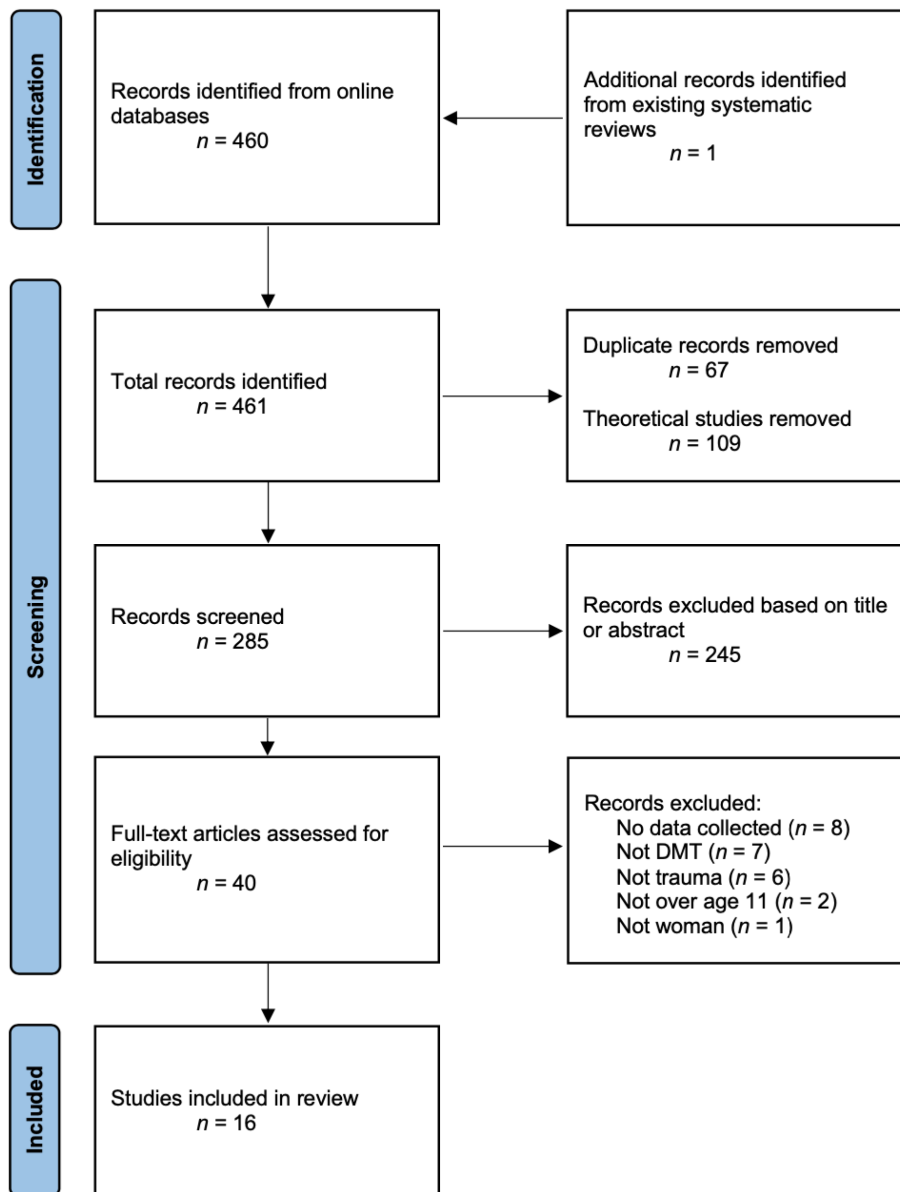
A full-text review was done for articles for which the inclusion and exclusion criteria could not be determined from the title or abstract. A full-text review was also done for all articles that seemed to meet the inclusion criteria at the title and abstract screening stage. A set of studies making up 10% of the entire sample (*N* = 46) were randomly selected to determine inter-rater reliability. Both the present author and the research assistant applied inclusion and exclusion criteria for this set of 46 studies, and this process yielded a 100% rate of reliability. This ensured that studies were reliably chosen and that there was little to no mistakes or bias included in the selection of studies.

As additional source that was searched was the reference lists of existing systematic reviews on the same topic. Only one such published systematic review was identified, and its reference list was reviewed for additional studies that fit the inclusion and exclusion criteria that was not found through the searches on the chosen online databases.

After the completion of the screening and selection process, a modified PRISMA Flow Diagram (see Figure 1) was created. This diagram summarized the process of selecting the final sample for the current systematic review.

Figure 1

PRISMA Flow Diagram



Data Collection and Extraction

The data collection and extraction form was utilized to document all essential information from the studies (see Appendix E). This form was filled out for each eligible study from the sample.

This form recorded:

- General information, including when the data was collected and by whom, as well as information about the source of the study;
- Design and methodological characteristics, including the aim of the study, the general methodology (qualitative, quantitative, or mixed), and the design of the study;
- Information that answers the first research question, including the total number of DMT sessions, the length of each session, the structure of these sessions, whether music was utilized, the dance experience of the therapist, and any special certifications or degrees of the therapist;
- Information that answers the second research question, including what symptoms were documented to be reduced, diagnoses treated, and any growth attributes (such as self-esteem or confidence) that were fostered;
- Information that answers the third research question, including data from any measures that were given, the qualitative reports from participants about how the intervention affected them, and clinical judgment from therapists on the impact of the intervention;
- Information that answers the fourth research question, including participants' racial and ethnic identity, nationality or immigration status, age, whether they are adult or adolescent, disability status, and the type of trauma they have experienced;
- Participant recruitment information, including the recruitment methods and sample size;

- Setting characteristics, including where the study was located and how the data was collected;
- Analyses conducted, including any descriptive or inferential statistics collected, as well as any qualitative analyses;
- Key results found by researchers; and
- Key conclusions, recommendations for future research, whether the study addressed the present author's review questions, the present author's take-aways, limitations of the study, references to other relevant studies, any additional necessary information, and if any correspondence was received about the study.

Quality Appraisal

In order to examine the quality of the included studies, a quality appraisal process was used (see Appendix F). This form was developed by the author's doctoral program and assessed the quality of the following domains: (a) strength of literature and rationale for the study, (b) clarity of research objectives, (c) quality of research design or methodological approach, (d) sample selection and characteristics, (e) measures and data tools, (f) data collection process, (g) analysis of data, (h) discussion of study limitations, (i) consideration of culture and diversity, and (j) an overall rating. Each domain will receive a rating of either strong (3 points), adequate (2 points), weak (1 point), or missing (0 points). The overall rating was the sum of the ratings on the 10 domains. The present author completed this form for each study in the final sample. The quality appraisal process occurred simultaneously with the data extraction process.

Data Organization and Management

Using Microsoft Excel, a central database was created to gather and store the data collected from all included studies (see Appendix G). This database organized the variables from

the Data Extraction Form to allow the author to easily view all data points across all studies. This spreadsheet is a comprehensive document that holds all of the extracted data information from all included studies. Data from the Quality Appraisal form was also entered into this database.

Chapter 3: Results

Overview

The initial searches on the chosen online databases resulted in a total of 460 records. Of these records, 67 were duplicate studies and 109 were not empirical studies (e.g., editorial papers, conference panel papers) and removed. 284 records were screened. After reviewing titles and abstracts for identifiable inclusion and exclusion criteria, 245 studies were excluded, resulting in 39 studies for full-text review. Of these studies, some were excluded due to being theoretical studies in which a DMT intervention was only proposed ($n = 8$), studies that used another creative arts therapy that was not dance ($n = 7$), studies that had participants who were not survivors of interpersonal trauma ($n = 6$), studies with participants who were not over the age of 12 ($n = 2$), and one study in which the participant did not identify as a woman ($n = 1$).

There exists one published systematic review on the topic of the use of DMT for the healing of trauma (Levine & Land, 2016). The reference list of this study was reviewed for any relevant articles that might have been missed by the online databases search. One additional study was found from this review that was not already identified as an included study from the online databases search, and it was added to the final sample. The final sample of this systematic review contained 16 studies (see Figure 1).

Levine and Land's (2016) systematic review had a slightly different inclusion criteria than the present dissertation. Levine and Land (2016) included studies with men and women, focused on all forms of trauma, with a qualitative research methodology, and published during or after 1992. There are two studies included in the Levine and Land (2016) review that the present dissertation also included. There are 14 studies in the present review that was not part of the previous systematic review.

Summary of Included Studies

A summary of the final sample of included studies is depicted in Appendix H. A list of the excluded empirical studies can be found in Appendix I. All but one of the included articles were qualitative studies (*n* = 15); the other was a mixed methods study (*n* = 1). Of the qualitative studies, eight were case studies and seven were phenomenological studies. The one mixed method study was an uncontrolled clinical trial. Of the included studies, the majority described the use of DMT by the author of the article (*n* = 11); the rest described the use of DMT indirectly, such as participants recounting an instance in the past in which they used dance for the healing of interpersonal trauma (*n* = 5). The majority of the included studies were published in American Journal of Dance Therapy (*n* = 8). The next most common journal was The Arts in Psychotherapy (*n* = 2). There was one study in each of the following journals: British Journal of Guidance & Counselling (*n* = 1), Journal of Counselling & Development (*n* = 1), Journal of Women and Social Work (*n* = 1), Dramatherapy (n = 1), Body, Movement and Dance in Psychotherapy (*n* = 1), and Intervention (*n* = 1).

Upon conducting this review, it was found that few studies reported sufficient information on their research methodology. The majority of the included studies' quality appraisal ratings were either Weak (*n* = 7), or Good/Adequate (*n* = 7); only two studies (*n* = 2) achieved a Strong rating of quality, and no studies achieved an Exemplary rating. This was largely due to a lack of information on methodology. Many of these studies did not describe their sampling techniques, the tools they used to collect or analyze data, the limitations that their study may have or how they considered culture and diversity within the study (Bernstein, 2019; Devereaux, 2008; Gray, 2001; Harris, 2019; Koch, 2008; Koch & Weidinger-von der Recke,

2009; Leseho & Maxwell, 2019; Margolin, 2019; Mills & Daniluk, 2002; Moe, 2014; Portokaloglou, 2018; Stirling & Andrews, 2022; Verreault, 2017).

The two studies with a Strong quality rating (Fargnoli, 2017; Ho, 2015) adequately describe their sampling methods, used culturally relevant data collection and analysis tools, and were transparent about the limitations of their studies. All studies in this review stated their aims and objectives clearly.

Seven studies (*n* = 7) did not report the dance experience of the therapist (Fargnoli, 2017; Gray, 2001; Koch & Weidinger-von der Recke, 2009; Leseho & Maxwell, 2019; Moe, 2014; Portokaloglou, 2018; Stirling & Andrews, 2022;). Mills and Daniluk (2002) described the use of DMT by a registered DMT practitioner (R-DMT) and not a mental health professional. Margolin (2019) described the use of DMT with a licensed mental health professional who was not an R-DMT. The rest of the studies (*n* = 7) described the use of DMT with a therapist who was both an R-DMT and a licensed or supervised pre-licensed mental health professional (Bernstein, 2019; Devereaux, 2018; Harris, 2019; Ho, 2015; Koch, 2008; Thomas, 2015; Verreault, 2017).

Due to the fact that only one study in this review contained quantitative data, a textual narrative synthesis approach was utilized to examine and synthesize the data from the included studies and answer this dissertation's research questions. Textual narrative synthesis is a technique that organizes studies into homogeneous groups and helps draw conclusions from a set of studies despite the heterogeneity between these studies (Lucas et al, 2007).

Participants of Dance/Movement Therapy for Interpersonal Trauma

The following section describes the participant demographics from the studies included in the present systematic review (see Table 1). The research was only conducted after Pepperdine University IRB gave its approval (see Appendix J).

Age

The majority of the included studies used DMT with adult participants (Devereaux, 2008; Fargnoli, 2017; Gray, 2001; Harris, 2019; Ho, 2015; Mills & Daniluk, 2002; Moe, 2014; Portokaloglou, 2018; Stirling & Andrews, 2022; Verreault, 2017). Two studies had participants who were in their adolescence (Margolin, 2019; Thomas, 2015). In one study, participants were both adolescent and adult (Leseho & Maxwell, 2019). In three studies, neither the age of the participants of DMT, nor whether the participants were adults or adolescents, were reported (Bernstein, 2019; Koch, 2008, Koch & Weidinger-von der Recke, 2009).

Race/Ethnicity

There were three studies in this review that did not report any data on the race or ethnicity of their participants (Devereaux, 2008; Koch, 2008; Leseho & Maxwell). Of the other included studies, the participants' racial and ethnic identities were incredibly diverse. Three studies (Margolin, 2019; Mills & Daniluk, 2002; Stirling & Andrews, 2022) had only Caucasian participants. Three studies (Gray, 2001; Harris, 2019; Koch & von der Recke, 2009) included African participants. Three studies (Bernstein, 2019; Devereaux, 2008; Ho, 2015) included Asian participants. One study (Portokaloglou, 2018) included Middle Eastern participants.

Table 1

Participant Demographics

Study	Age	Race/Ethnicity	International Context
Bernstein, 2019	NR	Asian	India
Devereaux, 2008	44	NR	NR
Fargnoli, 2017	22-30	Asian	India
Gray, 2001	38	African	Asylum seeker living in the U.S.
Harris, 2019	25, 39	African	Asylum seekers living in the U.S.

Study	Age	Race/Ethnicity	International Context
Ho, 2015	25-52	Asian	Hong Kong
Koch, 2008	NR	NR	Germany
Koch & Weidinger-von der Recke, 2009	NR	Various	Refugees living in the U.S. (Albania, Togo, Democratic Republic of Congo)
Leseho & Maxwell, 2010	16-67	Various	Canada, USA, New Zealand, Australia, South Africa, India, England, Brazil, Palestine, Germany, Japan
Margolin, 2019	"adolescent"	Caucasian	Canada
Mills & Daniluk, 2002	25-48	Caucasian	NR
Moe, 2014	22-68	Caucasian, Asian, Latina, Black, Native American	United States
Portokaloglou, 2018	"adults"	Various	Refugees in Greece (Syria, Iran, Afghanistan)
Stirling & Andrews, 2022	"middle aged" adult	Caucasian	Australia
Thomas, 2015	12-14	Caucasian, Asian American, Native American, African American	United States
Verreault, 2017	19-50	Various	Asylum seekers and refugees, living in the Netherlands (Afghanistan, Armenia, Democratic Republic of Congo, Kosovo, Sierra Leone, Somalia, Togo)

*NR = not reported

Three studies (Moe, 2014; Thomas, 2015; Verreault, 2017) had participants with different racial and ethnic identities. Moe’s (2014) participants were Caucasian, Asian, Latina, Middle Eastern, Black, and Native American. Participants in Thomas (2015) identified as Caucasian, Asian, Native American, and Black. Finally, Verreault (2017) included participants who were Middle Eastern and African.

International Context

The majority of the studies included in this review were conducted internationally, with participants who come from many different countries. Seven studies (Bernstein, 2019; Fargnoli,

2017; Ho, 2015; Koch, 2008; Leseho & Maxwell, 2019; Margolin, 2019; Stirling & Andrews, 2022) included participants residing outside of the United States whose traumatic experience are not related to immigration issues. The participants of DMT with whom Bernstein (2019) and Fargnoli (2017) described working were women from Kolkata, India. Participants in Ho (2015) were Chinese women from Hong Kong. The case participant in Koch (2008) was a woman from Germany. Leseho and Maxwell (2010) interviewed women from 12 different countries: "Canada, the US, New Zealand, Australia, South Africa, India, Persia, England, Brazil, Palestine, Germany and Japan" (p. 21). Margolin's (2019) case participant was from Canada. Finally, the case participant in Stirling and Andrews (2022) was from Australia.

There were five studies that described the use of DMT with participants who were either a refugee or an asylum seeker (Gray, 2001; Harris, 2019; Koch & Weidinger-von der Recke, 2009; Portokaloglou, 2018; Verreault, 2017). The case study participant in Gray (2001) was a political asylum seeker from an "African country" (p. 35) living in the United States. The two female participants in Harris (2019) were both asylum seekers living in the United States, one from "the Horn of Africa" (p. 261) and the other who is an "Arabic-speaking" (p. 263) woman from a North African country. In addition to a group of survivors whose international context is unclear, Koch and Weidinger-von der Recke (2009) describes the use of DMT with two case study participants who are refugees living in Germany, one from Togo and one from the Democratic Republic of Congo. The participants in Portokaloglou (2018) were all refugee women living in Greece. Finally, the participants in Verreault (2017) were asylum seekers and refugees living in the Netherlands.

Only two studies (Moe, 2014; Thomas, 2015) that were conducted in the United States reported that the participants lived in the United States without immigration issues; or the

participants' immigration statuses were not relevant to the study's objectives. Two studies (Devereaux, 2008; Mills & Daniluk, 2002) did not describe the international context of their participants at all. Studies by Devereaux (2008) was published in the United States; Mills and Daniluk (2002) was published in Canada.

Characteristics of Dance/Movement Therapy for Interpersonal Trauma

Many studies in this review lacked sufficient information on the DMT intervention that was used for the healing of interpersonal trauma. The following is a summary of the details that were reported (see Table 2).

Table 2

Characteristics of DMT for Interpersonal Trauma

Study	Total Amount of DMT	Structure of each DMT session	Use of Music
Bernstein, 2019	NR	1. Energizing dance warm-up 2. Discussion about theme 3. Dance about theme 4. Discussion to integrate material	Carefully selected music to help draw boundaries; Silence for open-ended movements
Devereaux, 2008	Weekly for several months	NR	NR
Fargnoli, 2017	NR	NR	Music used to let go
Gray, 2001	Weekly for 6 months; 19 sessions total	NR	NR
Harris, 2019	NR	NR	Music was used, unclear how
Ho, 2015	5 weekly sessions	20 min movement warm-up 25 min movement exercise 10 min break 25 min movement exercise 30 min discussion 10 min closing ritual	Fast music for vitality and joyful atmosphere; Steady beat for stability
Koch, 2008	NR	NR	Music was used, unclear how
Koch & Weidinger-von der Recke, 2009	NR	NR	Music from participant's home culture; helped deepen therapeutic relationship and connect to participants' strength and cultural identity

Study	Total Amount of DMT	Structure of each DMT session	Use of Music
Leseho & Maxwell, 2010	NR	NR	Music and sound to connect dancer to life force and present moment
Margolin, 2019	Weekly for 3 months	NR	NR
Mills & Daniluk, 2002	At least 6 sessions	NR	NR
Moe, 2014	NR	NR	Music was used, unclear how
Portokaloglou, 2018	NR	NR	Music used for soothing, flow, and spontaneity
Stirling & Andrews, 2022	NR	NR	NR
Thomas, 2015	10 weeks	1. Movement warm-up 2. Discussion 3. Movement exercises to embody discussion themes	Music to evoke different emotions; also used silence
Verreault, 2017	4 sessions	1. Checking in (verbal and movement) 2. Movement warm up 3. Movement exercises about theme 4. Processing (verbal and nonverbal) 5. Closing ritual (verbal and nonverbal)	Music was used, unclear how

*NR = not reported

Total Number and Length of DMT Sessions

Only two studies (Ho, 2015; Verreault, 2017) clearly reported the length of their DMT interventions. Ho's (2015) uncontrolled clinical trial utilized a two-hour DMT intervention that occurred weekly for five weeks. Verreault's (2017) phenomenological study included a 75-minute DMT intervention four times.

Four other studies (Devereaux, 2008; Gray, 2001; Margolin, 2019; Mills & Daniluk, 2002) described their intervention in more vague terms. The participants in Devereaux's (2008) case study engaged in DMT "weekly" and "over the course of several months" (p. 65-66). In the 2001 case study by Gray, the participant's DMT "took place almost weekly over a period of six months, for a total of nineteen sessions" (p. 36) but did not report the duration of the sessions; in addition, the author notes that at first, sessions "consisted of a combination of case management and DMT" (p. 36). The case study conducted by Margolin (2019) described meeting with the

participant for “3 months, 1 day per week” (p. 175), but there was no mention of the duration of the sessions. The participants in the phenomenological study by Mills and Daniluk (2002) participated in “at least six sessions of dance therapy” (p. 78).

Structure of Each DMT Session

Only four studies (*n* = 4) described the structure of their DMT intervention (Bernstein, 2019; Ho, 2015; Thomas, 2015; Verreault, 2017). Bernstein (2019) utilized “an energizing dance warm-up” before engaging the clients in a discussion about a theme, using that discussion to inspire “dances that target” (p. 202) the theme. The therapist ends each session with another discussion, this time about how to integrate the therapeutic material that was brought up from dance and discussion into the clients’ “daily lives” (Bernstein, 2019, p. 203).

The uncontrolled clinical trial conducted by Ho (2015) has the most systematic description of the DMT intervention. Each session started with a 20-minute warm-up consisting of “movement and group dancing for fun and relationship building” (p. 11). Then, there is a 25-minute “rhythmic movement” (p. 11) component, followed by a ten-minute break and then another 25 minutes of a movement exercise. Next, there is a 30-minute discussion in which clients share their “movement experiences, articulating movement experiences in relation to real-life experiences” (p. 11). Finally, there is a ten-minute closing ritual to summarize “what has been done and shared” and to engage in a “movement closing ritual” (p. 11).

In the community-based participatory research study by Thomas (2015), the author and the teenaged participants co-created a movement-based performance over the course of ten weeks. After ten weeks, the participants performed this piece during an assembly in the school they attended. During the first three weeks, participants met weekly, and each session had three segments: (a) warm-up that consisted of movement, (b) a discussion to generate ideas for the

performance, and (c) movement exercises to embody ideas and themes. In weeks four to ten, the author and participants worked on rehearsing for the performance with "room for improvisation and discussion" (Thomas, 2015, p. 184). The performance contained choreographed movement and scripted speech.

Verreault (2017) utilized four weekly DMT sessions, each session consisting of five parts: (a) Checking in verbally and using movement, (b) a body warm up to prepare for movement exercises, (c) movement exercises based on exploring a theme that emerged from the check-in, (d) verbal and nonverbal processing of the session, (e) and a closing ritual (verbal and nonverbal) to cool down the body and symbolically end the session. The author noted that the time spent in each part differed depending on what the participants needed, and that the participants directed the content of each session (Verreault, 2017).

The Use of Music

The use of music varied widely in the included studies. Bernstein (2019) described using both silence and music that was "carefully selected" (p. 208) to facilitate the DMT, drawing a distinction that moving to music helps draw emotionally safe boundaries and structure on feelings and moving to silence can potentially encourage more open-ended movements. Using a wide variety of music from across many cultures, Bernstein (2019) also taught music education workshops to her DMT participants to help expand their creativity. Below are examples given on the use of music in this study:

- World music such as Irish, Middle Eastern, Tibetan and Flamenco for introducing new dance dynamics and expanding dance vocabulary.
- West African drumming music for dances of assertion, self-definition, freeing of the hips, and a sense of demanding with leg strength.

- Keith Jarrett's "Koln Concert" as a non-intrusive background for personal story improvisations.
- The Bauls of Bengal and Indian folk rhythms for cultural-based recall and joyful dance.
- Handel's trumpet and water music for amplifying states of pride and courage.
- Mozart for supporting a lyrical journey in a story dance or for experimentation with imagery.
- Nature sounds such as wind, ocean waves or thunder storms for background without rhythm to set environments for individual self-exploration improvisation themes. (Berstein 2019, p. 208)

In Ho's (2015) uncontrolled clinical trial, music a fast tempo was used to help create "a sense of vitality" and "a joyful atmosphere" (p. 12). Slower tempo music that emphasized a steady beat was used to provide "a stable structure for movement" and facilitate "a sense of stability" for the participants (Ho, 2015, p. 12).

In the study by Thomas (2015), both music and silence were utilized. It was described that different types of music were used to "evoke different emotions" (Thomas, 2015, p. 187). The genres of the music "varied from classical to contemporary cello, to drums, to jazz, to heavy metal," and as the music played, the author asked the participants, "How does this music make you feel?" (Thomas, 2015, p. 187).

The transcript analysis from Leseho and Maxwell's (2019) study suggest that music/sound and breath provide for "inner space," whereas dance and movement provide "outer space" (p. 26). The authors elaborate that music and sound can bring "the dancer into the present and connect her to the universal life force" (Leseho & Maxwell, 2019, p. 26).

Verreault (2017) reported that each DMT session “included the use of music” (p. 123). Although the author did not describe what kind of music was played or how it was used, the author noted that “offering the choice” to use music or not helps participants notice their inner sensations and foster a “sense of being at ease” (Verreault, 2017, p. 126).

Koch and Weidinger-von der Recke (2009) described using a melody that combined traditional African music and funky jazz with a refugee survivor from the Democratic Republic of Congo. The participant reported that hearing this music, she was able to “present herself to the therapist as a happy and lively African woman instead of being a sick and weak refugee patient” (Koch & Weidinger-von der Recke, 2009, p. 294). The authors noted that the use of music helped deepen their therapeutic relationship, and they would use this music when the participant wanted to re-establish her connection with her inner strength and African identity (Koch & Weidinger-von der Recke, 2009).

In the study by Portokaloglou (2018), music was mentioned only once. The author states that music was used to “soothe” participants and help “enrich their interactive movement with free flow and spontaneity” (p. 105). In Fargnoli’s (2017) transcendental phenomenological study, one participant interviewed about their use of dance in the healing of interpersonal trauma reported, “The way I play the music, fast music, I let my body go” (p. 239); however, there is no further description of how the music was used. In studies by Harris (2019), Koch (2008), and Moe (2014), the use of music was mentioned, but there was no elaboration on what the music sounded like, how it helped the participants, or how it was used by the practitioner.

Outcomes of Dance/Movement Therapy for Interpersonal Trauma

Despite the fact that the DMT characteristics ranged widely in the included studies, the intervention outcomes that were observed had many commonalities (see Table 3).

Table 3

Observed Outcomes of DMT with Survivors of Interpersonal Trauma

Study	Increased Physical Ability	Increased Emotional Capacity	Mind-Body Integration	Safety	Trauma Processing	Empowerment	Social Support	Fun and Play
Bernstein, 2019	✓	✓		✓	✓	✓	✓	
Devereaux, 2008	✓	✓			✓			✓
Fargnoli, 2017		✓						
Gray, 2001	✓		✓					
Harris, 2019				✓		✓		
Ho, 2015	✓	✓					✓	
Koch, 2008							✓	✓
Koch & Weidinger-von der Recke, 2009							✓	
Leseho & Maxwell, 2010		✓	✓			✓		
Margolin, 2019					✓			
Mills & Daniluk, 2002			✓	✓	✓	✓	✓	✓
Moe, 2014				✓		✓	✓	✓
Portokaloglou, 2018		✓						
Stirling & Andrews, 2022	✓				✓			
Thomas, 2015							✓	
Verreault, 2017	✓			✓		✓	✓	

Increased Physical Awareness and Ability

Many studies reported a deeper awareness of the body by participants after a DMT intervention. This is especially helpful because commonly, survivors experience a body disconnection following the trauma, resulting in unwanted consequences. Devereaux (2008) reported that the participant “developed an increased awareness of her own body signals” (p. 68). The participants in Ho’s (2015) study reported becoming more “aware of their own pace through the rhythmic movements” (p. 13). According to the participant in the case study by Stirling and Andrews (2022), DMT allowed her to “bring awareness to the body” (p. 127) and attend to the senses in her body. In Verreault (2017), participants shared that after DMT, they were able to attend to body sensations, become aware of “their impulses to move or not,” and acknowledge their “bodily limits” while moving (p. 126).

DMT is also shown in multiple studies to increase participants’ range of movement. Bernstein (2019) witnessed DMT help “increase the dancer’s physical strength and movement range” (p. 199). One of the case participants in Harris (2019) displayed “an increasing range of movement” (p. 264) as they engaged in DMT. Similarly, the participant in Gray (2001) demonstrated an “even greater range of movement, a more erect posture, and increased eye contact” (p. 38) following the DMT intervention.

Increased Emotional Capacity

Many studies report that engaging in movement can help increase participants’ capacity for experiencing emotions. Bernstein (2019) noted that trauma responses often cause inhibition and restriction of expression, and DMT can expand participants’ expressive vocabulary. For example, a dance in which the participant shakes her body can become “shaking off, shaking out or shaking free” (Bernstein, 2019, p. 199). Portokaloglou (2018) reported the participants were

able to expand their “emotional and creative expression” (p. 108) that paralleled their process to their growing physical experiences. In Devereaux (2008), participants were able to expand their “capacity for self-regulation” (p. 67) by using their own bodies in the movement process. Participants in the study by Fargnoli (2017) remarked that they could use movement to “elicit emotional expression” (p. 243) and in order to then release these emotions. Leseho and Maxwell (2010) reported that participants were able to use DMT to “let go of stress” and “release tensions” (p. 23), thereby coping with stress and unpleasant emotional states.

DMT is also shown to help participants gain a greater awareness of their emotional states and abilities. Fargonli (2017) found that self-reflection was an essential theme that emerged from participants’ descriptions of how DMT helped them. This reflection increased the participants’ self-awareness, which increased their awareness of situations that could elicit a trauma response (Fargnoli, 2017). Similarly, after DMT, participants in Ho (2015) were able to use their newfound embodied sense of space to discover their “inner space” and the world “inside them” (p. 13). Leseho and Maxwell (2010) found that dance helped participants “discover a place within themselves of inner strength and resources” (p. 22).

Mind-Body Integration

Another finding that spans multiple studies in this review is that DMT seems to help participants with their mind-body connection. For instance, in Mills and Daniluk (2002), all of the participants reported feeling once disconnected from their bodies due to their previous experiences of trauma, and that DMT helped them re-establish their mind-body connection. After feeling more connected to their bodies, participants stated that they felt an increased sense of acceptance and care of their bodies (Mills & Daniluk, 2002).

Gray (2001) similarly observed that after a few sessions of DMT, the case participant started to integrate her physical sensations, emotions, and beliefs. During the very first DMT session, this participant stated that parts of her body felt “disconnected and broken” (Gray, 2001, p. 37); however, as treatment progressed, the author noticed that her “body and her mind were becoming more congruent and integrated" (p. 39), which allowed her to work through her traumatic experiences.

In Leseho and Maxwell (2019), one participant stated that the mind-body connection that was established by dancing or creative movement “kept my form going into depression” (p. 23). Margolin (2019) concluded that creative movement promote an integration of the physical, mental, and emotional experiences that traumatic exposure had disconnected. Moe (2014) reported that gendered victimization disconnects women from their bodies, and that belly dancing facilitates interconnectedness of body, mind, and spirit.

Safety

DMT was found in multiple studies to help participants experience sense of safety. Bernstein (2019) notes that DMT priorities emotional safety to avoid possibly re-traumatizing participants during the therapy process. This is done by carefully titrating therapy issues and strengthening psycho-physical capacities in tandem with addressing the negative impact of trauma (Bernstein, 2019). This is also shown in Harris (2019) with one case participant at first moving with “almost no energy,” but when asked to engage in movement, displaying “great strength” (p. 262). The author suggests that the movement exercise afforded the participant an enhanced sense of safety, thereby allowing her to move from a passive stance to an active stance (Harris, 2019). A participant in Moe (2014) reports that dancing creates a sense of safety in order

to experience difficult emotions without necessarily needing to talk about the traumatic memory itself.

Safety was a recurring theme in Verreault (2017). He found that safety was promoted when participants took their time in the movement exercises, did their own movement, and only did "what they want or what is good for their bodies" (Verreault, 2017, p. 124). He also found that when participants were offered these choices, they felt more at ease and, therefore, safer.

The participants in Mills and Daniluk (2002) reported that DMT helped them re-establish a connection with their bodies, which provided them with a sense of safety and control over their bodies. This sense of safety was what allowed them to "stay present in their bodies during times when painful feelings or sensations related to past bodily trauma resurfaced" (Mills & Daniluk, 2002, p. 80).

Trauma Processing

Another main finding across multiple studies is that participants in DMT are uniquely able to process their traumatic memories because dancing allows them to feel safe in their bodies. The participant in Stirling and Andrews (2022) reported that because of DMT, she felt grounded in the present moment, and therefore able to revisit the trauma without dissociation. This participant attributed the movement she had done to the ability to release and process "memories that had been held in the body" (Stirling & Andrews, 2022, p. 127). Similarly, Leseho and Maxwell (2010) contend that dancing creates "a sense of safety for the body and mind to process information and emotions previous too difficult to face" (p. 26).

The symbolic nature of dance also seems to play a key role in participants' ability to process their trauma. In the study by Devereaux (2008), one participant was able to recognize her pattern of immobilization, which was a response to the abuse she endured, through the metaphor

of physical confinement in DMT. Bernstein (2019) also reported using symbolic imagery to avoid re-traumatization when processing trauma. Bernstein (2019) notes that imagery, metaphor, or symbolic themes allow participants to relate to traumatic memories in an indirect way, therefore creating more emotional safety around trauma processing. Margolin (2019) remarks that the creative nature of symbol, imagery, or metaphor "gives form to ineffable and intangible things" (p. 186), which can facilitate trauma processing.

Mills and Daniluk (2002) found that some of the movement exercises in DMT revealed information about past traumas that were contained in the body. Participants reported a sense of struggle when painful memories arose during these movement exercises; they were also aware that processing these memories was necessary and critical to growth and healing (Mills & Daniluk, 2002).

Empowerment

Psychological empowerment has been defined as a sense of perceived control over one's environment, an internalized sense that one is able to meet situational demands, and a state of feeling self-efficacious or competent (Menon, 1999). Many authors in this review remarked that DMT helped participants experience psychological empowerment. Bernstein (2019) noted that dancing allows a survivor to integrate past memories of trauma while, at the same time, building experiences of agency. Since experiences of shame or self-criticism is common among survivors, Bernstein (2019) used dance to re-visit long-held narratives from a new vantage point, that of an empowered stance.

In Leseho and Maxwell's (2010) study, empowerment was found to be a main theme of DMT. These authors remarked that "dancing empowered these women to discover a place within themselves of inner strength and resources" (Leseho & Maxwell, 2010, p. 22). Survivors often

reject their own bodies after experiences of trauma, but dancing allowed these participants to develop an appreciation of the physical structure and power of their bodies (Leseho & Maxwell, 2010, p. 22). Similarly, Harris (2019) observed that following movement exercises, the participant's body posture and behaviors "suggested an empowered sense of self" (p. 262). In addition, Verreault (2017) reported that dancing allowed participants to build new and positive body experiences, which provided a sense of empowerment and self-agency.

Mills and Daniluk (2022) found that DMT enhanced their participants' sense of agency. The participants in this study reported appreciating the freedom of choice that characterized DMT, and as one participant stated, giving the choice to adjust the dancing to her own needs meant that she could reclaim "her right to be in charge of her body and her experience" (p. 82).

Participants in Moe (2014) reported that belly dancing facilitated healing largely due to the "physical reclamation" (p. 336) of their bodies, by experiencing positive appreciation for what their bodies could do. The author remarks on the seemingly juxtaposing idea that belly dancing – a type of dancing that is erotic – can facilitate embodied healing, explaining that because practitioners were in control of how and when they engaged in belly dancing, they were able to find empowerment in their sexuality (Moe, 2014).

Social Support and Healthier Relationships

Another significant outcome of DMT that was found across multiple studies in this review pertains to social support. For instance, the main finding in Koch's (2008) study was that sharing about her previous experience of abuse to the other group members was the first step in this participant's trauma recovery. The first sharing engendered subsequent sharing and stimulated empathy and understanding (Koch, 2008). When the participant felt heard by the

group, she felt her inner child – the one that was abused – being "protected and validated" (Koch, 2008, p. 80).

Koch and Weidinger-von der Recke (2009) observed that there are advantages to working through traumatic memories in a group setting. Mainly, the authors noticed that the presence of other survivors in a group setting seemed to shorten the participants' experiences of dissociative symptoms when recounting traumatic memories, and the other women in the group may even have contribute to the participants' lack of re-traumatization (Koch & Weidinger-von der Recke, 2009).

The participants in Moe (2014) described a sense of "belonging and comfort within the social context of belly dancing" (p. 336). Thomas (2015) observed that the movement exercises, since it highlighted a common experience, helped participants become more accepting and validating of each other. Participants in Verreault (2017) reported that being part of the group helped them realize that they were not alone, which was a significant part of what felt healing to them about the therapy.

Mills and Daniluk (2002) found that DMT allowed for a "unique kind of emotional connection" (p. 81) between participants. The participants in this study reported that moving together without words created an intimacy that added to their growth and healing (Mills & Daniluk, 2002). Additionally, participants found that observing one another being vulnerable with dancing contributed greatly to their sense of self-worth, since they felt "honored" to have witnessed a fellow participant take the risk of being vulnerable (Mills & Daniluk, 2002, p. 82).

Bernstein (2019) reported that by engaging in group dances, participants were able to build trust and healthy relationships with one another. Similarly, participants in Ho (2015) stated that the movement exploration around their body brought awareness of its boundaries, enabling

them to learn about their boundaries in relationships with others. Through DMT, these participants learned how to honor their own body and feelings, and develop limits with others (Ho, 2015).

Fun and Play

Dance and movement were found in many studies in this review to increase the participant's capacity for playfulness. Participants in Devereaux (2008) were able to laugh during DMT and at home, which was very reparative as survivors of constant abuse in the home. The ability to play and have fun was a main finding in Mills and Daniluk (2002), with participants reporting that experiencing playfulness as adults recaptured a sense of "carefree youth that had been lost to them" (p. 80) due to abuse. Additionally, these participants contended that the playfulness in DMT provided relief from the "emotionally heavier aspects" (Mills & Daniluk, 2002, p. 80) of the therapy. This was also a finding in Fargnoli's study, in which participants reported that dancing "elicited childlike behaviors and a sense of feeling carefree" (2017, p. 241), which brought participants peace.

Some participants of DMT simply found joy in dancing. For instance, one participant stated that "the day after I have [belly dancing] class, I'm bright, chipper, and happy" (Moe, 2014, p. 334). The case participant in Koch (2008) found that DMT contributed to her joy. Ho (2015) found that because participants were able to use their bodies to understand themselves and express their feelings, they found positive meaning and hope for a better life.

Effectiveness of Dance/Movement Therapy for Interpersonal Trauma

Participants from many studies in this review reported that DMT provided some relief from their mental health symptoms (Bernstein, 2019; Harris, 2019; Ho, 2015; Koch & Weidinger-von der Recke, 2005; Portokaloglou, 2018). However, only two studies (Harris 2019;

Ho, 2015) gave participants pre- and post-treatment measures to gather data on effectiveness, and neither of these studies had a control group to compare this data. The participant in Harris's (2019) case study was given a self-report symptom expression of PTSD at intake, 30 weeks, and 52 weeks. Results from these questionnaires indicate that there was a decrease in symptom expression for each criterion of PTSD (re-experiencing, avoidance, arousal, interpersonal problems, psychosomatic symptoms, mental health indicators, and obstacles to daily function); no statistical analyses were reported (Harris, 2019).

In Ho's (2015) mixed-methods study, participants were given the General Health Questionnaire-12, Courtauld Emotional Control Scale, Rosenberg Self-Esteem Scale, Stagnation Scale, and Overattahment Scale at baseline (T0), post-intervention (T1), and five weeks post-intervention (T2); the authors noted that each of these measures have been validated for the Chinese population, which was important as all participants were residents of Hong Kong. Overall, there were no statistically significant differences found in any of the outcome variables at the $p < 0.05$ level, and small effect sizes were found (Cohen's $d \geq 0.2$-0.5; Ho, 2015). Based on these studies, there is not enough information to comprehensively answer the present review's second research question.

Chapter 4: Discussion

Overview

The present study aimed to systematically review studies in current literature that used dance or movement to help women and girls heal from interpersonal trauma. An electronic search in two online databases, as well as the reference list of a recently published systematic review on the same topic, was completed for peer-reviewed articles published in English between the years 2000 and 2022. Studies of all methodologies were included, as long as a dance or movement intervention was used for the healing of interpersonal trauma (i.e., theoretical studies were excluded). Of the 460 articles identified from online databases, 39 articles were screened at the full-text level, and 15 studies were included. One additional study was identified from the existing published systematic review on the same topic. In total, 16 studies were included in this review. Of the included studies, 15 had a qualitative research design and one had a mixed methods design. A narrative synthesis was completed on the final sample of studies. Results from the narrative synthesis revealed both commonalities and differences in the use of DMT, its observed outcomes, and its participants.

It is important to note that the field of DMT for survivors of interpersonal trauma is far less developed than the author had originally expected. It was found that very few of the included studies provided sufficient information on the study methodology and results, which made it difficult to answer one of the present systematic review's research questions. For instance, only one of the studies gave participants pre- and post-treatment measures to assess the effectiveness of DMT (Ho, 2015). The rest of the included studies only reported the effects of DMT that the therapist had observed, with some studies also including participant reports of how DMT impacted them. Given the lack of data on treatment outcomes that were systematically

collected and analyzed, RQ3 (How effective is DMT for female survivors of interpersonal trauma?) could not be answered.

In addition, upon conducting this review and appraising the quality of the included studies, many studies were found to be weak in quality. This was primarily due to the lack of sufficient reporting on research methodology. Many authors did not report how they recruited participants, how they collected and analyzed their data, or even the limitations of their study. However, despite there being unclear or missing data, the extracted data sufficiently answered RQ1, RQ2, and RQ4. Synthesizing the existing data yielded interesting results that could help practitioners of psychotherapy who wish to use dance and movement to help their female clients who have survived interpersonal trauma.

RQ1: Characteristics of DMT for Interpersonal Trauma

The characteristics, qualities, and structure of DMT seemed to vary greatly across different studies. In this review, the fewest reported sessions of DMT were five total sessions (Ho, 2015) and the greatest reported number of total DMT sessions was 19 (Gray, 2001). Most of the studies did not report the exact number of implemented DMT sessions, and some studies reported this data in vague terms, for example, Devereaux (2008) implemented DMT weekly "over the course of several months" (p. 66). For the studies that described the structure of each session (Bernstein 2019; Ho, 2015; Thomas, 2015; Verreault, 2017), sessions always started with movement to warm up the body. These studies also described combining verbal discussion and movement exercises, usually on the same theme. Some studies (Ho, 2015; Verreault, 2017) utilized a closing ritual while others (Bernstein, 2019; Thomas, 2015) did not.

Due to the artistic nature of the intervention, some variability between how DMT is conducted is to be expected. There does not yet exist a manual for practitioners to follow

instructions on how best to use this intervention. The variability could be a function of the novelty of this intervention; although dancing has been historically used as a healing practice, formal DMT is only now emerging in literature as a legitimate intervention to use in psychotherapy. Perhaps DMT characteristics and structure must be experimented with for some time before it becomes more evident to practitioners what works, what doesn't, and how to measure and report these findings. Future research may consider examining if and how DMT should be different for those who survived trauma more recently (i.e. someone who experienced intimate partner violence within the past year) and those who survived trauma less recently (i.e. an adult survivor of childhood abuse).

The use of music also ranged widely across all studies in this review. In one study, moving to silence was mentioned to encourage more open-ended movements (Bernstein, 2019). Other studies in this review mentioned the use of music to help evoke emotions (Thomas, 2015), to soothe (Portokaloglou, 2018), to provide stability or boost energy (Ho, 2015), to draw emotional boundaries (Bernstein, 2019), or to connect to the participant's cultural strengths (Koch & Weidinger-von der Recke, 2009).

Koch and Weidinger-von der Recke (2009) had remarked on the significance of using music that was culturally congruent to the participant's ethnic identity. This is consistent with the existing literature on the use of culturally congruent music in psychotherapy. Research has found that people's associations with music and its emotional qualities has more to do with their cultural traditions than the elements of music itself (Gregory & Varney, 1996). For instance, traditional music was found to be an essential step in healing the intergenerational effects of forced assimilation policies for indigenous youth in Canada, as music connected the youth to their cultural practices (Kirmayer et al., 2003). Due its highly expressive and sociopolitical

nature, hip-hop and rap music can be used to engage Black and Latino clients in social justice counseling (Washington, 2018; Tyson, 2004). Literature shows that the use of music in therapy for BIPOC is powerful.

Crucially, therapists need to be aware of their clients' unique cultural backgrounds and traditions, and they must be careful to avoid making assumptions based on generalizations. There are several ethical concerns that arise when uninformed therapists use music with clients from different cultural backgrounds (Bradt, 1997), the discussion of which are beyond the scope of this review. However, if therapists take careful steps to ensure that the utilization of music is additive to treatment, and not harmful, it is evident that using traditional music from the home culture of a DMT client has the potential to bring great healing for that client.

RQ2: Outcomes Observed in DMT for Interpersonal Trauma

Across all the studies in the present systematic review, the support from a group of other survivors was the most commonly observed outcome. It was found that being in a group helped participants open up, feel more validated and less alone, avoid dissociation when talking about traumatic memories, and build better relationships in their personal lives (Bernstein, 2019; Ho, 2015; Koch, 2008; Koch & Weidinger-von der Recke, 2009; Mills & Daniluk, 2002; Moe, 2014; Thomas, 2015; Verreault, 2017). This finding is consistent with the robust evidence in literature indicating that social connections have the power to help survivors overcome interpersonal trauma, promote physical health, and even increase life expectancy (Holt-Lunstad, 2018). The qualitative reports from the study participants of the current review confirms the previous research that human beings heal in social connection, especially given the interpersonal nature of the trauma these survivors are healing from.

In order to heal the pain that was inflicted upon us by other people, we must heal with other people. This is perhaps an unsurprising finding, given that time and time again, studies show that the therapeutic relationship is the most powerful intervention in psychotherapy (Norcross, 2010). However, it would be important for practitioners to pay special attention to the power of social connections when using DMT for survivors of interpersonal trauma. Shame is a common experience for those who have experienced interpersonal violence. The experience of shame can cause a survivor to keep their experiences a secret, fearing judgment from others if they disclose their experiences. Literature shows that survivors often experience negative social reactions to the disclosure of a traumatic event (Campbell et al., 2001). When exacerbated by these negative social reactions, shame leads to more severe mental health symptoms and can worsen trauma recovery outcomes (Campbell et al., 2001). Group therapy has a unique opportunity to combat shame. Therefore, practitioners can maximize the full healing effects of this intervention by conducting DMT in groups so that survivors can come together, bear witness to each other's stories, and help one another heal.

Studies in this review also found that DMT commonly helped participants feel more empowered, increased participants' sense of agency, and facilitated participants' sense of being in control of their bodies and their sexuality (Bernstein, 2019; Harris, 2019; Leseho & Maxwell, 2020; Mills & Daniluk, 2002; Moe, 2014; Verreault, 2017). The feeling of empowerment is defined as the perception of self-efficacy, control over one's environment, and ability to meet the demands of life (Menon, 1999). Empowerment is a key component of healing for survivors of interpersonal trauma, as their experiences of violence had stripped them of their real and perceived sense of control and agency. DMT can be special place where survivors can decide

exactly what to do with their bodies, how to do it, and at what pace. For some survivors, this will be the first time they have ever experienced true control over their own body.

Participants being more aware of their bodies and being more physically able is another common DMT outcome in the studies in this review. DMT was found to increase participants' strength, movement range, strong posture, ability to pay attention to their body signals and impulses, and even their ability to make eye contact with the therapist (Bernstein, 2019; Devereaux, 2008; Gray, 2001; Ho, 2015; Stirling & Andrews, 2022; Verreault, 2017). Hyperarousal and dissociation are hallmarks of trauma, and both extremes result in the survivor feeling dysregulated and out of touch with their body. Perhaps gaining physical ability helps in trauma recovery because the survivor is able to gain a sense of mastery over their own body. This is consistent with previous research indicating that for adult survivors of childhood trauma, a sense of personal mastery leads to greater mental health outcomes (Infurna et al., 2015). Personal mastery is defined as the extent to which an individual feels in control of their life and is found to protect against depressive symptoms during times of stress (Cheng et al., 2021). It is significant that the concept of power and control appears again when examining what helps survivors of interpersonal trauma heal.

Following DMT, participants were also commonly found to have an increased capacity for emotional awareness and expression. The physical act of dance or movement helped participants feel, express, and release their emotions, increase their ability to regulate their emotions and cope with stress, and helped increase participants' emotional self-awareness (Bernstein, 2019; Devereaux, 2008; Fargnoli, 2017; Ho, 2015; Leseho & Maxwell, 2020; Portokaloglou, 2018). Perhaps due to the physical and emotional benefits of DMT, another common finding was that participants felt more connected to their bodies and integrated in their

emotional, physical, and spiritual experiences (Gray, 2001; Leseho & Maxwell, 2010; Mills & Daniluk, 2002). DMT was also commonly found in the included studies to help participants feel safer, both emotionally and in their bodies (Bernstein, 2019; Harris, 2019; Mills & Daniluk, 2002; Moe, 2014; Verreault, 2017). This sense of safety is perhaps the reason why DMT was also found to help participants process their traumatic memories, and make meaning from their experiences, without experiencing dissociation (Bernstein, 2019; Devereaux, 2008; Margolin, 2019; Mills & Daniluk, 2002, Stirling & Andrews, 2022).

Finally, many studies in this review found that DMT helped participants experience laughter, joy, and fun, which was a welcome break from the heavier parts of trauma recovery (Devereaux, 2008; Koch 2008, Mills & Daniluk, 2002; Moe, 2014). The process of trauma recovery is often dark and painful. This can lead to clients of therapy dropping out prematurely; in fact, client dropout rates in treatment for PTSD remains a major issue in the field of trauma recovery (Valenstein-Mah et al., 2022). For veterans in prolonged exposure and cognitive processing therapy treatment, dropout rates can be above 50% (Schnurr et al., 2022). In comparison, a systematic review examining the use of mind-body interventions such as gentle yoga for veterans reported study retention of 70% or higher (Cushing & Braun, 2018). A discussion about the full complexity of psychotherapy attrition rates is beyond the scope of the current review; however, it appears that therapy clients are more likely to have better outcomes in mind-body interventions comparable to DMT. Joy and fun being a part of treatment for DMT could be a motivating factor for clients to stick to the treatment, even if the treatment is at times difficult. This is a major strength of DMT, and future research can examine more deeply the potential causal relationship between joy and attrition rates in treatment for trauma.

RQ3: Effective DMT for Female Survivors of Interpersonal Trauma

Given the lack of data on treatment outcomes that were systematically collected and analyzed, RQ3 could not be answered.

RQ4: Participants of DMT for Interpersonal Trauma

Based on the data reported in this systematic review's included studies, DMT seems to be helpful for survivors of interpersonal trauma from all walks of life. In the included studies, the participants' racial and ethnic identities, as well as their citizenship, immigration, and international context, were all incredibly diverse. Notably, people from Southeast Asia, Central and South America, with the exception of only one participant from Brazil, are missing from the included studies in this review, suggesting a potential gap in current literature.

There were five studies in which DMT was used with refugees or asylum seekers, which is about one-third of the total sample of included studies, indicating that DMT may be a particularly well-suited intervention for this population. This is consistent with existing literature on the use of expressive arts therapy for refugees and asylum seekers. The forced migration experience is a turbulent one, with the survivor having left their homes, loved ones, and culture behind to settle in an unfamiliar environment with new language and customs; this highlights a particular need for treatment for this population to be culturally sensitive and trauma-informed (Dieterich-Hartwell et al., 2020). According to Dieterich-Hartwell et al. (2020), DMT is a trauma-informed intervention that is culturally sensitive, somatically informed, and strengths-based, which makes it a uniquely fitting modality for refugees and survivors of torture.

Most studies in the present review were conducted outside of the United States, and the majority of the participants from across all studies were non-white, highlighting that perhaps DMT is well suited intervention for the Global Majority (GM)—a collective term describing the

non-white majority that represents approximately 85% of the world's population. Researchers have been calling for interdisciplinary and creative approaches to healing trauma, particularly for survivors who are in the GM (Lee et al., 2023). DMT seems to be an effective intervention for GM survivors, perhaps because dancing is culturally bound. The way someone moves their body and the music they choose to move their body to, are deeply influenced by their culture, background, and history. Those who grew up in cultures where movement is integrated into their living and part of how they process the events of life may be more comfortable and get more out of DMT as a therapeutic intervention.

With the exception of one study (Thomas, 2015), the vast majority of the included studies did not examine the use of DMT for oppression trauma. Some articles (Bannerman, 2017; Campbell, 2019; Cantrick et al., 2018) on the use of DMT for racial trauma were excluded at the search and screening process because they were theoretical and did not collect data. There is a lack of empirical data on the use of DMT for heal from racial trauma, which is a significant gap in current literature.

The current review focused on the racial/ethnic representation and international context of survivors of interpersonal trauma who identify as cis-gender women and girls. Gender identity and sexual orientation are missing dimensions of cultural identity from this review. It would be important for future research to examine how LGBTQIA+ individuals who have survived interpersonal trauma experience DMT, and whether DMT is an effective intervention for them.

Limitations

The current systematic review has a few noteworthy limitations. Many included studies had a significant lack of sufficient data on study methodology, participant characteristics, and intervention characteristics. These low-quality studies were not excluded due to the fact that the

present topic is still emerging in current literature and excluding these studies would result in excluding a significant portion of the data. However, including these low-quality studies could have potentially exaggerated the overall results of this study, and lead to incorrect inferences (Khan et al., 1996).

Another significant limitation of the present systematic review is the lack of a second researcher in the data extraction phase. Although a research assistant was available for the search and screening phase, and reliability was reached for the selection of the final sample of studies for this review, only the research assistant was not available for the data extraction phase. This meant that only the present author extracted data from the sample of included studies, which could have resulted in reporting bias. Reporting bias is shown in literature to overestimate treatment effects, potentially threatening the validity of the review (Dwan et al., 2013). This is a potential limitation to the present study.

Implications for Clinical Practice

DMT has been found in the current review to be beneficial for female survivors of interpersonal trauma. The following are some recommendations, based on current literature, that practitioners should consider if they wish to utilize dance and movement to help women and girls heal from interpersonal trauma, or refer their clients for DMT as an adjunctive treatment.

Use Groups

The group setting was found to be an important aspect of what helps survivors. The support given from a group of other survivors was the most commonly observed outcome in the set of included studies reviewed. Witnessing each other be vulnerable and share in both discussion and movement was found to engender safety, connection, and subsequent sharing (Koch, 2008; Mills & Daniluk, 2002). It was also found that being in a group setting may have

helped participants avoid dissociative symptoms and re-traumatization (Koch & Weidinger-von der Recke, 2009). There is great benefit from conducting DMT in a group of multiple female survivors, as opposed to conducting DMT individually.

Use the Body to Create Metaphor, Imagery, and Symbolism

The use of figurative expression, as created by the body during dance and movement, was found to help participants process difficult material in a safe way. For instance, "shaking dances can become shaking off, shaking out or shaking free" (Bernstein, 2019, p. 199); exploring the physical boundary of the environment can become a metaphor for re-establishing one's emotional boundaries with others (Devereaux, 2008; Ho, 2015); using the arms to create a pushing motion can symbolically "push" (Fargnoli, 2017, p. 39) away feelings of shame. Using figurative expression can offer survivors a way to bypass defense mechanisms such as intellectualization (Mills & Daniluk, 2002), thereby being an excellent tool to help survivors process traumatic memories.

Give Choices

Many studies found that survivors found empowerment through making their own choices within DMT (Leseho & Maxwell, 2019; Ho, 2015; Moe 2014). Some examples can be offering survivors the choice to "take the lead or not, to use music to not, to turn off the music, to rest or lie down, to inquire about their bodily needs during the sessions" (Verreault, 2017, p. 126) or simply giving the choice to "adjust their participation according to their own needs, agendas, and comfort levels" (Mills & Daniluk, 2002, p. 82). Consistent with the current literature on trauma-informed care (Reeves, 2015), giving clients as much autonomy as possible seems to be an important aspect of treating survivors of interpersonal trauma.

Use Music Purposefully

Although many studies in the current review did not document their use of music, in the studies that did mention it, it was found that music can help evoke emotions (Thomas, 2015), create atmosphere/mood (Ho, 2015; Portokaloglou, 2018), and help connect a survivor to the present moment (Leseho & Maxwell, 2019). Music also has the potential to help connect a survivor to her cultural identity, and thereby helping the survivor access the strength she derives from her culture (Koch & Weidinger-von der Recke, 2009); however, this was notably a rare finding, unique to the circumstances of the participant in this case study, and it should be noted that not all survivors of interpersonal trauma will have a strong cultural identity from which to derive strength.

Don't Forget The Fun

According to the studies in this review, DMT has the potential to infuse trauma recovery – a type of treatment that is typically heavy and difficult – with creativity, joy, and fun. Not only does having fun help with therapy retention rates because survivors feel more able to continue with the heavier aspects of treatment (Mills & Daniluk, 2002), having fun is healing for survivors who, because of the trauma they survived, have historically lived difficult and painful lives (Devereaux, 2008; Fargnoli, 2017; Ho, 2015; Mills & Daniluk, 2002; Moe, 2014). Therefore, it is important for practitioners of DMT to remember the importance for having fun.

Recommendations for Future Research

Results of this review seem to suggest that practitioners who wish to utilize DMT can be flexible in the way they implement the intervention; there is not one standardized way to conduct DMT. It might benefit the field of DMT for interpersonal trauma for future practitioners and researchers to create a standardized intervention. The advantages of a manualized intervention

are great; it can elevate DMT to an evidence-based practice, ensure that treatment outcomes are as successful as possible, facilitate training for other practitioners (Mansfield & Addis, 2001). However, manual-based treatments are not without its potential disadvantages. A creative intervention such as DMT relies on imagination and flexibility. Since every client of DMT is unique, and a one-size-fits-all intervention may not be effective for all clients, and a manual could restrict the full healing power of this artistic form of healing.

Additionally, the field of DMT for interpersonal trauma would greatly benefit from further research that is rigorous in its methodology. As previously mentioned, the majority of the studies in the current review had poor quality due to a lack of information on the research methodology. Without this information, it would be virtually impossible to replicate these studies and verify treatment validity. Future researchers in this field should consider implementing more rigorous methodology and documenting their research more thoroughly to increase the credibility of this intervention. DMT being a more valid and credible intervention will ultimately help survivors of interpersonal trauma find healing.

Finally, it was found that current literature on the use of DMT for interpersonal trauma in women and girls lacked quantitative research, and when quantitative data was reported, it was only secondary to the qualitative data. There are many advantages of qualitative research; qualitative data builds a “complex, holistic picture” (Creswell, 1998, p. 15) to describe the human experience, and the languaged nature of qualitative research allows for complex topics such as the one discussed in the present dissertation to be investigated without reducing its complexity to a set of numbers. However, given the complete lack of quantitative data, the field of DMT would benefit from future quantitative research to balance out the qualitative literature that already exists. Quantitative research has the potential to reduce bias by using more objective

modes of data collection (Almalki, 2016). Future research that creates a manualized treatment protocol, uses more rigorous research methodology, or uses quantitative approaches could all potentially further legitimize this intervention in the eyes of policy makers and health care providers.

Given that the topic of using dance and movement to help heal survivors of interpersonal trauma is still emerging in current literature, all future research on this topic would benefit this field. It was particularly important for the present paper to systematically review the existing literature. By summarizing the studies that have been conducted, ascertaining the parts of this intervention that seem to be effective, and identifying the gaps in current literature, the present paper bolsters the knowledge of this intervention, ultimately allowing survivors to further gain access to a treatment approach that could help them in their journey of trauma recovery.

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APPENDIX A

List of Search Term

Search Term ID#	**Primary Term**	**Synonyms/ Alternate Forms**	**Notes**
01	Interpersonal trauma	"Trauma" or "Complex trauma" or "PTSD" or "post traumatic" or "Interpersonal trauma" or "Interpersonal violence" or "Intimate partner abuse" or "Intimate partner trauma" or "Intimate partner violence" or "domestic violence" or "sexual assault" or "dating violence" or "child abuse" or "child sexual abuse" or "molestation" or "sex trafficking" or "human trafficking" or "commercial sexual exploitation" or "racism" or "sexism" or "heterosexism" or "homophobia" or "racial trauma" or "racialized interactions" or "race-based trauma" or "race-based violence" or "gender-based trauma" or "gender-based violence"	
02	Dance therapy	"Dance" or "Dance/movement" or "Dance/movement therapy" or "Dance therapy" or "Movement therapy" or "Expressive arts" or "Expressive arts therapy"	
03	Women	"wom*" or "female" or “girl”	Women or woman
04	Adolescence	"teen" or "adolescent"	

APPENDIX B

Comprehensive Search Plan

Search Type	**Databases or Sources**	**Search Term ID(s)**	**Search Syntax or Instructions**	**Fields to Search**	**Specifiers**
Electronic Database	PsycINFO and PILOTS/PTSDPubs	01, 02, 03	("Trauma" or "Complex trauma" or "PTSD" or "post traumatic" or "Interpersonal trauma" or "Interpersonal violence" or "Intimate partner abuse" or "Intimate partner trauma" or "Intimate partner violence" or "domestic violence" or "sexual assault" or "dating violence" or "child abuse" or "child sexual abuse" or "molestation" or "sex trafficking" or "human trafficking" or "commercial sexual exploitation" or "racism" or "sexism" or "heterosexism" or "homophobia" or "racial trauma" or "racialized interactions" or "race-based trauma" or "race-based violence" or "gender-based trauma" or "gender-based violence") AND ("Dance" OR "Dance/movement" OR "Dance/movement therapy" OR "Dance therapy" OR "Movement therapy" OR "Expressive arts" OR "Expressive arts therapy") AND ("wom*" OR "female" or "girl*")	Title, Keywords, Abstract	*Years: 2000-2022 *Type: Peer-reviewed articles only *Language: English
Electronic Database	PsycINFO and PILOTS/PTSDPubs	01, 02, 04	("Trauma" or "Complex trauma" or "PTSD" or "post traumatic" or "Interpersonal trauma" or "Interpersonal violence" or "Intimate partner abuse" or "Intimate partner trauma" or "Intimate partner violence" or "domestic violence" or "sexual assault" or "dating violence" or "child abuse" or "child sexual abuse" or "molestation" or "sex trafficking" or "human trafficking" or "commercial sexual exploitation" or "racism" or "sexism" or "heterosexism" or "homophobia" or "racial trauma" or "racialized interactions" or "race-based trauma" or "race-based violence" or "gender-based trauma" or "gender-based violence") AND ("Dance" OR "Dance/movement" OR "Dance/movement therapy" OR "Dance therapy" OR "Movement therapy" OR "Expressive arts" OR "Expressive arts therapy") AND ("teen" or "adolescent")	Title, Keywords, Abstract	*Years: 2000-2022 *Type: Peer-reviewed articles only *Language: English

Search Type	**Databases or Sources**	**Search Term ID(s)**	**Search Syntax or Instructions**	**Fields to Search**	**Specifiers**
Individual Search of Journal Table of Contents	American Journal of Dance Therapy	01, 03	("Trauma" or "Complex trauma" or "PTSD" or "post traumatic" or "Interpersonal trauma" or "Interpersonal violence" or "Intimate partner abuse" or "Intimate partner trauma" or "Intimate partner violence" or "domestic violence" or "sexual assault" or "dating violence" or "child abuse" or "child sexual abuse" or "molestation" or "sex trafficking" or "human trafficking" or "commercial sexual exploitation" or "racism" or "sexism" or "heterosexism" or "homophobia" or "racial trauma" or "racialized interactions" or "race-based trauma" or "race-based violence" or "gender-based trauma" or "gender-based violence") AND ("wom*" OR "female" or "girl*")	Title, Keywords, Abstract	*Years: 2000-2022
Individual Search of Journal Table of Contents	American Journal of Dance Therapy	01, 04	("Trauma" or "Complex trauma" or "PTSD" or "post traumatic" or "Interpersonal trauma" or "Interpersonal violence" or "Intimate partner abuse" or "Intimate partner trauma" or "Intimate partner violence" or "domestic violence" or "sexual assault" or "dating violence" or "child abuse" or "child sexual abuse" or "molestation" or "sex trafficking" or "human trafficking" or "commercial sexual exploitation" or "racism" or "sexism" or "heterosexism" or "homophobia" or "racial trauma" or "racialized interactions" or "race-based trauma" or "race-based violence" or "gender-based trauma" or "gender-based violence") AND ("teen" or "adolescent")	Title, Keywords, Abstract	*Years: 2000-2022

APPENDIX C

Search Documentation Record

Search Date	FULL SEARCH ID#	TYPE OF SEARCH	DATABASE/SOURCE	5EARCH TERM ID#s	FIELDS SEARCHED	SEARCH SPECIFIER: Years	SEARCH SPECIFIER: Publication Type	# of Records
4/26/22	1	electronic database	PsycINFO	1, 2, and 3	Title, Keywords, Abstract	2000-2022	Peer reviewed articles in English	173
4/30/22	2	electronic database	PsycINFO	1, 2, and 4	Title, Keywords, Abstract	2000-2022	Peer reviewed articles in English	66
5/1/22	3	electronic database	American Journal of Dance Therapy	1, 3	Title, Keywords, Abstract	2000-2022	Peer reviewed articles in English	143
2/5/22	4	electronic database	American Journal of Dance Therapy	1, 4	Title, Keywords, Abstract	2000-2022	Peer reviewed articles in English	75
3/13/22	5	electronic database	PILOTS	1, 2, and 3	Title, Keywords, Abstract	2000-2022	Peer reviewed articles in English	0
3/13/22	6	electronic database	PILOTS	1, 2, and 4	Title, Keywords, Abstract	2000-2022	Peer reviewed articles in English	3
5/7/22	7	other	Reference list of systematic review	5		2000-2022	Peer reviewed articles in English	1
							TOTAL	461

APPENDIX D

Screening and Selection Record

	AUTHOR(S)	YEAR	ABBREVIATED TITLE	DATABASES/ SOURCES	Seach ID	TITLE AND/OR KEYWORD SCREEN DATE	ABSTRACT SCREEN: DECISION - DATE	FULL-TEXT SCREEN?	INCL (SO): Empirical study published in peer reviewed journal
2	Margolin, Indrani	2019	Breaking free: One adolescent woman's recovery from dating violence through creative dance.	APA PsycInfo	1	CL 3/26/22	CL 3/26	Y	y
3	Dutton, Mary Ann; Dahlgren, Sherisa; Martinez, Monica; Mete, Mihriye	2021	The holistic healing arts retreat: An intensive, experiential intervention for survivors of interpersonal trauma.	APA PsycInfo	1	CL 4/26/22	CL 4/26/22	Y	Y
4	Ho, Rainbow Tin Hung	2015	A place and space to survive: A dance/movement therapy program for childhood sexual abuse survivors.	APA PsycInfo	1	TR 3/25/22	TR 4/7	Y	Y
5	Stirling, Janine; Andrews, Katrina	2021	Somatic interventions therapists use when treating women presenting with sexual assault trauma involving tonic immobility.	APA PsycInfo	1	CL 4/26/22	CL 4/26/22	Y	Y
6	Rova, Marina; Burrell, Claire; Cohen, Marika	2020	Existing in-between two worlds: Supporting asylum seeking women living in temporary accommodation through a creative movement and art intervention.	APA PsycInfo	1	CL 4/26/22	CL 4/26/22	Y	Y
7	Masson, Cora E.	2020	Writing and healing: Poetry as a tool in leaving and recovering from abusive relationships.	APA PsycInfo	1	CL 4/26/22	CL 4/26/22	N	Y

	INCL(RV): Dance/movement Therapy	INCL (RV): Interpersonal Trauma	INCL(PAR): Age over 13	INCL(PAR): Women	EXCLUSION: other mind/body interventions	EXCLUSION: non-interpersonal trauma	REVIEWER DECISION - DATE	FINAL DECISION	DECISION NOTES
2	y	y	y	y	n	n	CL 3/26	YES	
3	not dmt						CL 4/8/22	no	intervention was not DMT
4	Y	Y	Y	Y	N	N	TR 4/7/22	YES	
5	Y	Y	Y	Y	N	N	CL 4/26/22	YES	
6	not dmt						CL 4/26/22	no	intervention was art and movement together, not possible to extract only movement data
7	not dmt						CL 4/26/22	no	

APPENDIX E

Data Collection and Extraction Form

Document ID#

Authors and Year *(last names of authors and year of publication, e.g., Johnson, Jones, and Jackson 2011)*

Full Document Title

Research Variables

Notes:

General Information

1. **Date form completed** ***(dd/mm/yyyy)***	
2. **Initials/ID of person extracting data**	
3. **Source/Publication Type** *(journal, book, conference, report, dissertation, abstract, etc.)*	
4. **Source Name** *(Title of Journal, Book, Organization, etc.)*	
5. **OTHER:**	
6. **Notes:**	

Design Characteristics and Methodological Features

	Descriptions as stated in report/paper	**Location in text** *(pg & ¶/fig/table)*
7. **Aim of study**		
8. **General Method** (Quant, Qual, Mixed)		
9. **Design or Specific Research Approach**		
10. **Other**		

11. **Notes:**

DMT: Characteristics, Quality, And Structure (RQ #1)

Research Variables	**Information**	**Reliability/Validity/Utility**	**Location in text** *(pg & ¶/fig/table)*
12. **Total amount of DMT sessions**			
13. **Length of each session**			
14. **What was the structure? (Warm-up, intervention & cool down? Intervention only?)**			
15. **Utilization of music**			
16. **Dance experience of therapist**			
17. **Therapist degree and certifications**			
18. **Notes:**			

DMT: Outcomes Assessed (RQ#2)

Research Variables	Information	Reliability/Validity/Utility	Location in text *(pg & ¶/fig/table)*
19. **Symptoms**			
20. **Diagnoses**			
21. **Growth attributes**			
22. **Notes:**			

DMT: Effectiveness (RQ #3)

Research Variables	Information	Reliability/Validity/Utility	Location in text *(pg & ¶/fig/table)*
23. **Data from measures**			
24. **Qualitative report of participants**			
25. **Clinical judgment**			
26. **Notes:**			

DMT: Participants (RQ #4)

Research Variables	Information	Reliability/Validity/Utility	Location in text *(pg & ¶/fig/table)*
27. **Race/ethnicity**			
28. **Nationality/immigration status**			
29. **Age**			

Research Variables	Information	Reliability/Validity/Utility	Location in text *(pg & ¶/fig/table)*
30. **Adult or adolescent**			
31. **Disability status**			
32. **Type of trauma experienced**			
33. **Notes:**			

Study Participant Recruitment

	Description as stated in report/paper	Location in text *(pg & ¶/fig/table)*
34. **Recruitment Methods**		
35. **Sample Size**		
36. **Notes:**		

Setting Characteristics

	Descriptions as stated in report/paper	**Location in text** *(pg & ¶/fig/table)*
37. **Study Location**		
38. **Data Collection Setting(s)**		
39. **Other**		
40. **Notes:**		

Analyses Conducted

	Description as stated in report/paper	**Location in text** (pg & ¶/fig/table)
41. **Descriptive Statistics used**		
42. **Inferential Statistics used**		
43. **Qualitative Analyses conducted**		
44. **Other**		
45. **Notes:**		

Results

	Description as stated in report/paper	**Location in text** *(pg & ¶/fig/table)*
46. **Key Result #1**		
47. **Key Result #2**		

	Description as stated in report/paper	Location in text *(pg & ¶/fig/table)*
48. **Key Result #3**		
49. **Key Result #4**		
50. **Key Result #5**		
51. **Key Result #6**		
52. **Key Result #7**		
53. **Key Result #8**		
54. **Notes:**		

Conclusions and Follow-up

	Description as stated in report/paper	Location in text *(pg & ¶/fig/table)*
55. **Key conclusions of study authors**		
56. **Study Author's Recommendations for Future Research**		

57. **Does the study directly address your review question?** ***(any issues of partial or indirect applicability)***		
58. **Your Take-Aways: General**		
59. **Your Take-Aways: Implications for Practice**		
60. **Salient Study Limitations (to inform Quality Appraisal)**		
61. **References to other relevant studies**		
62. **Further study information needed?** *(from whom, what and when, contact info)*		
63. **Correspondence received** *(from whom, what and when)*		
64. **Notes:**		

APPENDIX F

Quality Appraisal Form

INDIVIDUAL STUDY QUALITY APPRAISAL FORM FOR SYSTEMATIC REVIEWS
Developed by Shelly P. Harrell, Ph.D., Pepperdine University
Author(s) and Year: author, year Study ID# 000

1. Methodology: Quantitative   Qualitative   Mixed Methods

2. Specific Design/Inquiry Approach: approach

RATING SCALE: Strong=3   Good/Adequate=2   Weak=1   Missing=0   N/A

3. Strength of Literature Foundation and Rationale for Study: n
(POSSIBLE CONSIDERATIONS: current and relevant references, background literature sufficiently comprehensive, Need/Rationale for study clearly stated, etc.)

4. Clarity and specificity of Research Aims/Objectives/Questions: n

5. Quality of research design or methodological approach: n
(POSSIBLE CONSIDERATIONS: provides rationale for design chosen, appropriateness for research questions, clear description of design and methodological approach, strength of design characteristics utilized (e.g., randomization, blinding, triangulation, etc.), potential confounds identified and addressed in some way, consideration of internal and external validity in design, specific design-based "risk of bias" criteria)

6. Sample Selection and Characteristics: n
(POSSIBLE CONSIDERATIONS: adequacy of sample size in context of design, detailed description of sample characteristics, representativeness of sample, adequacy of sample characteristics in the context of research aims, detailed description of recruitment and selection of participants, extent of selection or sample bias)

7. Measures / Data Collection Tools: n
(POSSIBLE CONSIDERATIONS: rationale for selection, appropriateness for assessing variables, development of new tool clearly described, psychometric properties (reliability, validity, utility) described, adequacy of psychometric properties, sufficiently comprehensive, etc.)

8. Data Collection: n
(POSSIBLE CONSIDERATIONS: data collection procedures clearly described, intervention strategies and implementation described in detail, quality of data collected, attrition, etc.)

9. Analysis of Data: n
(POSSIBLE CONSIDERATIONS: appropriateness of analysis for research questions and type of data, power and effect size presented, results presented clearly and comprehensively, etc.)

10. Discussion of Study Limitations: n
(POSSIBLE CONSIDERATIONS: identifies and discusses limitations in the context of design/strategy utilized (e.g., various forms of bias, internal validity, external validity (generalizability), ecological validity, transferability, credibility, transparency, etc.), comprehensiveness of limitations identified)

11. Consideration of culture and diversity: n
(POSSIBLE CONSIDERATIONS: attention to diversity within sample, includes culturally appropriate methods and tools, avoids biased language, uses appropriate terminology, etc.)

12. OVERALL RATING:	**EXEMPLARY**	**STRONG**	**GOOD/ADEQUATE**	**WEAK**
	(e.g., all "3"s)	(e.g., mostly "3"s)	(e.g., mostly "2"s)	(e.g., mostly "1"s)

APPENDIX G

Data Extraction Spreadsheet

ID#	Author(s)	Year	FINAL DECISION DATE	DATA EXTRACTION DATE	GENERAL: *Source Title*	GENERAL: *Type of Study*	STUDY CHARACTERISTICS: *Design/Approach*	STUDY CHARACTERISTICS: *Direct or indirect data*	STUDY CHARACTERISTICS: *Sample Size*

STUDY CHARACTERISTICS: *Total DMT Sessions*	STUDY CHARACTERISTICS: *Length of Each DMT Session*	STUDY CHARACTERISTICS: *Structure of Intervention*	STUDY CHARACTERISTICS: *Utilization of Music*	STUDY CHARACTERISTICS: *Dance Experience of Therapist*	STUDY CHARACTERISTICS: *Growth attributes*

STUDY CHARACTERISTICS: *Trauma Symptoms Reduced*	STUDY CHARACTERISTICS: *Other Mental Health Symptoms Reduced*	STUDY CHARACTERISTICS: *Diagnoses Treated*	PARTICIPANT CHARACTERISTICS: *Age*	PARTICIPANT CHARACTERISTICS: *Race/Ethnicity*	PARTICIPANT CHARACTERISTICS: *Nationality/Immigration Status*	Quality Appraisal Overall Rating	Notes/Comments

APPENDIX H

Evidence Tables

Study	Title	Journal	Research Method	Research Design	Sample Size	Quality Appraisal Rating
Bernstein, 2019	Empowerment-Focused Dance/Movement Therapy for Trauma Recovery	American Journal of Dance Therapy	Qualitative	Phenomenological study	Not reported	Weak
Devereaux, 2014	Untying the Knots: Dance/Movement Therapy with a Family Exposed to Domestic Violence	American Journal of Dance Therapy	Qualitative	Case study	1	Weak
Fargnoli, 2017	Maintaining Stability in the Face of Adversity: Self-Care Practices of Human Trafficking Survivor-Trainers in India	American Journal of Dance Therapy	Qualitative	Phenomenological study	6	Strong
Gray, 2001	The Body Remembers: Dance/Movement Therapy with an Adult Survivor of Torture	American Journal of Dance Therapy	Qualitative	Case study	1	Weak
Harris, 2019	Dance/Movement Therapy in Cross-Cultural Practice: Fostering Assertiveness with Torture Survivors	American Journal of Dance Therapy	Qualitative	Case study	2	Weak
Ho, 2015	A place and space to survive: A dance/movement therapy program for childhood sexual abuse survivors	The Arts in Psychotherapy	Mixed Methods	Uncontrolled clinical trial	25	Strong
Koch, 2008	Dance/Movement Therapy with Clergy in Crisis: A (Group) Case Study	American Journal of Dance Therapy	Qualitative	Case study	1	Weak
Koch & Weidinger-von der Recke, 2009	Traumatised refugees: An integrated dance and verbal therapy approach	The Arts in Psychotherapy	Qualitative	Case study	3	Weak
Leseho & Maxwell, 2010	Coming alive: creative movement as a personal coping strategy on the path to healing and growth	British Journal of Guidance & Counselling	Qualitative	Phenomenological study	29	Good

Study	Title	Journal	Research Method	Research Design	Sample Size	Quality Appraisal Rating
Margolin, 2019	Breaking Free: One Adolescent Woman's Recovery from Dating Violence Through Creative Dance	American Journal of Dance Therapy	Qualitative	Case study	1	Good
Mills & Daniluk, 2002	Her Body Speaks: The Experience of Dance therapy for Women Survivors of Child Sexual Abuse	Journal of Counseling & Development	Qualitative	Phenomenological study	5	Good
Moe, 2014	Healing Through Movement: The Benefits of Belly Dance for Gendered Victimization	Journal of Women and Social Work	Qualitative	Phenomenological study	20	Good
Portokaloglou, 2018	Transplanting the Soul-Tree: an analytical perspective on how the Sesame approach and movement with touch and sound became the fertile soil for the psychological support and therapy for refugee women	Dramatherapy	Qualitative	Case study	Not reported	Weak
Stirling & Andrews, 2022	Somatic interventions therapists use when treating women presenting with sexual assault trauma involving tonic immobility	Body, Movement and Dance in Psychotherapy	Qualitative	Case study	1	Good
Thomas, 2015	The Dance of Cultural Identity: Exploring Race and Gender with Adolescent Girls	American Journal of Dance Therapy	Qualitative	Community-based participatory research	7	Good
Verreault, 2017	Dance/Movement therapy and resilience building with female asylum seekers and refugees: a phenomenological practice based research	Intervention	Qualitative	Phenomenological study	8	Good

APPENDIX I

List of Excluded Studies

1. Abdulah, D. M., & Abdulla, B. M. O. (2020). Suicidal ideation and attempts following a short-term period of art-based intervention: An experimental investigation.
2. Acolin, J. (2016). The mind–body connection in dance/movement therapy: Theory and empirical support.
3. Akehurst, S., & Oliver, E. J. (2014). Obsessive passion: a dependency associated with injury-related risky behaviour in dancers.
4. Akunna, G. I. (2015). An African Igbo perspective on mourning dances and their application to dance/movement therapy.
5. Al-Ajarma, Y., & Barzilay-Shechter, K. (2007). Dialogue between political trauma and personal defenses.
6. Alsaker, K., Moen, B. E., & Kristoffersen, K. (2007). Comparing quality of life instruments in a population of abused women.
7. Amir, D. (2004). Giving trauma a voice: The role of improvisational music therapy in exposing, dealing with and healing a traumatic experience of sexual abuse.
8. Andrus, M. (2020). Exhibition and film about miscarriage, infertility, and stillbirth: Art therapy implications.
9. Appleton, V. (2001). Avenues of hope: Art therapy and the resolution of trauma.
10. Arias, G., Dennis, C., Loo, S., Lazier, A. L., Moye, K. D., Moye, K., ... & Butler, J. D. (2020). A space to speak: therapeutic theater to address gender-based violence.
11. Backos, A., & Samuelson, K. W. (2017). Projective drawings of mothers and children exposed to intimate partner violence: a mixed methods analysis.
12. Bagla, R., Khoury, J. S., & Skidmore, C. (2009). Teaching video NeuroImages: dancing epilepsy.
13. Baljon, M. C. L., & Ganzevoort, R. (2011). Symbolen voor kracht De bijdrage van beeldende werkvormen aan posttraumatische groei bij in hun jeugd misbmikte mannen = The contribution of spirituality and art therapy to posttraumatic growth for male survivors of childhood abuse.
14. Bannerman, A. (2017). Resisting oppression: Body psychotherapy techniques to empower women.
15. Barton, E. J. (2011). Movement and mindfulness: A formative evaluation of a dance/movement and yoga therapy program with participants experiencing severe mental illness.
16. Baudino, L. M. (2010). Autism spectrum disorder: A case of misdiagnosis.
17. Baum, R. (2013). In the arms of grief: Working with developmentally delayed children and their caregivers.
18. Beardall, N., & Furcron, C. (2019). The Embodied Teen: A Somatic Curriculum for Teaching Body-Mind Awareness, Kinesthetic Intelligence, and Social and Emotional Skills.
19. Beardall, N., Blanc, V., Cardillo, N. J., Karman, S., & Wiles, J. (2016). Creating the online body: Educating dance/movement therapists using a hybrid low-residency model.
20. Beggan, J. K., & Pruitt, A. S. (2014). Leading, following and sexism in social dance: change of meaning as contained secondary adjustments.
21. Ben-Asher, S., Koren, B., Tropea, E. B., & Fraenkel, D. (2002). Case study of a five year-old Israeli girl in movement therapy.
22. Bereiter, J. (2007). Review of A handbook of play therapy with aggressive children.
23. Betty, A. (2013). Taming tidal waves: A dance/movement therapy approach to supporting emotion regulation in maltreated children.
24. Beutel, M. E., Michal, M., & Subic-Wrana, C. (2008). Psychoanalytically-oriented inpatient psychotherapy of somatoform disorders.
25. Biondo, J. (2019). Stillness in dance/movement therapy: Potentiating creativity on the edge and in the void.
26. Bird, J. (2018). Art therapy, arts-based research and transitional stories of domestic violence and abuse.
27. Blanc, V. (2021). The Dance of Becoming: Pedagogy in Dance/Movement Therapy in the United States.
28. Blum, H. P. (2011). Oskar Kokoschka and Alma Mahler: Art as diary and as therapy.
29. Bower, J., Catroppa, C., Grocke, D., & Shoemark, H. (2014). Music therapy for early cognitive rehabilitation post-childhood TBI: an intrinsic mixed methods case study.
30. Brantley, M. L., Kerrigan, D., German, D., Lim, S., & Sherman, S. G. (2017). Identifying patterns of social and economic hardship among structurally vulnerable women: a latent class analysis of HIV/STI risk.
31. Brooks, S. (2010). Hypersexualization and the dark body: Race and inequality among black and Latina women in the exotic dance industry.
32. Brown, C. A. (2010). American Dance Therapy Association 44th Annual Conference 2009 Research Poster Session.
33. Buck, H. L. (2002). Rebuilding the bridge: An Arab-American art therapist responds to 9/11.
34. Buk, A. (2009). The mirror neuron system and embodied simulation: Clinical implications for art therapists working with trauma survivors.
35. Burt, H. (2006). Editorial.

36. Caldwell, C. (2016). The moving cycle: A second generation dance/movement therapy form.
37. Caldwell, C. (2019). Grace and grit: A meditation on dance movement therapy's locations and aspirations.
38. Caldwell, C., & Leighton, L. (2016). Dance/movement therapy, women's rights, and feminism: The first 50 years.
39. Callahan, A. B. (2011). The parent should go first: A dance/movement therapy exploration in child loss.
40. Campbell, B. (2019). Past, present, future: A program development project exploring Post Traumatic Slave Syndrome (PTSS) using experiential education and dance/movement therapy informed approaches.
41. Cantrick, M., Anderson, T., Leighton, L. B., & Warning, M. (2018). Embodying activism: Reconciling injustice through dance/movement therapy.
42. Capello, P. P. (2007). Dance as our source in dance/movement therapy education and practice.
43. Capello, P. P. (2008). Dance/movement therapy with children throughout the world.
44. Capello, P. P. (2017). Crossing continents: Global pathways of dance/movement therapy.
45. Cardinal, K. (2014). The Personality Tea Pot: The Effects and Future Application in Art Therapy (La théière de la personnalité: les effets et les applications futures de l'art thérapie).
46. Carr, C., d'Ardenne, P., Sloboda, A., Scott, C., Wang, D., & Priebe, S. (2012). Group music therapy for patients with persistent post-traumatic stress disorder–an exploratory randomized controlled trial with mixed methods evaluation.
47. Casey, S. E. (2018). Moving to prevent child sexual abuse: Dance/movement therapy as primary prevention.
48. Chang, M. aH. (2016). Dance/movement therapists of color in the ADTA: The first 50 years.
49. Chenghou, C. (2017). The water of life: Dissolution and transformation in sandplay therapy.
50. Chiang, M., Reid-Varley, W. B., & Fan, X. (2019). Creative art therapy for mental illness.
51. Cimolin, V., Beretta, E., Piccinini, L., Turconi, A. C., Locatelli, F., Galli, M., & Strazzer, S. (2012). Constraint-induced movement therapy for children with hemiplegia after traumatic brain injury: a quantitative study.
52. Clements-Cortes, A. (2014). Breaking free: Healing physical, verbal, and sexual abuse through the Bonny Method of Guided Imagery and Music.
53. Climenko, J. (2009). Vanessa A. Camilleri: Healing the Inner-City Child, Creative Arts Therapies with At-risk Youth.
54. Colegrove, V. M., Havighurst, S. S., & Kehoe, C. E. (2019). Emotion regulation during conflict interaction after a systemic music intervention: Understanding changes for parents with a trauma history and their adolescent.
55. Colegrove, V. M., Havighurst, S. S., Kehoe, C. E., & Jacobsen, S. L. (2018). Pilot randomized controlled trial of Tuning Relationships with Music: Intervention for parents with a trauma history and their adolescent.
56. Cooper, A. L. (2012). When the Lullaby is Missing: Healing from an Infancy in Foster Care.
57. Cristobal, K. A. (2018). Power of touch: Working with survivors of sexual abuse within dance/movement therapy.
58. Culver, K. A., Whetten, K., Boyd, D. L., & O'Donnell, K. (2015). Yoga to reduce trauma-related distress and emotional and behavioral difficulties among children living in orphanages in Haiti: A pilot study.
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60. Curtis, A. S. (2006). Expressing trauma: comparing the client's art-making to the artist's work.
61. Czamanski-Cohen, J. (2010). "Oh! Now I remember": The use of a studio approach to art therapy with internally displaced people.
62. Dance, C., Rushton, A., & Quinton, D. (2002). Emotional abuse in early childhood: Relationships with progress in subsequent family placement.
63. Dansky, S. K. (2022). The Small Body Outline Drawing and Art Therapy With a Female Substance Use Disorder Patient to Facilitate Mindful Processing of Trauma: A Case Report (Le petit dessin de contour du corps et l'art-thérapie avec une patiente souffrant d'un trouble d'abus de substances pour faciliter le traitement conscient du traumatisme: un rapport de cas).
64. Day, T., Baker, F., & Darlington, Y. (2009). Experiences of song writing in a group programme for mothers who had experienced childhood abuse.
65. de Juan, T. F. (2016). Music therapy for women survivors of intimate partner violence: An intercultural experience from a feminist perspective.
66. de Valenzuela, M. P. (2014). Dancing with mothers: A school-based dance/movement therapy group for Hispanic immigrant mothers.

67. DeMatteo, C., Bain, J. R., Galea, V., & Gjertsen, D. (2006). Botulinum toxin as an adjunct to motor learning therapy and surgery for obstetrical brachial plexus injury.
68. Devís-Devís, J., Pereira-García, S., López-Cañada, E., Pérez-Samaniego, V., & Fuentes-Miguel, J. (2018). Looking back into trans persons' experiences in heteronormative secondary physical education contexts.
69. Domene, P. A., Stanley, M., & Skamagki, G. (2018). Injury surveillance of nonprofessional salsa dance.
70. Dominguez, K. M. (2018). Encountering disenfranchised grief: An investigation of the clinical lived experiences in dance/movement therapy.
71. Dunphy, K., Elton, M., & Jordan, A. (2014). Exploring dance/movement therapy in post-conflict Timor-Leste.
72. Dutton, M. A., Dahlgren, S., Martinez, M., & Mete, M. (2021). The holistic healing arts retreat: An intensive, experiential intervention for survivors of interpersonal trauma.
73. Dwivedi, K. N., Nicholson, C., & Irwin, M. (2010). Children and adolescents in trauma: Creative therapeutic approaches.
74. Eisenbach, N. A., Snir, S., & Regev, D. (2015). Identification and characterization of symbols emanating from the spontaneous artwork of survivors of childhood trauma.
75. Erika, P., Katalin, K. E., & Ilona, H. (2009). A hatképes történet módszere a komplex művészetterápiában = The six-part story method in the context and use of complex art therapy.
76. Fairchild, R., Thompson, G., & McFerran, K. S. (2017). Exploring the meaning of a performance in music therapy for children and their families experiencing homelessness and family violence.
77. Farris, P. (2006). Mentors of diversity: A tribute.
78. Federman, D., Zana-Sterenfeld, G., & Lev-Wiesel, R. (2019). Body movement manual for the assessment and treatment of trauma survivors.
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81. Fitzpatrick, F. (2002). A search for home: The role of art therapy in understanding the experiences of Bosnian refugees in Western Australia.
82. Flentroy, S. L., Young, M., Blue, N., & Gilbert, D. J. (2015). Innovative assessment of childhood trauma and its link to HIV and substance abuse in post-incarcerated women.
83. Ford, C. (2013). Dancing with horses: Combining dance/movement therapy and equine facilitated psychotherapy.
84. Franckeviciute, E. V., & Krisciunas, A. J. (2008). Motor recover during the acute period of craniocerebral trauma using kinetotherapy.
85. Fuhrmann, T. L., Brayer, A., Andrus, N., & McIntosh, S. (2010). Injury prevention for modern dancers: a pilot study of an educational intervention.
86. Gamba, M., & Nichols, E. (2021). Resmaa Menakem, My Grandmother's Hands: Racialized Trauma and the Pathway to Mending Our Hearts and Bodies.
87. Gilberti, N., Gamba, M., Gasparotti, R., Padovani, A., & Magoni, M. (2014). " Head banging" causing subdural hemorrhage and internal carotid artery dissection.
88. Ginsburgs, V. H., & Goodill, S. W. (2009). A dance/movement therapy clinical model for women with gynecologic cancer undergoing high dose rate brachytherapy.
89. Glaister, J. A. (2000). Four years later: Clara revisited.
90. Goodarzi, G., Sadeghi, K., & Foroughi, A. (2020). The effectiveness of combining mindfulness and art-making on depression, anxiety and shame in sexual assault victims: A pilot study.
91. Gooding, L. F., & Langston, D. G. (2019). Music therapy with military populations: A scoping review.
92. Gordon-Giles, N., & Zidan, W. (2009). Assessing the Beyond Words educational model for empowering women, decreasing prejudice and enhancing empathy.
93. Gordon, A. J. (2014). Focusing on positive affect in dance/movement therapy: A qualitative study.
94. Graham, R., & Cloitre, M. (2009). Creative Interventions with Traumatized Children.
95. Grasser, L. R., & Javanbakht, A. (2021). Virtual arts and movement therapies for youth in the era of COVID-19.
96. Grasser, L. R., Al-Saghir, H., Wanna, C., Spinei, J., & Javanbakht, A. (2019). Moving through the trauma: Dance/movement therapy as a somatic-based intervention for addressing trauma and stress among Syrian refugee children.

97. Haen, C., & Weber, A. M. (2009). Beyond retribution: Working through revenge fantasies with traumatized young people.
98. Hammig, B., Childers, E., & Jones, C. (2009). Injuries associated with the use of riding mowers in the United States, 2002-2007.
99. Hanania, A. (2018). A Proposal for Culturally Informed Art Therapy With Syrian Refugee Women: The Potential for Trauma Expression Through Embroidery (Une proposition d'art-thérapie adaptée à la culture de femmes réfugiées syriennes: le potentiel de la broderie pour l'expression du traumatisme).
100. Hancock, P. D. (2021). Re-embodied by the Rhythm: A Jungian Understanding of a Woman's Experience of Birth Trauma and Its Transformation Through a Spiritual Dance Practice.
101. Hanvey, C., & Tepper-Lewis, C. (2019). Co-leading for community building: A program description of a dual-modality creative arts therapy group in psychiatric emergency care.
102. Harnden, B., Rosales, A. B., & Greenfield, B. (2004). Outpatient art therapy with a suicidal adolescent female.
103. Harris, D. A. (2007). Dance/movement therapy approaches to fostering resilience and recovery among African adolescent torture survivors.
104. Harris, D. A. (2007). Pathways to embodied empathy and reconciliation after atrocity: Former boy soldiers in a dance/movement therapy group in Sierra Leone.
105. Hass-Cohen, N., Clyde Findlay, J., Carr, R., & Vanderlan, J. (2014). "Check, change what you need to change and/or keep what you want": An art therapy neurobiological-based trauma protocol.
106. Havron, E., & Edan, Y. I. (2019). Establishing the "area of need" through optimal responsiveness: Yoga/Psychotherapy for childhood sexual abuse survivors.
107. Heard, E., Mutch, A., & Fitzgerald, L. (2020). Using applied theater in primary, secondary, and tertiary prevention of intimate partner violence: a systematic review.
108. Hearns, M. (2009). Journey Beyond Abuse: Healing Through Music and Imagery.
109. Hegeman, E. (2013). Ethnic syndromes as disguise for protest against colonialism: three ethnographic examples.
110. Hendry, D., Campbell, A., Ng, L., Grisbrook, T. L., & Hopper, D. M. (2015). Effect of M ulligan's and K inesio knee taping on adolescent ballet dancers knee and hip biomechanics during landing.
111. Hernández-Ruiz, E. (2005). Effect of music therapy on the anxiety levels and sleep patterns of abused women in shelters.
112. Hernández-Ruiz, E. (2005). Effect of music therapy on the anxiety levels and sleep patterns of abused women in shelters.
113. Hervey, L., & Stuart, L. (2012). Cultural competency education in approved dance/movement therapy graduate programs.
114. Hirai, M., Dolma, S., Vernon, L. L., & Clum, G. A. (2020). A longitudinal investigation of the efficacy of online expressive writing interventions for Hispanic students exposed to traumatic events: competing theories of action.
115. Hirschson, S., Fritz, E., & Kilian, D. (2018). The tree of life as a metaphor for grief in AIDS-orphaned adolescents.
116. Ho, R. T.-H. (2005). Regaining balance within: Dance movement therapy with Chinese cancer patients in Hong Kong.
117. Homann, K. B. (2017). Engaging the dynamic equilibrium of the mind through dance/movement Therapy.
118. Homann, K. B. (2020). Dynamic equilibrium: Engaging and supporting neurophysiological intelligence through dance/movement therapy.
119. Hopkins, C. (2016). Dance/movement therapy careers amid changing systems: The first 50 years.
120. Hopper, E. K., Azar, N., Bhattacharyya, S., Malebranche, D. A., & Brennan, K. E. (2018). STARS experiential group intervention: A complex trauma treatment approach for survivors of human trafficking.
121. Hylton, E., Malley, A., & Ironson, G. (2019). Improvements in adolescent mental health and positive affect using creative arts therapy after a school shooting: A pilot study.
122. Jacobs-Kayam, A., Lev-Wiesel, R., & Zohar, G. (2013). Self-mutilation as expressed in self-figure drawings in adolescent sexual abuse survivors. Self-mutilation as expressed in self-figure drawings in adolescent sexual abuse survivors.
123. Jacobsen, S. L., McKinney, C. H., & Holck, U. (2014). Effects of a dyadic music therapy intervention on parent-child interaction, parent stress, and parent-child relationship in families with emotionally neglected children: A randomized controlled trial.

124. Jang, S. H., Kim, S. H., & Lee, H. D. (2017). Recovery of an injured prefronto-caudate tract in a patient with traumatic brain injury: a diffusion tensor tractography study.
125. Jani, N. (2018). Ethno-theatre: Exploring a narrative intervention for trafficking survivors. Ethno-theatre: Exploring a narrative intervention for trafficking survivors.
126. Jani, N., & Anstadt, S. P. (2013). Contributing factors in trafficking from South Asia.
127. Jeffreys, S. (2008). Keeping women down and out: The strip club boom and the reinforcement of male dominance.
128. Kalmanowitz, D. (2016). Inhabited studio: Art therapy and mindfulness, resilience, adversity and refugees.
129. Kavaler-Adler, S. (2013). Dialectics of Mortality and Immortality: Time as an Internal and Transitional Object Experience and Time as a Persecutory vs. a Holding Object.
130. Kawano, T., & Chang, M. (2019). Applying critical consciousness to dance/movement therapy pedagogy and the politics of the body.
131. Kawano, T., Cruz, R. F., & Tan, X. (2018). Dance/movement therapists' attitudes and actions regarding LGBTQI and gender nonconforming communities.
132. Kay, L. (2007). Women, Trauma & Visual Expression by Amy Stacey Curtis.
133. Keen, A. W. (2005). Using music as a therapy tool to motivate troubled adolescents.
134. Kierr, S. (2011). Is dance/movement therapy relevant to the process of achieving a healthy sexuality?
135. Kim, S. S. (2007). A reflection on inclusion.
136. Kirane, K. (2021). Dance/movement therapists' attitudes and practices toward opioid use disorder.
137. Knight, C. (2009). The Use of the Creative Therapies with Survivors of Domestic Violence by Brooke, S.(Ed.) (2008).
138. Ko, K. S. (2014). Korean expressive arts therapy students' experiences with movement-based supervision: A phenomenological investigation.
139. Ko, K. S. (2016). East Asian students' experiences of learning dance/movement therapy in the US: A phenomenological investigation.
140. Koch, S. C., & Bräuninger, I. (2005). International Dance/Movement Therapy Research: Theory, Methods, and Empirical Findings.
141. Konstandinidis, C., Bebetsos, E., Filippou, F., & Zetou, H. (2019). The "homophobia scale" in greek dancing context: Psychometric properties and gender and type of dance effects.
142. Kruger, D., & Swanepoel, M. (2017). Gluing the pieces together: Female adolescents' construction of meaning through digital metaphoric imagery in trauma therapy.
143. Kurz, M. R. (2020). When death precedes birth: The embodied experiences of women with a history of miscarriage or stillbirth—a phenomenological study using artistic inquiry.
144. Kurz, M. R. (2020). When death precedes birth: The embodied experiences of women with a history of miscarriage or stillbirth—a phenomenological study using artistic inquiry.
145. Lamont, S., Brunero, S., & Sutton, D. (2009). Art psychotherapy in a consumer diagnosed with borderline personality disorder: A case study.
146. Lande, R. G., Tarpley, V., Francis, J. L., & Boucher, R. (2010). Combat trauma art therapy scale.
147. Lay Trigo, S., & Rothwell, K. (2022). Dancing with my other-self: A self-portrait history of a healing process through dance.
148. Le Grice, J. (2018). Exotic dancing and relationship violence: exploring Indigeneity, gender and agency.
149. Leclerc, J. (2011). Re-presenting trauma: The witness function in the art of the Holocaust.
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APPENDIX J

Pepperdine University IRB Approval Letter

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

February 23, 2022

Protocol #: **22022**

Project Title: The use of dance and movement therapy for the embodied healing of interpersonal trauma in women and girls: A mixed-methods systematic review.

Dear Catherine:

Thank you for submitting a "GPS IRB Non-Human Subjects Notification Form" for *The use of dance and movement therapy for the embodied healing of interpersonal trauma in women and girls: A mixed-methods systematic review* project to Pepperdine University's Institutional Review Board (IRB) for review. The IRB has reviewed your submitted form and all ancillary materials. Upon review, the IRB has determined that the above titled project meets the requirements for *non-human subject research* under the federal regulations 45 CFR 46.101 that govern the protection of human subjects.

Your research must be conducted according to the form that was submitted to the IRB. If changes to the approved project occur, you will be required to submit *either* a new "GPS IRB Non-Human Subjects Notification Form" or an IRB application via the eProtocol system (httpw://irb.pepperdine.edu) to the Institutional Review Board.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* at https://community.pepperdine.edu/irb/policies/.

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval.

On behalf of the IRB, we wish you success in this scholarly pursuit.

Sincerely,

Institutional Review Board (IRB)
Pepperdine University

cc: Mrs. Katy Carr, Assistant Provost for Research
Dr. Judy Ho, Graduate School of Education and Psychology IRB Chair

24255 Pacific Coast Highway, Malibu, California 90263 ▪ 310-506-4000