Empowering Dance Movement Therapy: Implementing a Dance Break Method in Healthcare Systems to Benefit Patients in Eating Disorder Treatment

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Empowering Dance Movement Therapy: Implementing a Dance Break

Method in Healthcare Systems to Benefit Patients in Eating Disorder Treatment

Capstone Thesis

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Dance Movement Therapy

Dr. Jena Leake REAT
Abstract

This thesis aimed to explore how implementing dance/movement therapy can empower effective changes in healthcare systems to benefit patients in eating disorder treatment. While other expressive therapy treatments were utilized, dance/movement therapy treatment was met with resistance because the key elements of moving the body could bolster excessive and compulsive exercise as a secondary eating disorder behavior. A Dance Break intervention worked as a therapeutic method of inquiry to investigate how moving the body could support patients in rediscovering their identities without reinforcing eating disorder behaviors. Data was collected through movement observation analysis, arts-based exploration, and verbal discussion. The results appeared to support a heightened self-awareness and stimulated bodily sensations. There is an opportunity for further research on how a Dance Break intervention may be applied to different socio-cultural populations, and how its flexible and adaptable quality could be included in healthcare systems across the United States.

Keywords: self-image, empowerment, healthcare systems, eating disorder, excessive exercise, compulsive exercise, dance/movement therapy

Author Identity Statement: The author identifies as a first-generation American Italian, born in the US, native English speaking, middle-aged cisgender white woman residing in the United States.
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**Introduction**

The body is physically restricted when emotions are bound up inside. People’s shoulders tighten, their facial muscles tense. They spend enormous energy on holding back tears-or any sound or movement that might betray their inner state. When the physical tension is released, the feelings can be released. Movement helps breathing become deeper, and as the tensions are released, expressive sounds can be discharged. (Van der Kolk, 2015, p. 218-219)

When someone with an eating disorder (ED) is severely malnourished, unwell, or refusing treatment, they can be admitted to a hospital that offers intensive inpatient levels of care to stabilize their health. When people with an ED are admitted for hospitalization, they can stay on an average of up to eight days, to a year or longer receiving medical care on a psychiatric inpatient hospital ward or specialty unit for an ED. Imagine how it might feel if you were admitted to an inpatient unit without knowing when you will be going back to the routines and habits you developed before the admission. Time away from loved ones, pets, school, or work can carry a heavy burden and have significant physical, psychological, and emotional outcomes. While trying to recover from an ED, individuals are placed in hospital environments where they don’t know anyone having to manage a range of critical care needs as well as the contained feelings of being away from their lives.

Eating disorders are patterns of disordered eating behaviors accompanied by underlying psychodynamic, cultural, and gender conflicts (Krantz, 1999). An ED is defined as a behavioral
condition characterized by severe and persistent disturbances in eating behaviors associated with distressing thoughts and emotions (American Psychiatric Association [APA], 2013). Eating disorders often coincide with other psychiatric disorders, most commonly mood, anxiety, and obsessive-compulsive disorders. Serious conditions of an ED can affect physical, psychological, and social function (APA, 2013). According to the National Eating Disorder Association (NEDA, 2018), an estimated 95% of individuals who experience an ED are between the ages of 12-24, and people with an ED have the highest mortality rate of any mental illness. Associated features supporting diagnosis show that individuals with an ED display excessive levels of physical activity (PA) often preceding onset of the disorder, and over the course of the disorder increased activity accelerates weight loss. During ED treatment, excessive and compulsive exercise activity may be difficult to control, therefore jeopardizing recovery (APA, 2013).

According to the American Dance Therapy Association (ADTA, 1999), dance/movement therapy (DMT) is defined as the psychotherapeutic use of movement as a process which furthers the emotional, cognitive, physical, and social integration of the individual. DMT specializes in physical free association, allowing the moving body to express itself to accomplish a similar relaxation of defenses. Feelings, images, memories, words, sounds, and new sensations emerge when individuals move their lived experiences of the present moment (Caldwell, 2019). DMT functions as the catalyst to create connectedness between all elements of their being (Kleinman, 2009). Also, DMT provides authentic connection using expressive action and verbal processing to transform disconnected experiences into meaningful expressions and understanding that can lead to long lasting change (Chaiklin & Wengrower, 2016).

In this research, I explored how DMT can be a form of a holistic therapy, utilizing expressive action as the key component to enhance body awareness in the treatment of an
inpatient ED hospitalization among a young adult population. While interning as a dance movement therapist in an ED treatment hospital, this organization distrusted DMT interventions and approaches because they felt “moving the body” could bolster secondary ED behaviors of excessive and compulsive exercise. It appeared to me that most applied healthcare professionals at the internship tended to adhere to conventional notions that DMT included “dancing” and “movement of the body” and could impact weight restoration and management in ED patients. Within the area of health promotion, this healthcare system’s generalization of DMT limited evidence that could be considered a treatment for people struggling from this disorder.

My DMT interests materialized while observing DMT’s efficacy with a range of clients combatting ED behaviors. There is a strong case to be made that a holistic approach to “moving” the body needed to align with a mindful way of eating, otherwise, one behavior would sabotage another. Restricting movement altogether simply perpetuates this restrictive all or nothing compensatory thought pattern which fuels the restrictive ED itself. In this thesis, I introduce a DMT Dance Break Method intervention that examined how moving the body expressively for a short time would heighten self-awareness and increase emotional sensations in patients with an ED, without it validating disordered eating habits or intensifying exercise obsessions. This thesis capstone project aimed to investigate these questions: Can dance/movement therapy empower patients with an eating disorder in healthcare systems to develop a healthier relationship with their body? Does dance/movement therapy support patients struggling with an eating disorder rediscovering their identities without reinforcing their eating disorder behaviors?

My goal for this thesis capstone is to explore dance movement theorists and therapists who have made contributions using DMT approaches in healthcare settings. Additionally, I will investigate why healthcare systems overlook DMT as a valid therapeutic method of
inquiry. Lastly, through having employed my own DMT method, I argue the efficacy of implementing DMT models and techniques into treatment settings.

**Literature Review**

This review will highlight current literature as it pertains to the effectiveness of utilizing movement-based approaches and DMT practices in the treatment of patients with an ED. I will describe and investigate literature pertaining to performance outcomes of physical activity, behavioral symptoms and signifiers of an ED, excessive exercise, and compulsive exercise in the treatment of an ED.

**Healthcare In Eating Disorder Treatment**

The full continuum of care for an ED includes outpatient care, intensive outpatient programs (IOP), day treatment or partial hospital programs (PHP), residential programs, and inpatient hospitalization. A patient may move through varying levels of care based on factors including symptom severity, medical status, motivation, past treatment history, and financial abilities. When patients are admitted for hospitalization, they are assigned a main treatment team consisting of a dietitian, physician, psychiatrist, and social worker or therapist. According to Hay (2019), an exercise therapist and activity/occupational therapist would be included in part of this distinguished interdisciplinary group. Palmer (2015) reported, “dance movement therapists have been used in various ways to foster integration among individuals with eating disorders” (p. 116).

Individuals struggling with an ED focus on their thoughts and ignore their feelings which remain buried inside the body itself (Bucharová et al., 2020, p. 9). An ED takes a hold of the mind making it difficult for the individual to tolerate feelings, therefore individuals will turn to alternative secondary behaviors such as excessive exercise and compulsive exercise behaviors to
feel more in control (Dalle Grave et al., 2008). NEDA (2018) recognized that many people who struggle with primary ED symptoms associated excessive exercise and compulsive exercise behaviors to manage emotions. These secondary behaviors are utilized as a source of permission to eat and then individuals will exercise to “getting rid of” or “purge” food intake to maintain a certain body image, size, or weight. Not only are ED patients characterized by a persistent disturbance of eating or eating related behavior that significantly impairs their physical health, but this resemblance is also reflected in their experiences of other mental health disorders and secondary behaviors that commonly co-occur with their ED. When providing support to an individual struggling with ED in healthcare, professionals need to recognize that the ED is far more than a measure of weight and that the multiple comorbidities as well as secondary exercise behaviors warrant the full continuum of care in the treatment of an ED for the individual to have a successful recovery.

Bucharova et al. (2020) stated that the exact susceptibility of an ED concurs with a combination of genetic, biological, behavioral, psychological, and social factors. While the exact mechanisms are not fully understood, eating disorders carry the highest mortality risk among other psychiatric diagnoses. It is estimated that approximately 80% of anorexia nervosa (AN) and 55% of bulimia nervosa (BN) patients engage in unhealthy exercise patterns (Davis et al., 1997). Corning and Heibel (2015) claimed that individuals who experience an ED hold a particular attitude about their shape, size, and appearance. When identity is based on these narrow aspects, the ED weakens identity formation and jeopardizes a patient's overall self-worth. Dewey-Lambert and Sonke (2019) reported patients demanded their compartmentalized medical care be provided in a more personalized, humanized, and demystified manner and paired with the rise of whole-person healthcare which considers the patient’s physical, mental, emotional, and
spiritual dimensions and needs. Instead, ED treatment was considered ineffective as it undermined engagement leaving patients disempowered, distressed, and patronized, in a system that was too restrictive, structured, and strict during daily medical care (Johns et al., 2019). Hausenblas et al. (2008) found that satisfactory levels of weight gain were achieved, despite levels of exercise activity when cleared by a physician and may be viable in ED treatment. There is a prevalent misconception that exercise leads to weight loss within ED treatment. Individuals with AN and BN feared gaining weight and have levels of dissatisfaction with their bodies. A small subgroup of individuals diagnosed with AN showed excessive levels of physical activity preceding onset of the disorder. The criteria demonstrated how during treatment excessive activity may be difficult to control and jeopardize weight recovery (APA, 2013, p. 341). Excessive exercise was not included as a diagnostic criterion for AN. The DSM-5 (2013) stated that in “bulimia nervosa diagnosis, exercise may be considered excessive when it significantly interferes with important activities, occurs at inappropriate times or settings, or when an individual continues to exercise despite medical complications or injury” (p. 346).

**Behavioral Symptoms of an Eating Disorder**

According to NEDA (2018), there are behavioral symptoms of an ED. Firstly, weight loss, dieting, and controlling food are major concerns. These behaviors are not healthy because there is a “bad” and “good” mind set, which is also referred to as black and white thinking. Black and white thinking is a cognitive distortion, which means one will think in an extreme manner without middle ground or neutrality. Secondly, when one exercises compulsively and excessively, this can lead to injuries, stress fractures, rapid weight loss, irregular period, and lose bone density. Thirdly, individuals often binge eat, which denotes consuming large amounts of food in one period where one may feel their eating is out of control. Fourthly, an individual may
purge, which means they engage in self-induced vomiting. Purging often can result in dehydration while also unbalancing electrolytes and straining the heart. Also, purging can cause nutritional and metabolic imbalances which can lead to long-term health issues. Fifthly, one may abuse laxatives, diuretics, and or other diet pills. Sixthly, one may experience distorted self-image where one feels overweight despite weight loss and reports low body weight. Additionally, one may eat in an impulsive and irregular manner, which can affect the body physically. For example, one may go through gastrointestinal issues and abdominal pain. Finally, one may display noticeable distress and feelings of disgust, depression, or guilt surrounding food. Overall, all these behaviors impair one’s ability to stay present and mindful, which is why DMT proves important to distract from these behaviors (Eating Disorder Foundation, 2022).

**Signs of Excessive/Compulsive Exercise in Eating Disorder**

There are many different signs of compulsive exercise in an eating disorder according to Muhlheim (2021) such as how individuals may experience intense anxiety, depression, irritability, feelings of guilt, and/or stress without exercise. This hinders one’s ability to move mindfully as well as stay grounded in the present. Individuals may feel uncomfortable and avoid taking rests or inactivity. Neglecting to take a break can cause physical injury and other health complications because exercising can cause tears in muscles, which need time to heal, repair, and strengthen. Also, because of the strong exercise and ED thoughts, one may even put themselves at risk by exercising during inclement weather, when they feel ill or fatigued. Managing emotions and masking feelings occurs where individuals struggle with expressing their true feelings. Furthermore, one may ask permission to eat, which implicates restrictive behavior around food. By limiting food intake and restricting, this can perpetuate an ED cycle and can
cause cravings, binges, and overeating. Individuals with ED may withdraw socially, which can limit their happiness and life where appeasing the ED becomes of primary importance (NEDA, 2022).

Physical Fitness

El Ghoch et al. (2013) defined physical fitness as a state of being with a low chance of premature problems and the energy to engage in many PAs. In public health, PA is considered one of the most crucial indicators for a healthy lifestyle and preventing lifestyle-related diseases. One can measure physical fitness as the sum of morphological fitness, bone strength, muscular fitness, flexibility, motor fitness, cardiovascular fitness, and metabolic.

Excessive Exercise

El Ghoch et al. (2013) described exercising as “excessive” when it drastically interrupts daily activities, occurs during surprising times or inappropriate settings, or perpetuates despite injury or medical complications. The motivation for exercise may be related in important ways to eating pathology because when an individual excessively exercises for weight related reasons, they may develop an ED rather than an individual who exercises for other health benefits (Thome & Espelage, 2007).

Compulsive Exercise

Martenstyn et al. (2022) characterized compulsive exercise as a highly driven and rigid urge to exercise, combined with a perceived inability to stop exercising despite awareness of the risk of harm from continued exercise. Exercising is defined “compulsive” when it is associated with a being driven or compelled to exercise, giving it priority over other activities. (El Ghoch et al., 2013). In ED treatment an individual can experience feelings of guilt if the key factor in their
prevention of gaining weight is to exercise it away. They will compulsively exercise in unhealthy ways to shed anyway any food intake.

**Understanding the Role of Exercise in Eating Disorder Treatment**

Freimuth et al. (2011) argued that excessive exercise is always secondary to an ED. When excessive exercise and an ED co-occur, the danger is that only one problem is treated, often the ED. The exercise addiction remains hidden. Bardone-Cone et al. (2016) reported that ED patients who are recovering from learning to eat intuitively can learn to exercise intuitively. Adopting this combined routine supported the over generalizing and negative thought patterns associated to ED thoughts and behaviors.

Bratland-Sanda et al. (2009) examined PA and exercise dependence during inpatient treatment within individuals who endured long standing ED and recognized how although excessive PA can be a maladaptive behavior, controlled PA could benefit various ED diagnoses treatment. PA changes, exercise reasons, exercise dependence, and ED psychopathology during inpatient treatment were investigated. Patients were classified in excessive PA and non-excessive PA groups. The sample consisted of 59 eligible adult females. The treatment prescribed included talk therapy, psychological-related education, and art therapy. The study lasted 12 weeks for patients with BN and 20 weeks for a AN. Treatment consisted of 60- minute obligatory group sessions twice per week as part of patients’ treatment, both excessive and non-excessive exercisers. Activities varied from ball games, walking, strength exercises, and horseback riding. Bratland-Sanda et al. (2009) concluded these activities were moderate and mitigated excessive exercise’s pernicious consequences. According to the research, it is imperative to develop alternative strategies to regulate negative affect within excessive exercising in ED patients (Bratland-Sanda et al., 2009).
Calogero and Pedrotty (2004) investigated incorporating an exercise program to reduce exercise abuse in women in residential treatment for ED. The 6-month study included 127 participants to 127 non-participants on weight gain and self-reported beliefs about exercise. All participants were medically cleared. Exercise participants attended two sessions before meals (breakfast and dinner) and the control group did not attend any sessions. Participants reported their experience with exercise before, during, and after each group exercise. Feelings, thoughts, identity, and exercise challenges were shared and discussed. Results revealed that participants in the exercise group had less anxiety before meals and gained more than one-third as much weight as those in the control group. The exercise group also reported reduced attitudes towards exercise compared to the control group. Findings suggested that the use of exercise programs targeting exercise abuse in patients with an ED are feasible during treatment. Guided PA that is mindful of practice and process of healthy exercise may change unhealthy exercise behaviors in the same way guided experiences with food help challenge ED behaviors (Calogero & Pedrotty, 2004).

**Dance Movement Therapy**

DMT is the psychotherapeutic use of movement to promote emotional, social, cognitive, and physical integration of the individual (ADTA, 1999). People of all ages, diverse backgrounds, and abilities explore what drives them, assisting people to develop self-awareness and sensitivity to others and to find pathways to feeling more comfortable in their body. Instead of traditional talk therapy, dance and movement are the primary tool and key component of the process by which a trained dance movement therapist will observe, evaluate, and implement therapeutic intervention during this type of psychotherapy (ADTA, 1999). Goodill (2006) identified dance/movement therapists working in healthcare are uniquely trained in their discipline to treat and evaluate individuals. A dance movement therapist engages a client for
therapeutic goals and objectives serving as an integrated, interdisciplinary healthcare practitioner. Research in the DMT field is founded on the principle that movement characteristics that are revealed are associated with specific ways of relating to others and the world (Padrão and Coimbra 2011). DMT brings out a diversified vocabulary of movement, opening opportunity to experience spontaneity and adaptability to lead a more balanced live style. According to Padrão and Coimbra (2011 as cited by Kleinman & Hall 2006), by the same token, DMT allows sufferers from an ED to pursue a more embodied experience of the self by experiencing themselves more fully and identifying connections between their ED behaviors and the issues underlying them.

**History of Dance Movement Therapy**

DMT has been a distinguished profession for over 50 years. Sandel et al. (1993) noted that Marian Chace is acknowledged as one of the first pioneers to bring DMT to medical communities in the 1940s. There was an openness to new methods of treatment because during this time psychotropic drugs were virtually unknown. Chace’s work in psychiatric hospital wards and mental institutions was an inspiration for the next generation of dance movement therapists (p. xvii). Using the body's natural response to music and rhythm as a way of inviting interest, Chace noticed how the use of movement was symbolic of the patient's unconscious. By reflecting and building on the movement, patients claimed their own expression and explored new possibilities. Chase became the first full-time dance therapist in 1947 (Sandel et al., 1993). According to Goodill (2016 as cited by Brandman, 2007) the arts in healthcare movement was first introduced in the 1970s in the United States. Shortly after, DMT was defined and professionalized by the formation of the ADTA in 1966 during Chace’s presidency.
Blanche Evan, recognized as another pioneer in the field of DMT, believed that repressive influences such as family and society effect individual neurosis (Krantz, 1999). These influences are manifested and held deeply in the body restricting movement and expression (Krantz, 1999). Evan premised that “human experience takes place in the moving body.” (Krantz, 1999 as cited by Rifkin-Gainer, 1984, p. 85). When difficult experiences present themselves, rather than managing the experiences, they separate from the self thus, repressing emotions, ideas, and creativity within the body. Evans recognized these dissociative defenses in clients with an ED. When a client with an ED is faced with a situation of conflict the body signals overwhelming distress, such as despair, terror, or pain, yet the client is unaware of their emotional state and is without ideas or feelings to express or connect with them (Krantz, 1999). Evan theorized that action-based movement without thought or emotion soothes bodily distress. Evan's approach directly addresses the client's need to reconnect the body with feeling and knowing through movement (Krantz, 1999).

**Mind and Body Movement Approaches in Dance Movement Therapy**

DMTs creative process can introduce individuals struggling with ED between the expressive physical action and the patterns in their lived experiences that may be a significant cause or the basis of manifesting their ED thoughts. Moving the energy through and out of the body mindfully can be a way to uncover the beliefs and feelings held in the body that lie at the root of ED suffering. Under the assumption that individuals with ED are disconnected from their bodies and that an ED can represent a patient’s disconnection with their emotional life, dance/movement therapists work to reunify the “broken walls of body, mind, and spirit” (Krantz, 1999, p. 84).
Chaiklin and Wengrower (2015 as cited by Chang 2006) stated the entire range of the unconscious to body movement begins with nonverbal movement observation as a key component of an individual’s psychophysical habitus. “The corporeal habitus, which includes aesthetic preferences, is an embodied and encompassing, unconscious, and unavailable to linear thinking, mind and body prototype that is instilled preverbally” (Bourdieu, 1977, Chaiklin & Wengrower, 2015, p. 321). How we observe and experience movement naturally predisposes a dance movement therapist to understand the role of dance-as-aesthetics.

Chaiklin and Wengower (2016) asserted how “dance/movement therapy helps individuals with ED learn how to reconnect with themselves, enabling authentic change in both actions and words to occur and to recognize their whole self to be a necessary part of their life force” (p. 154). Cardillo explained “eating disorders affect every system of the body and dance movement therapy utilizes the body as a reference point to process conflicts manifested within the body” (NJ. Cardillo, personal communication, February 23, 2022).

In therapy, dance movement therapists influence patients to evaluate their movements and their bodies in all their social and individual dimensions of DMT (Chaiklin & Wengrower, 2015). Dance movement therapists are trained to understand the language of their own bodies as well as those of others (Dosamantes-Beaudry, 2007). According to Anderson et al. (2014) DMT’s main goals are to stimulate creativity and integrate the mind body experience. The body is the receptor, gathering information as the way to respond to the patients and indicated that all therapy involved interactions between the mind and the body. Dance movement therapists’ own experiences of embodiment informed not only their sense of self but is significant to building the therapeutic relationship (Palmer, 2015 as cited by Kleiman, 2013).
Tortora (2006) described the mind-body connection as a meditative experience that happens through the body when it is in the process of moving or being still (p. 219). The ability to take in information through somatic awareness is integral to the practice of body psychotherapy, DMT, as well as traditional psychotherapy (Palmer, 2015 as cited by Vulcan, 2009). Body psychotherapy, which is considered a branch of somatic psychology, is based on the concept that people experience the world not only through their thoughts and emotions but also simultaneously through their bodies (Good Therapy, 2007).

**Dance Movement Therapy in Medical Treatment**

One of the central goals in the practice of DMT is to promote positive changes in body image with the ED population (Pylvänäinen 2003 as cited by Stanton-Jones, 1992). Pylvänäinen (2003) presented a theoretical, literature-based study on body image using a tripartite model. The model was created to clarify the meaning of body image using words. Pylvänäinen (2003) differentiates body image into three interrelated aspects: image-properties, body-self, and body-memory. Image Properties represented the way the individual perceived the look of their body. Body-self was described as the interrelated core self as it relates to environment and interaction. Body-memory represented the notion of the body as a container for an individual’s life experience. Pylvänäinen (2003) separated the three aspects of the model with italics, bold type, and underlining. Analyzed in this way highlighted the challenge inherent in trying to conceptualize the body within a Western socio-cultural perspective that favors mental powers and visual perception and reduces the importance of bodily sensation and dynamic movement. “The significance of bodily sensation is minimized in favor of a more cognitive conceptualization” (Pylvänäinen, 2003, p. 45). When body image was conceptualized into the
three dimensions of image-properties, body-self/lived experience, and body-memory, the body as a psychologically relevant phenomenon was appreciated.

Krantz (1999) described a case summary of a 24-year-old female presenting with an ED. The client is self-referred and sought outpatient one-on-one DMT treatment to help their current struggle with BN. The case study occurred over the course of 14 months based on the viewpoint of Blanche Evans theory that described how action that occurs spontaneously is understood as a personal expression, simultaneously psychological, and physical (Krantz, 1999 as cited by Evan & Rifkin-Gainer, 1982). By regenerating the body's potential to move, both emotional and mental states were changed. A written summary of the individual dance therapy treatment is presented, illustrating the potential of this approach to promote therapeutic change in an ED. The results of this case study showed that the client was able to reconnect the body with the feeling and allowed the client to experience affect and express their inner world.

Padrão and Coimbra (2011) conducted a 6-month body-oriented psychotherapeutic intervention project with a group of seven hospitalized female patients diagnosed with AN. Patients were medically cleared for the body-based intervention and movement was cautiously studied and analyzed prior to each session by a doctor who was aware of the patients’ medical condition. The intervention worked as a single pilot study and was then integrated into a larger medium-term project, which had as its main goals to collect relevant material on the experiential and semantic levels of the body experience in AN, as well as on the assessment of the movement characteristics and preferences revealed by the patients. DMT sessions lasted 75 minutes on a weekly basis. DMT sessions included body awareness techniques, thematic/expressive dance, warm-down, and closure. Data collection included movement observation and verbal discourse
analysis. The results showed patient felt more resilience in movement patterns and verbalized more comfort in their bodies.

Dor Haim et al. (2019) described a one-to-one pair of equal staff to patients in a dyadic group model with adolescent girls in an inpatient ED treatment hospital. The researchers sought to understand the resistance that occurs in group movement therapy with ED patients and how the physical presence of others evoked intense emotions and shame when struggling with body image. The setting included one DMT therapist, four patients, and four medical staff members. Participants and parents signed a written consent and were expected to participate as part of treatment. Participants were hand selected by medical staff and were replaced when a patient was discharged. Case studies through vignette analysis were utilized to illustrate the implications derived from the unexpected highly positive impact of multi-dyad movement group therapy. Results displayed that staff member-patient pairing enabled movement in patients and enabled patients to symbolically play and dance alongside the continuation of their problematic relations with their bodies.

Camic (2008) theorized that applied psychologists tend to adhere to conventional notions about what constitutes appropriate intervention or treatment in healthcare limiting what evidence is allowed to be considered in evidence-based practices. Camic (2008) examined a wide range of arts-based studies in healthcare and community settings and how ethological theories supported the evolutionary significance of arts in human development and helped form a foundation to understand the biopsychosocial processes involved in arts (dance movement, art, music, drama, and poetry) participation while being medically treated. Camic (2008) identified that some physical illnesses are manifestations of psychosomatic responses. Additionally, it was noted that
patients struggling with physical movement associations were able to provide clinicians with information regarding body perceptions.

Savidaki et al. (2020) evaluated the effectiveness of a DMT intervention’s impact on body image and alexithymia in ED patients. This qualitative study evaluated 14 patients between the ages of 14-32 years old with ED. Seven were assigned via quasi-randomization to the DMT group while the others (n =5) continued their treatment as usual. Over a 14-week period, there were 12 DMT sessions lasting 30-minutes each. Participants who attended DMT sessions reported improvements in mood and increased self-awareness through the processes of their emotionally and physically reflective diaries.

Hagensen’s (2015) study examined the relationship between an adolescent female’s overall wellness, defined by quality of life, and her participation in a DMT based holistic wellness curriculum. The curriculum focused on nutrition, mindfulness, movement, body image, and friendships. Research indicated that curriculum topics, which included holistic wellness models and DMT, are each relatively effective for work with adolescent females, but their combination had yet to be explored using the format of the current study. Quantitative and qualitative data were gathered using the Youth Quality of Life-Research Version as well as parent surveys and session transcriptions. Themes emerging from this data suggested that through engagement with the DMT curriculum the participant increased knowledge about themself and how their body functioned.

Gordon (2014) explored positive affect as an intervention within adult DMT groups. Specifically, the study analyzed how therapists operate when they focus on positive affect; why they implement positive affect; and identified which circumstances necessitated its’ employment. DMT therapists responded to their inpatient psychiatric clinics, adult day centers, and ED partial
hospitalization programs while employing four DMT interventions. Therapists conducted a DMT session lasting approximately one hour. The primary goal was to increase enjoyable emotions through positive and uplifting experiences. Positive affect offered DMT practitioners’ alternative interventions that could strengthen an ED client’s well-being. Simultaneously, the clients’ attributes regarding physical and emotional developmental tolerance were significant. All three dance movement therapists collected and coded data while the 5-point Likert scale was used to respond to feelings. Each dance movement therapist reviewed video recordings and transcripts highlighting processes that emerged in interviews. Gordon (2014) measured 13 themes divided across 4 categories: therapeutic intervention, intentions and goals, client attributes, and therapist attributes. Creating non-coercive incentives to help encourage patients to participate in treatment is equally crucial. It is important that treatment feels self-motivated and humanistic rather than punitive and obligatory (Gordon, 2014).

**Methods**

While other expressive therapies (ET) were utilized at my internship site, a hospital treating ED patients, there was an absence of DMT both in group and individual therapy treatment. When proposing the addition of DMT to help co-occurring mental health symptoms for ED patients, the concept was met with resistance. The rationale from healthcare professionals was that DMT physical movement attributes could launch excessive exercise or compulsive exercise behaviors. The dominant view implied DMT was exercise based because the applied psychology of DMT was underrepresented. Clinical staff were concerned that movement aspects of DMT would comprise caloric intake and weight recovery because the primary treatment is heavily focused on medical monitoring of weight management and restoration.
The absence of DMT as part of ET treatment was peculiar to me. In my mind, the dominant view of DMT is not exercise. DMT is a way of understanding how movement is an implicit form of expression reflected in our lives and that what is stored in the body is information that connects us to ourselves and others. With primary emphasis in ED treatment being placed on weight restoration and management, patients lean on interventions and methods that guide their primary ED behaviors. Patients gain understanding in nutrition, learn what a balanced meal looks like, and discover that food is not a substance to be controlled but an essential source for optimizing health. Stabilizing primary ED behavior while inpatient for ED treatment could result in harming the body in other vital ways if secondary behaviors are not treated.

As a product of the research, I developed a Dance Break Method to introduce at my internship site. This intervention examined how moving the body expressively for a short time would heighten self-awareness and increase emotional sensations in patients with an ED, without validating disordered eating habits or intensifying exercise obsessions. DMT's effective way of looking at mind, body, and emotions while integrating psychological insight with corresponding movement is a rich framework for understanding the relationship between psychological events and what is physically stored in the body. My mode of inquiry was to understand if a short Dance Break would restore awareness of the mind body connection and allow patients to access feelings and emotions that supported connection and empowered self-image. At my internship, the healthcare professionals working with patients with exercise behaviors need to consider what predicts the behavior and why individuals participate in these behaviors. If they are able to predict the behaviors, there would be more awareness on how to treat one exercise behavior from
another. The Dance Break is a gentle, effective way to move the body and can make new meaning of what is stored within the body.

Participants

The participants were patients who were being treated for ED in an inpatient hospitalization ward. Patients presented with ED diagnosis and concurring comorbidity with other psychiatric disorders, most notably with complaints related to depression, mood, and anxiety. The intervention took place in a large group room on the inpatient unit, consisting of 4 young adult patients ranging between the ages of 18-23 and myself, the intern dance movement therapist. Intervention was approved by the site supervisor and participants voluntarily attended as part of a regulatory weekly activity I created.

Procedure

The intervention occurred in one session lasting 45 minutes. The structure of the Dance Break included verbal check-ins, artistic inquiry, Dance Break, artistic response, processing, and closing circle. I directed participants as they entered the room to create a circle while collecting movement data to respond to participants. Protocols consisted of a brief description of DMT, therapist introduction, followed by individual names, pronouns, and group agreements. I directed the group to create their own signature move to bind group agreements. Before beginning, the group was directed to co-create a gesture that respected the autonomy of another individual when boundaries or limitations have gone too far. The co-created gesture was a non-verbal expression that would be utilized as a warning during the session if a participant felt slighted or wounded by something that transpired in the group.
Materials

A Coping Card (see Appendix, Figure A1) was utilized to record discoveries before and after the Dance Break. Each participant was offered an 8 X 11 Coping Card template sheet. Participants were instructed to place the printed side down and make a vertical fold, followed by a horizontal fold to create a two-fold style card. Assembling the Coping Card was a strategy to regulate emotions and breathing in an unimposing way. Markers and art materials were utilized to break resistance and engage participants in a creative expression to express how they were feeling in the moment. Artistic inquiries could be in the form of images, symbols, or words aimed to respond to these two questions: How do you feel? What are you holding onto in the body in this moment? Artistic inquiries were reflected on the left side of the Coping Card and artistic responses on the right side.

Collecting Data

I created a DMT Dance Break Diary Sheet (see Appendix, Figure A2). The diary sheet illustrated goals, committed action objectives, and method of assessment with an area to record behavioral observation, participant responses, and reflection. To add to the continuity and consistency of the diary sheet, I used a voice recorder app on my phone and journaled after the session to analyze data, body position, posture, gestures, and movement observations.

Results

The session began with resistance. All four participants attended group casually dressed. Everyone moved slowly into the space and settled themselves in an area within the room with significant distance from one another. Although participants were entering a group processing space, they all isolated in their special areas of protected space in the room. Participants attitudes were guarded, and the mood of the room felt weighted and depressing. Non-verbal
communication was observed among participants, and no-one greeted me as they entered the space. Indirectly, I felt participants were reluctant to trust and get to know who I was. Participants preoccupied their time and avoided communication by engaging in material they brought into group (journals, crossword books), or fidgeted with their hands, or gazed into space.

I invited participants to join me in a seated circle on the floor. After introductions and agreements were established, I directed participants to create a signature move to bind group agreements. I explained their signature gesture was their way of contracting themselves to try something new. Each participant used their index finger and created a signature within their mid reach space. Movement was brisk as if participants were uninterested or as if I had invaded their comfort zone. When I asked for the group to establish a collaborative gesture to respect boundaries and limitations, participants were staring at one another waiting on someone in the group to take the lead. When one participant initiated a gesture, participants were receptive using verbal responses, such as “cool, yeah that works, and okay.”

When the Coping Card (see Appendix, Figure A1) and art materials were introduced, participants were eager to know the purpose of the activity which materialized into communication with others in the group and the facilitator. The materials broke some resistance. I noticed posture in all four participants was less restricted and there was engagement in participants’ eye movements and facial expressions as they interacted with the materials and each other. One participant commented, “Oh good, I thought you were going to make us dance.” I responded, “Do I look like a dancer?” Giggles and chuckles of laughter were heard as participants observed I was a middle-aged person. Poking fun at myself appeared to destigmatize the perception of dance and normalize the experience.
Participants’ verbal communication formed between the other group participants and me. Utilizing the Coping Card and art materials, I directed participants to create an image, symbol, or word aiming to respond to two questions: How do you feel? What are you holding onto in the body at this moment? One participant fell into a deep gaze. Their mind was trapped in a paralyzing state while their legs began shaking involuntarily. Intuitively, I could sense the distress in creating this hallmark of identifying feelings. I guided the participants through verbal communication to mark the Coping Card with anything that came to mind and to put aside the prompt questions. Reorganizing my verbal communication, the participant was less hesitant to the art making and began creating an image on the Coping Card.

When participants were finished, they were instructed to fold their Coping Card face up so that their image could be displayed somewhere in the room. Each participant gave careful consideration in their decision making to where Coping Cards were placed in the room. While participants were standing and moving freely about the space, one by one they adjoined together in a standing circle with me as if we were scattered pieces of a puzzle connecting loosely to one another. In my own body, I felt a transition forming. There was an indicator in the groups shift that transitioned from social isolation to a collaborative mindset equipped and ready for group participation. There was a divine fated connection that felt very powerful between our five bodies when we all stood in circle with more alertness, openness, and extended posture.

Referring to their artistic inquiry, I invited participants to create a gesture or expressive movement that reflected their thoughts and/or ideas. There were looks of confusion. Participants were perplexed of the sudden change. One participant initiated by going first. I guided the group to echo back their movement to validate the participant’s experience. Everyone participated setting the process of the Dance Break in motion. One participant was resistant and stated, “I
don’t know what to do, but I like seventies music” and moved out a disco-like boogie movement. Smiles and giggles filled the space. Bodies began moving more freely as this expression was echoed. There was something fond in the movement, almost mischievous but in a well-behaved way. Movement in head nodding and facial expressions indicated agreement and understanding. When everyone had a turn, I invited each participant to join me in a short Dance Break using their movement expressions in a collaborative moment metaphor. The Dance Break lasted approximately five minutes. I selected a disco song to continue the playful communication that was emerging from the group’s dynamics.

Body posture and positions that had restricted form evolved and expanded during the Dance Break. As one participant moved alongside another in the Dance Break, the group’s movement was heightened, and the bond of the group strengthened. One participant playfully questioned out loud over the music, “This is weird, why does this feel like it goes to the music?” In my body, I felt the group was on a path of discovery. Through the movement, I could begin to see a glimpse of their identities peeking through their laughter and smiles. When the Dance Break ended, group participants were feeling energized. One participant expressed, “It felt good to move; we’re always sitting.”

Participants were asked to gather their Coping Cards and art materials. I employed a follow up prompt asking: How do you feel? What are you holding onto in the body at this moment? Using images, symbols, and words, participants created a second image on the right side of the Coping Card to assess any noticed changes. Each participant was gathered in a sitting circle closer together. No one made their way back to their original seats. A sense of freedom emerged from their bodies as there was a consistent flow of movement as participants prepared their artistic responses with deeper intension.
During this artistic response, I sketched a drawing of a lion. I started with two eyes and nose and a mouth to represent the group members. I envisioned the longer hair around the head of a lion to be symbolic of our circle. The thread lines of the hair were sketched to indicate the variety of identities that shaped our space. As we moved together it reminded me of the way a lion’s mane moves when it walks cautiously yet in an unusual powerful manner. My embodied experience of this animal made me think of how I view lions. I began to envision one laying down in the distance. When I look at them, I often question why they are alone or what they might be thinking. My body memory recalled this initial feeling with the group when they walked into session. Participants were distant physically and socially and I wondered what was going on. As group participants moved, I associated their underlining strengths to the primary strength and power of a lion.

To further my understanding of the connection between my embodied experience and the groups’ process, I engaged in my own process of aesthetic analysis. I utilized my verbal recordings, personal journal entries, and painting to explore the lion image further (see Appendix, Figure A3). I chose this arts-based exploration to create an artistic representation of the data, drawing on arts-based research practice (Leavy, 2020).

Lions often appear in positions suggesting they are guarding a person or place of importance and on a somatic level, I associated this understanding utilizing the blue color in my painting as my position of a movement therapist protecting the participants. The gold color was developed naturally in my art making and when my image was completed, I reflected on this area of my painting as our associated bodies in the space exerting force and energy from one another. The five reddish and orange flames were an expression of how we came together to love and
nourish ourselves as a group. By the end of the session, participants reclaimed small parts of their lives and my own role as a dance movement therapist emerged.

In the closing process, the Coping Cards did not have to be shared. I prompted a series of questions to open dialogue and discussion about the guided imagery process and the Dance Break including the following: What did you notice? What thoughts did you observe? Did anything change? Was it easier to draw it out or move it out? What motivated you to engage in the committed action of a Dance Break? One participant described the Dance Break as uncomfortable until everyone else started moving. Others expressed, “Laughing felt good, and it was a nice distraction from being here.” Other reflections included, “Yeah, I can’t remember the last time I laughed since I got here,” and “When things got playful, I thought about my two-year-old son and how much I missed playing with him.”

Through creating a calm and gentle environment, I terminated the group session with a gentle closing circle. Each participant was asked to share one goal to complete by the end of day. In a metaphorical manner, I explained the goal rests in the right hand and will move to the left hand as an actionable step to take them through their day to hold onto. Also, this movement closing was passed clockwise in the circle to each participant. Goals were identified as laughter, hope, disco moves, home, and connection. Once goals were identified, participants brought their hands to heart to embody their goals. Finally, Coping Cards were taken by participants as a memento of the guided imagery process before the Dance Break and what they felt or held in the body after the Dance Break.

**Discussion**

Movement is a natural part of life whether you are a trained mover or not. Moving is as essential as food is a source of fuel to survive. DMT functions as a point of reference to evaluate
irregular behavior and patterns of movement that would interfere in the restoration of weight and management recovery. ED is an unescapable disorder in daily life where abstinence from engaging with exercise or food is highly unfeasible. Thus, rather than encouraging exercise abstinence, it is crucial to practice mindfulness and moderation. Restricting movement will not serve ED patients after healthcare treatment because movement cannot be avoided. From waking up in the morning and walking to school to participating in sports, our bodies move. Moving is something that all patients will be forced to confront once discharged from treatment.

In DMT, individuals can explore what it means to move, why they are moving, and what the movement’s intention is. ED patients will eventually be discharged and when they are, they will resume a routine outside a medical setting that will rely on the skills and treatment methods that they have learned to function. DMT can help a patient shift their focus from external appearances to mindful movement’s internal and transformative and healing experience. DMT offers the opportunity for ED patients to view the moving body differently through their own lived experiences and those shared by others. If movement is not part of the treatment process in ED recovery, patients are therefore denied characteristics and key movement aspects that are essential to human existence. Restricting movement could also take away a patient’s identity if they have a strong relationship to movement outside their treatment. In this manner, one form of treatment supports the other and avoids irregularity between the two. Healthcare systems need to include DMT approaches that focus on overarching ED themes so that patients can regain a sense of empowerment and self determination to live a healthy and balanced life.

The Dance Break intervention sought to address how the psychotherapeutic use of movement in DMT can empower ED patients in treatment to recognize their potential and qualities in relationship to their ED. The Dance Break fostered connection and supported
participants to rediscover themselves in the form of hope, optimism, and positivity. The Dance Break enabled changes that renewed vitality and connected group members. Through this intervention participants were able to access a part of their unconscious, which was inaccessible before the movement. Through shared discussion, thoughts, feelings, beliefs, and intentions, small goals were constructed within a social context by the actual and imagined interactions with the movement and with others. The Dance Break functioned as a way for ED patients to reclaim their identities while remaining attentive to the movement to discover new bodily sensations. The intervention demonstrated how in a short time, a person can embrace shifts of change and growth as an opportunity to learn and to become more engaged and self-confident. In response to the literature, I created the Dance Break to contribute to DMT theories, based on the premise that body and mind are connected and that changes in one inform changes in the other (Anderson 2014; Chaiklin and Wengrower, 2015; Palmer 2015; Tortora 2006; Vulcan 2009). Moving expressively as a short Dance Break can be a safe point to evaluate irregular behavior and patterns in movement that would interfere in weight and management recovery.

As patients with an ED are changing their relationship to food, healthcare systems could consider DMT as a therapy to help their patients overcome their ED challenges by incorporating more mindful ways of moving that supports excessive and compulsive exercise tendencies. If systems neglect to teach mindful movement and encourage stationary activity while restricting exercise altogether, this puts the patients’ discharge in jeopardy. After not moving for the whole duration of treatment, some patients may over exercise when discharged because they were not conditioned nor educated how to mindfully move. “Ignoring and restricting exercise in treatment can lead patients to regress once discharged and even over-exercise in the long term” (E. Ross, personal communication, February 28, 2022). If movement plays a central role in the patients’
identity, then restricting movement outside treatment could alter their self-perceptions. At my internship, healthcare professionals could broaden their approach and consider a dance movement therapist to lead movement-based activities. Also, healthcare professionals could work alongside patients with secondary exercise behaviors where DMT strategies, key concepts, and practices are within the scope of the body’s movement.

Exercise during recovery requires full awareness and appreciation for the mind-body connection. A balance of physical, cognitive, and psychological approaches is necessary so that one unhealthy obsession in ED patients is not replaced with another. After reviewing the literature on secondary exercise behaviors and DMT movement-based approaches, healthcare in ED treatment could be more aware of the physical, psychological, biological, interpersonal, and cultural forces that contribute to or maintain the ED.

The Dance Break was an initial research study through my clinical mental health counseling training as a dance/movement therapist intern at an ED treatment hospital. Despite the small number of group participants, the data suggested that a short Dance Break offered patients a way to rediscover a healthier relationship to their bodies without reinforcing eating disorder behaviors while receiving inpatient level of care in an ED treatment hospital. In addition, comments by the participants suggested participants noticed an increase in emotional sensation during and after the Dance Break intervention as the key concept in reclaiming their identities.

Limitations of the study included a small group size and a one-time session analysis. More research is necessary to investigate clinical application and appropriate DMT interventions with this population and to elaborate on how ethical factors concerning secondary behaviors influence this process. It is recommended that the Dance Break Method be expanded throughout longer session analysis and conducted through a multicultural and equitable lens, taking into
account health disparities among vulnerable populations. Future studies could explore how a Dance Break Method could be applied to different sociocultural populations, and how its flexible and adaptable quality could be included in United States healthcare systems. Overall, the intervention was seen to have a positive impact in the small group setting during this study. The Dance Break intervention has the potential to enhance the treatment of eating disorders.
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Appendix A

Figure A1

Coping Card
Dance Movement Therapy Dance Break Diary Sheet

<table>
<thead>
<tr>
<th>Goals: Committed Action Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify states of change as well as actionable steps one can take to empower self-identity</td>
</tr>
<tr>
<td>2. Foster strength to what is important in one’s life and how to maintain in those connections.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group Protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Check-In/Intro</strong> 5-10 min</td>
</tr>
<tr>
<td>Therapist introduction/participants name (signature move), pronouns, group agreements/gesture that displays boundaries and limitations (ooh, ouch)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Artistic Inquiry Coping Card 5-10 min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass out the coping card template and art materials</td>
</tr>
<tr>
<td><strong>Group Activity Prompt:</strong></td>
</tr>
<tr>
<td>- Q1: How do you feel?</td>
</tr>
<tr>
<td>- Q2: What are you holding onto in the body at this moment?</td>
</tr>
<tr>
<td>Create artistic response on left side of coping card (images, symbols, words). Place coping card somewhere in the room as a metaphor to create a safety container and give space between thoughts and actions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dance Break 3-5 min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formulate a movement gesture that reflects reflection to the questions. One at a time, participants move their artistic expression. Group members echo back the movement to validate expression. Music incorporated. Invitation to take a “dance break” using movement expression. Facilitator guides members to move out artistic response in a collaborative moment metaphor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Artistic Response Coping Card 5-10 min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow up Prompt:</td>
</tr>
<tr>
<td>- Q1: How do you feel?</td>
</tr>
<tr>
<td>- Q2: What are you holding onto in the body in this moment?</td>
</tr>
<tr>
<td>Create artistic response on ride side of coping card (images, symbols, words)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Processing Share/Discuss 5-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>What did you notice?</td>
</tr>
<tr>
<td>What thoughts did you observe, did anything change?</td>
</tr>
<tr>
<td>Was it easier to draw it out or move it out?</td>
</tr>
<tr>
<td>What motivated you to engage in committed action/dance break?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Closing Circle 2 min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arms open, palms of hands facing up, participants share one goal to complete by the end of day. Metaphorically the goal is resting in right hand and take-action by placing it in left hand. Facilitator directs each participant to hold onto that goal tightly with a firm grip and pass it to the person. When goals are identified everyone brings hands to heart to be embody goals. Take with them coping cards as a guided imagery to aid the process</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method of Assessment: Behavioral observation, participant responses and reflection</td>
</tr>
<tr>
<td>Coping Card Art Materials Music Device</td>
</tr>
<tr>
<td>Facilitators Observation Comments:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date:</th>
<th>Number of Participants:</th>
<th>Facilitator:</th>
</tr>
</thead>
</table>

*Figure A2: Dance Movement Therapy Diary Sheet*
Figure A3

Arts Based Reflection
Student's Name: Pamela C Caira

Type of Project: Capstone Thesis

Title: Empowering Dance Movement Therapy: Implementing a Dance Break Method in Healthcare Systems to Benefit Patients in Eating Disorder Treatment

Date of Graduation: May 21, 2022
In the judgment of the following signatory this thesis meets the academic standards that have been established for the above degree.

Thesis Advisor: Jena Leake