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The Elements of Dance/Movement Therapy Employed when Treating Women with Posttraumatic Stress Disorder

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Abstract

Traumatic events can have significant physical, psychological, and neurological effects on an individual. Posttraumatic stress disorder (PTSD) is a psychological condition that can result from experiencing or witnessing a traumatic event. Women have a higher risk of PTSD than men do, and because PTSD has been shown to increase the risk of suicidal ideations and behavior, homicidal behavior, and general violence in the community and in the home, women are at a great risk (Levine & Land, 2014). This paper explores the use of dance/movement therapy (DMT) as an intervention to treat women suffering with PTSD. Examining the connection between the body, the mind, and the brain for individuals who have experienced traumatic events helps to highlight how multifaceted treatment methods for PTSD, such as DMT, can be more effective. Semi-structured phone interviews were conducted with 15 dance/movement therapists about the use of DMT with women experiencing PTSD. Using methods rooted in content and thematic analysis, the present study examined the emergent theme of intervention tools and tactics. The results highlight the core elements of the intervention that may be integrated into social work practice, in an effort to better support women with PTSD.

Keywords: Qualitative methodology, dance/movement therapy, body-oriented intervention, women, trauma

Traumatic events can have a significant effect on an individual in terms of their physical, psychological, and neurological health (Irish et al., 2013; Spitzer et al., 2009; Wang, Tsay, & Bond, 2005). Posttraumatic stress disorder (PTSD) is a psychological condition that may result from experiencing or witnessing a traumatic event (American Psychiatric Association, 2013). A traumatic event is defined as an extraordinary incident that elicits intense feelings of being overwhelmed, helpless, and afraid and can result from various experiences such as surviving a natural disaster, being involved in an accident or being a victim of rape or battery (Herman, 1997). PTSD can increase the risk of suicidal behavior, homicidal behavior, psychoactive substance abuse, and general violence both in the community and in the home (Panagioti, Gooding, & Tarrier, 2012; Nickerson et al., 2014; Workman, 2009). Notably, women have been found to have a higher risk of developing PTSD after experiencing a traumatic event than men (Breslau & Anthony, 2007; Stein, Walker, & Forde, 2000; Tolin, & Foa, 2006). Andrews, Brewin, and Rose (2003) found that women are more than four times more likely to develop PTSD after exposure to a traumatic event than are men. More sophisticated assessment procedures and greater acknowledgment and understanding of the disorder by mental health professionals and, in turn, by the public has initiated a shift in the attention to those suffering with PTSD (Jakupcak et al., 2007).

Despite growing knowledge of the connection between the body and brain in terms of the production and maintenance of the illness, a major gap exists in related intervention research. The current and most frequently used treatment methods for PTSD often focus primarily on the mind and less on body and brain involvement (Land, 2014). Engaging the body as part of the treatment of trauma, in addition to talk therapy, may shorten the length of treatment and make treatment more effective and long lasting (Ogden, Pain, & Fisher, 2006b). One such method is dance/movement therapy (DMT), which is “the psychotherapeutic use of movement to further the emotional, social, cognitive, physical, and social integration of the individual” (American Dance Therapy Association, 2012, para 1). Unfortunately, empirical research in the area of DMT is limited. This is due, in part, to a lack of manualization of the treatment method. Qualitative research investigating the practice of DMT is a necessary first step toward the development of a treatment manual. The current study uses qualitative research methodology rooted in content and thematic analysis to explore the use of DMT as an intervention for women suffering with PTSD.

Literature Review

Gender, PTSD, and Treatment

Research on the evaluation of risk exposure has highlighted important gender disparities in susceptibility to and manifestations of PTSD (Gehrke & Violanti, 2006). In general, women are more likely to develop PTSD if exposed to trauma (Lilly & Valdez, 2012). Differences in the expression of symptoms between men and women are important to note for the development of effective, gender-specific interventions (Breslau, & Anthony, 2007; Lilly, Pole, Best, Metzler, & Marmar, 2009). Women experience symptoms more frequently than men do. These symptoms include more intense psychological reactivity to stimuli that represent the trauma, constrained affect, and magnified startle response (Bangasser & Valentino, 2014; Kobayashi & Delahanty, 2013). Depression and anxiety often co-occur with PTSD among women, and women are more likely than men are to have greater longevity of symptoms and to present with partial

symptomatology of PTSD, in which some, but not all, of the criteria for PTSD are met (Gwadz, Nish, Leonard, & Strauss, 2007).

Judith Herman (1997), an eminent trauma expert, explains, “The conflict between the will to deny horrible events and the will to proclaim them aloud is the central dialectic of psychological trauma” (p. 1). Trauma theory is based on the assumption that it is this dialectic that causes traumatized individuals to fluctuate between feeling numb and reliving the traumatic event(s) (Herman, 1997). In her seminal work, *Trauma and Recovery* (1997), Herman asserts that trauma only gets the attention it deserves when it is related to a grandiose social movement or events, such as war. Importantly, Herman (1997) was one of the first scholars to stress the frequency of trauma and PTSD among women in civilian life. Through her discussion of gender-specific trauma, Herman emphasizes the historically separate spheres of the public trauma of war and the private trauma of domestic violence, rape, and abuse. According to Herman, men cope with a masculine trauma from war and women deal with sexual trauma. This idea is exemplified in the following statement:

The hysteria of women and the combat neurosis of men are one. Recognizing the commonality of affliction may even make it possible at times to transcend the immense gulf that separates the public sphere of war and politics—the world of men—and the private sphere of domestic life—the world of women. (Herman, 1997, p. 32)

A great challenge is presented in attempting to integrate the two worlds of public and private in trauma theory. An analogous quandary exists when the traumas related to military service are viewed through this trauma theory lens. Whereas the weight of psychological trauma experienced in the military has been recognized increasingly since World War I (Herman, 1997), the glories of battle are at the forefront of military PTSD research and intervention development, while the abuse-related traumas taking place in the daily lives of women are often ignored and, thus, untreated (Herman, 1997). Now on the battlefield as soldiers, women are coping increasingly with multiple traumatic events in the public and private spheres. Hence, they are at risk for cumulative trauma and severe PTSD.

Inspired by Herman’s work, Ann Cvetkovich (2003) highlights the importance of acknowledging and archiving the quotidian traumas of ordinary human experiences: those traumas that are not public and are not part of war and mass acts of violence. Using a Marxist lens, Cvetkovich has a “dialectical approach to the intersection of lived experience and systemic social structures and to trauma’s place in the social history of sensation” (2003, p. 20). Through this lens, she hopes to bring the discussion of trauma back into academic discourse as a means to develop “new models for how affective life can serve as the foundation for public culture” (Cvetkovich, 2003, p. 20). Cvetkovich makes the claim that everyday traumas are as important as the catastrophic. In her argument, she points to the fact that trauma theory and studies are limited in that they rely on the dichotomy between private and public. This divide has often left women’s experiences overlooked. Current literature in trauma theory, such as that of Cvetkovich, supports the idea that the unique traumatic experiences of women in the military—public and private—should receive equal attention as the disastrous combat experiences often associated with men in the military receive. The sphere in which the trauma takes place should not determine the attention the victim receives or their eligibility for treatment.

The treatment modalities most frequently used for women diagnosed with PTSD are cognitive-behavioral therapy, cognitive processing therapy, eye movement desensitization and reprocessing, dialectical behavioral therapy, and exposure therapy (Foa, Keane, Friedman, & Cohen 2008). These treatments aim to help individuals feel more in control of their thoughts and emotions, largely through verbal therapy and do not focus on engaging the limbic system and the body in treatment. There have been mixed findings with regard to the effectiveness of each of these treatment modalities (Bisson, Brayne, Ochberg, & Everly, 2007). For example, although these treatments often alleviate immediate symptoms, the symptoms tend to return once treatment terminates and tend to be present for longer periods, especially among women when compared with men (Albright & Thyer, 2010). Withdrawal rates are as high as 30% for many of these treatment interventions (Bisson et al., 2007). This may be attributed to the findings in some studies which show initial adverse effects at the onset of treatment, such as increased re-experiencing (Foa et al., 2000).

There has also been growing access to and interest in pharmacotherapy as a treatment for PTSD. Pharmacotherapy may help stabilize the brain function of those with PTSD symptoms, in that these drugs remodel the chemistry of the brain to change the firing of neurotransmitters. However, the pace at which neurotransmitters change the signaling processes in the brain is not enough; psychotherapy can actually remodel these neural pathways by fostering the growth of new neurons (Cozolino, 2010). Engaging the mind in treatment involves a more extensive effort, but one that may be preferred. The use of psychopharmacological intervention can lead to prescription drug dependence and can be quite costly for long-term usage (Feeny, Zoellner, & Kahana, 2009). Side effects, such as sleepiness, nervousness, insomnia, dizziness, nausea, tremors, gastrointestinal problems, weight change, appetite change, and decreased sexual drive may deter individuals from using pharmacological therapy as a means of reducing PTSD symptoms (Brady et al., 2000). In fact, women with PTSD are more inclined to favor psychotherapy treatment over pharmacotherapy when given an option (Feeny et al., 2009).

PTSD: A Brain-Mind-Body Problem

The brain's structure and its fundamental processing system indicate the importance of involving the body in the PTSD treatment process (Cozolino, 2010; Lanius et al., 2004). The bilateral construction of the brain consists of two separate cerebral hemispheres connected by the corpus callosum. Brain function lateralization provides insight into the type of treatment that might be most effective for PTSD (Lanius et al., 2004). The right side of the brain largely threads together information and memory to create a whole picture, story, theme, or concept. Conversely, the left side of the brain, or the linguistic brain, functions to understand and articulate abstract thought and language (Cozolino, 2010). When trauma occurs, it is coded and stored in the right side of the brain (Badenoch, 2008; Cozolino, 2010; Schore, 2003). Under normal conditions, the left side of the brain symbolically represents right-side experiences. However, in the case of trauma, the experience is stored in a different fashion than traditional verbal cognitive information, thereby potentially altering the brain function and structure (Badenoch, 2008; Siegel, 2007). According to findings from psychoneuroimmunology, traumatic experiences affect the middle prefrontal cortex, subsequently altering the connection between the limbic areas and the prefrontal region (Cozolino, 2010). When the normal firing of neurons in the brain ceases, information cannot travel between areas of the brain as it is intended to do. This

disruption in information travel may result in various forms of dissociation, such as dissociation of affect from cognitive processing (e.g. memory of the traumatic incident), or dissociation of body sensations from consciousness. Essentially, such disruption in the firing of neurons can cause a split of thoughts and feelings from the body sensations (Badenoch, 2008). As a result, accessing traumatic experiences would likely require an alternative form of communication beyond verbal language alone. In fact, literature suggests that engaging the body in the treatment of PTSD may bring dissociated past experiences forward into consciousness and create important body-mind-brain connections (Badenoch, 2008; Kurtz, 1997; Levine, 2005).

When an individual has experienced a trauma, she may be unable to complete actions that their inherent fight-flight systems are inclined to initiate. This situation could be due to the fear-freeze response or because they were physically inhibited at the time the trauma occurred (Applegate & Shapiro, 2005; Cozolino, 2010). Ogden et al (2006b) postulated that it is integral to turn to the body for such completion. Incorporating the body in treatment may provide a necessary resource for regulating and modulating traumatic memories (Levine, 2005; Ogden et al., 2006b). Once an individual is aware of the problem, bringing the body into treatment from the beginning encourages right-brain integration of body, limbic region, and cortex. This integration is called vertical integration. The brain senses what is happening in the body, it is able to label what is being experienced, and it ultimately communicates this experience in a coherent narrative (Badenoch, 2008). Integrating the body into the cognitive and emotional components of treatment can increase the depth, speed, and ease of recovery. Thus, targeting the integration of cognition and emotion within intervention research is a necessary next step and may prove to be particularly effective for treating PTSD (Badenoch, 2008).

The Need for an Improved Intervention for PTSD: DMT

Further research in the area of PTSD may have the potential for treating clients with a history of complex trauma. Such research may produce more successful, long-lasting outcomes if alternative treatments outside the realm of existing verbal and pharmacological treatment modalities are explored. Examining therapies that engage the triune of mind, body, and brain may be effective in alleviating the enduring symptoms. An example is DMT. This form of treatment may help individuals with PTSD to access the fragmented memories of traumatic experiences by allowing the body to tell the story that words cannot. Scholars in the area of trauma recognize that talk therapy may only access the verbal components of the trauma, and because the body is a necessary component in the transmission and translation of trauma, a treatment that addresses the body is necessary (Badenoch, 2008; Cozolino, 2010). For example, sensorimotor therapy addresses the somatic symptoms of trauma by using the body and the bodily experiences as the starting point in the therapeutic process to help the individual become mindful of the interaction of their movements, emotions, sensations, and thoughts (Ogden et al., 2006a). Ogden and colleagues (2006) found that individuals with PTSD often have a “fragmented memory of their traumatic experiences, a host of easily reactivated neurobiological responses, and baffling, intense, nonverbal memories—sensorimotor reactions and symptoms that ‘tell the story’ without words, as though the body knows what they do not know cognitively” (p. 3). The need for varying forms of expression might be attributed to the fact that Broca’s area and Wernicke’s area, the parts of the brain that are responsible for speech, are uninvolvement or *offline* during traumatic events, thus making it difficult for many people to verbally describe their

traumatic experience (Cozolino, 2010). Combining additional forms of expression with verbal therapy may be more effective in treating individuals with PTSD because expressing the trauma physically may allow the individual to be present in the here and now (Ogden et al., 2006a). The present study aimed to understand some of the elements of DMT implemented when working with women with PTSD.

Methods

Study Description

DMT is a treatment modality that has been practiced since the 1940s; yet, there has been limited research with regard to its effectiveness (Payne, 2008). To date, the literature on DMT is predominantly conceptual. Berrol (2000) attributes the lack of empirical research to the fact that the “complexities of the therapeutic process [of DMT] are not readily quantifiable” (p. 31). Without tools with which to measure the intervention objectively; it is difficult, if not impossible, to track the impact of the intervention on an individual. To measure an intervention, it is essential to understand first what the intervention entails. In order to understand what the intervention entails we interviewed dance/movement therapists, people we considered to be the experts of integrating movement and therapy. The objective of the present study was to interview dance/movement therapists who work with women who have been diagnosed with PTSD or who have experienced trauma, but have not received a Diagnostic Statistical Manual (DSM) diagnosis of PTSD. These interviews are the necessary first step in the process of developing a body-oriented interventions manual for social workers. Therapists were interviewed on the subject of their use of this treatment modality in practice, in an effort to understand the themes related to the therapeutic process. Specifically, DMT therapists were asked questions, designed to uncover the core elements of the intervention, how the body is engaged in the treatment process, and how the intervention might be implemented.

Sample

The sample composed of 15 certified dance movement therapists from across the United States. To be included in the study, participants had to have been working in the field of DMT for at least three years and have experience working with women who have a history of trauma or PTSD. Participants were recruited using multiple nonprobability methods, primarily convenience and availability sampling. An email was sent to 70 people listed on the American Dance Therapy Association (ADTA) website stating the purpose of the study and the criteria for participation. In response to the email, 15 people (21%) met the inclusion criteria and participated in the interview.

The 15 dance movement therapists who participated in the study live and work in various cities throughout the United States. All participants were female, with a mean age of 49 years. The majority of participants were Caucasian (93%); however, 7% self-identified as Hispanic. The majority of participants had been working in the DMT field for more than 20 years. Four participants worked in hospital trauma units, three worked in psychiatric units, three worked in acute care hospital settings, while the remaining participants worked in various private practice settings.

Procedure

Semi-structured interviews were conducted by phone at a convenient time for the participants. Interviews were conducted between January 2011 and February 2011 by the principal investigator. Interviews ranged from 30 to 75 minutes in length, with an average interview length of 45 minutes. All subjects volunteered to be interviewed, and no compensation was offered for participation. Both open-ended and guided interview methods were utilized. The interview guide aimed to facilitate discussion about the process and the effectiveness of DMT in practice. Questions were designed to explore the complex issues in DMT and trauma by examining the concrete experience of the clinicians that work in this area and the meanings their experiences have for them. For example, included questions asked therapists about the engagement of the body in practice, what they thought was effective as well as ineffective about dance and movement, which populations they felt benefited the most from DMT, the duration of treatment, and how long they had been using this method. These interviews were sufficiently flexible, which enabled participants to discuss issues they considered to be relevant to their use of DMT in practice. This study was approved by the Institutional Review Board.

Data Management and Analysis

Interviews with dance/movement therapists were digitally recorded and transcribed by an external company. Transcriptions were reviewed and checked for accuracy by the principal investigator. Using methodology rooted in content and thematic analysis (Creswell and Plano Clark, 2007), data were first reviewed to develop a broad understanding of content as it related to the explicit aims of the study. This understanding was used to identify themes and subthemes. Based on these themes, a codebook was built by the principal investigator. The responses were then categorized and organized according to the common themes that best described how the therapists used DMT. The material from the interviews was coded to condense the data into analyzable units; this involved assigning codes based on a priori themes from the codebook to words, phrases, and paragraphs in the interviews. Two coders assigned the codes to the text using QSR NVivo 9 (QSR International, 2010). Using NVivo 9, a taxonomy of themes was established and represented in a series of categories arranged in a treelike structure (nodes) to connect text for analysis (Krueger & Casey, 2009).

Results

Each therapist's experience was unique, yet many of the therapists reported similar themes regarding the use of the body for the treatment of women with a history of trauma. The core elements of DMT were embedded in the emergent theme of intervention tactics and strategies. Within this theme, several subthemes emerged, each of which will be explored.

Intervention Tactics and Strategies

The main theme that emerged, which was intervention, highlighted the strategies and tactics used by DMT therapists in treating trauma. Each participant discussed strategies and tactics for successful implementation of this modality. Although many of the therapists argued that the fluidity of the session is critical to treatment, there was consistency in the accounts of sessions, suggesting that there is a clear beginning, middle, and end to each session. The

strategies were organized and discussed based on the order in which they took place during a session.

Group Sessions versus Individual Sessions

Before exploring the strategies used during the beginning of the session, how sessions were organized needed to be described. One recurring subtheme was the use of group sessions as opposed to individual sessions. Most therapists described working in both group and individual settings, but 86% of the respondents emphasized the power of working in groups, especially in the case of trauma. One participant suggested:

I think in the group it is a wonderful way to work with trust, and fluid body boundaries, to take care of others. I really found the overwhelming need of survivors to care take other people, and what would it be like for them to take care of themselves.

Beginning of the Session

Warm-up. Each session starts with a warm-up. The warm-up was emphasized as an important time for the therapist to assess the movement qualities that she would be working within the session. The warm-up is usually the most structured component of the session. One participant remarked:

The warm-up is the thing that looks the most like a dance class because for me, that is the most that I am telling them what to do, or guiding them. Just to get them comfortable with moving in their own bodies. From there, asking questions throughout the warm-up can help stimulate and encourage their own creative movements.

Movement lexicon development. The movement patterns identified during the warm-up can develop the movement lexicon that will be used throughout the rest of the session. One participant commented:

Usually the setting is circular, let's just start with getting our bodies warmed up, shaking our fingers and wrists and elbows. And moving up the body, roll your shoulders, doesn't that feel good? And then your head, allow the weight of your chin to drop. Now let's get our feet and our legs, shake them, and moving the hips, that is of course pretty central and perhaps more threatening than just moving our fingers. So we start with the warm-up, sort of an introduction or pathway into the therapy itself, or movement process itself.

Dance/movement therapists view movement as an honest mode of communication. Revered modern dancer and choreographer Martha Graham once said, "movement never lies" (1991, p. 122). One dance/movement therapist in the present study echoed this sentiment by noting, "You can talk all the talk, but the body never lies." One of the reasons respondents perceive movement to be an honest mode of communication is because they believe the

unconscious speaks through the body. Many of the participants expressed this sentiment in various ways. Sometimes it is difficult to tap into the unconscious, and in this case, the therapists use movement guidance to help the individual access the deeply stored memories, thoughts, and feelings. Another participant elaborated on this theme, stating:

We work with the expressive element of movement. So we don't necessarily tell someone how to move, we allow their own expressive qualities to come out and manifest in movement. And that is what we explore.

Movement guidance. A DMT session is not like a dance class, in which students are taught a routine and then perform the routine for the teacher and class. Instead, DMT relies on the creative impulse of the client and is about expression, not just movement. That being said, the therapist does have a role in guiding movement when necessary. Guiding the client's movement relies on astute assessment of clients and being present with the client. This assessment often involves movement on a very small level. One participant commented:

Can they even close their eyes? Can they even allow the music to enter their body, or enter their room? Can they even decrease their hyper vigilance and be able to let go of all of that?

Building rapport. Just as expressing oneself verbally demands a relationship built on trust, it is imperative to establish rapport and trust in the DMT setting. When trauma is the presenting problem, the need for rapport is exacerbated. A participant explained:

So the first thing was development of trust in self and environment. And we did that in DMT through really experiencing safe and caring relationships within the group. Really feeling safe and helping them to create a holding environment within that space, and helping to decrease hypervigilance. And on a movement level, really accepting and initiating contact with others.

Just as in verbal therapy, one of the most important elements in establishing rapport is meeting the client where the client needs to be met. One of the therapists elaborated on this theme and said:

One patient had come to me and all of a sudden she hits the floor after a loud noise, and a patient had popped a balloon. So I dropped to the floor with her, and I told her it's okay, take my hand and we are going to stand up together.

Resistance can often be an issue in therapy. Although questions about issues of resistance were asked to all of the respondents, no one identified it as a major problem once rapport was established. However, the responses generally suggested that women are less resistant to DMT than men are, even in the earlier stages before rapport has been established. Resistance can be represented in the form of fear of movement, especially in the early stages of the therapeutic process. A participant stated:

And believe me there are a lot of people that come into a session and they are very guarded and fearful because they have these ideas of themselves as a mover or dancer and so they usually come away with a different experience.

The therapist can use the self to help guide the client into experiencing movement in a setting that feels safe.

I will move with the group if they need me to. If they have higher ego strengths I might just facilitate. I might mirror their subtle fragile movements to let them know they are okay just where they are.

One tactic used by the therapist to overcome fear of movement and resistance is the creation of a holding space. A participant explained:

Holding space is an energetic of being 100% plus present with whatever is going on in front of me. If I have pain or issues going on it all disappears so I can be the container of everything that person needs to do or say or experience in that moment.

Middle

Metaphor. All of the therapists spoke about tools that they use in practice to help clients ease into the movement process. When guiding the client in the movement process, the therapist will frequently use metaphor as a tool for developing and understanding a movement. One participant spoke of a female client suffering from PTSD and depression with whom she used metaphor:

She described a tree out in our garden that is dead, and she told me she is that tree. She feels dead. And she told me she would like to be able to grow leaves. We are now working on growing green leaves for her. So when I get someone willing, I go with that flow. We did two movements. One I initiated and one she initiated. One was opening up our arms wide and then the other was closing our arms over our stomachs. And we explored that interaction, what it felt like, what it meant.

Metaphor can be used to explore the mind. Opposing themes like open and closed, hard and soft, and high and low can be integrated to assist the client in exploring the expression of feelings. Music can also be used to explore these dichotomies. Additionally, the rhythm in the music can add a structure to the session, when useful.

Music and props. Although music can be a useful tool in the session, the participants were careful to note that the therapist needs to be careful in picking the music. Lyrics can influence the client's movement process. Additionally, many therapists incorporate the use of props into their practice. Props can help to ground the client or ease them into the movement process. Specifically, in working with women and trauma, there are props that can be powerful in establishing boundaries and experiences of support, concepts that may feel foreign to those with PTSD. One therapist explained:

I use the hoop with trauma because the hoop is like a circle, it's a boundary, you can be in the circle, or out of it. Or one foot in, one foot out. You can have the person holding it on one side and I can hold it on the other side so we are together but not touching. But the hoop is between us. She can pull, we can do a tug of war with the hoop. And that alone can become very empowering. You can raise the hoop above your head and then wiggle it down your body, and suddenly you are wiggling a little, and your body is moving a little bit.

Body awareness. The body holds the trauma; therefore, it is important to involve the body in accessing those stored memories. Many of the respondents discussed the need to turn to the body for the expression, and thereby the completion, of the trauma. One participant explained:

Your body is saying I can complete some kind of cycle that needs to be completed that you are not allowed to do when you are being attacked. Her body is protecting itself, and when it is in a place where it can release and check out, it does.

Creating a sense of awareness for the client was a subtheme explored by every therapist. In the case of trauma and PTSD, numbness is a common symptom experienced that is caused by dissociation (Cozolino, 2010). The goal in treatment is to help the individual feel their bodies again and to be aware of their experiences in their bodies. Many of the therapists used the phrase "bringing the person back into their bodies." Awareness exercises included grounding, breathing, and mirroring. One participant stated:

When we are sitting still there is so much going on in our bodies, blood is pumping and moving. If you are alive you are moving. If you are breathing, you are moving.

Mirroring. Mirroring is a very important tool in movement therapy and appears throughout the movement session. In an individual session, the application of mirroring involves the therapist mirroring the client's movement with her own movement, or vice versa. One of the roles of the therapist in the use of mirroring is to pinpoint and exaggerate the subtle movement of the client. The therapist observes the movement that the client is performing and amplifies it in her own movement to help the client gain awareness. This was explained by one participant as:

If they are moving in a tentative, hesitant way you want to make that explicit, what are you being careful of? You want to put them in the scenario so that they are aware of it. It's easier when you have anger because it is more explicit.

Empowerment. An important subtheme from the middle of a session is empowerment and decreasing self-identification as a victim. One therapist explored the decrease in powerlessness when the client(s) can regain a sense of control:

There might be a survivor, and this is definitely at further stages of healing, but one client could be on one side of the room and we would slowly move toward

that one person and that client said “stop” when we’re close enough, when we began to invade her space. How can she use her voice and her body to say “stop” or “no?”

Many of the participating therapists explained that feeling empowered is often a result of increasing mastery and decreasing shame or guilt. DMT can be effective in establishing a sense of empowerment because there is a notion of reclaiming and honoring the body involved in the treatment. Often, in the case of trauma, the victim does not feel ownership of the body. DMT is a modality that allows for the building or rebuilding of that ownership and honoring the body. Such ownership may be achieved through gained muscle strength or establishing boundaries. DMT can help individuals to be aware of their position in space: to recognize where their bodies end and where others begin.

We worked a lot in the movement level with experiencing former body boundaries that were intruded upon during the trauma, how do you feel those boundaries, how do you feel the outline of your body? Feeling it against a surface, really establishing, “this is me!” and feeling a firmer sense of self on a body level.

Trust. Developing a fluid sense of personal boundaries can be very challenging for victims of trauma. However, through the use of DMT, a positive sense of self is established, which can ultimately enable the individual to invite other people into their space.

Can they negotiate physical touch within a dance therapy session? Can they reach out and hold a hand? Do they feel like they are losing themselves and they cannot connect with anyone else? Is there a proper distance that they need in relationships in the session?

Ultimately, the client is learning to trust his or her own body again through the use of movement. The therapist helps to show the client that the things happening in the body are supposed to happen in response to trauma.

We are supposed to get all activated, typically have flashbacks, typically blocks things out, that is the way a person should deal with, and so here we are going to try and just move some of that along. So you are telling them that it isn’t that they haven’t been doing things correctly, it is just that we are going to move it along.

Self care. In the case of trauma, the body has often been violated. DMT uses tools to help the individual to reconnect with the body, to care for and nurture the body, and to trust the body again by being able to use it for healthy forms of expression and communication. These skills can be taken outside of the session and integrated into the lives of the clients, ultimately helping them reduce stress, anxiety, depression, and, ultimately, PTSD.

End Phase of the Session

Processing. In summary, the middle of the session develops based on what happens in the warm-up, and the session closes with a cool down and verbal processing of the session. The end phase is a time when change is noted.

At the end of a session we will cool down, process the session, review what we did, what they liked and didn't like, how it was helpful to them. This is a time for me to point out changes. "Look at your posture, look how differently you are walking now, you look like you have so much more energy. Do you feel that?"

Integration of other modalities. DMT is not intended to be used alone and without the integration of other treatment modalities; it is a modality that works well when integrated with other methods, such as verbal therapy or other expressive art therapies.

We could use other modalities. And that's why I think you need to be a trained therapist. I think that both modalities are necessary so you can respond to the client in the room, their diagnosis, what is necessary, what they need to do, they may want to stay in that physical state or they may want to express through movement what is coming out. But they need to be connected.

Discussion

Conclusions and Study Implications

The present study investigated the elements of DMT when working with women with PTSD. DMT is a well-developed, albeit small, field in its own right. It is a field that requires specific training and has its own accreditation. Due to the relatively minor representation of dance/movement therapists in the United States (i.e., there are only 941 therapists listed on the ADTA website), many people do not know that this resource exists, and many U.S. cities do not have any practicing and licensed dance/movement therapists (ADTA, 2012). As a result, DMT may not be as widely available to clients as a social work service. Therefore, to make DMT more available in the treatment of PTSD, one of the goals of the present work is to apply the findings toward the process of developing a body-oriented intervention manual for social workers. If social workers can adapt these practices into their treatment, then the benefits of DMT, woven into a body-oriented intervention, will be more widely accessible to women with PTSD.

Within the theme of intervention, the strategies and tactics identified indicate the core elements to be included in the manual. The findings from this research suggest that each session should be structured with a beginning warm-up, a middle that builds on the movement themes expressed in the warm-up, and an end that integrates verbal therapy to process and understand what developed in the session. DMT therapist should use tools such as music, props, and metaphor to guide the client in the movement process and exercises such as mirroring, breathing, and grounding to create awareness of where the body has stored trauma. Additionally, the intervention should be conducted in a group setting. The agreement between interviewees that this intervention works well in a group setting has many positive implications. Beyond its

treatment effectiveness, the use of group work can have positive implications for service providers by providing a cost-effective form of treatment whereby more clients can be seen and treated in shorter periods by fewer clinicians (Yalom, 2005). Ultimately, these intervention methods explored in the present study will help clients expand their movement repertoires and gain skills that can be integrated into their lives outside of the therapeutic setting.

A treatment modality that engages the body, mind, and brain may be an effective treatment option for individuals with PTSD. Existing literature on the body-mind-brain connection highlights the need for additional intervention techniques that involve the integration of the body into social work practice when working with this vulnerable population. The findings in the present study highlight the integral tools, strategies, and tactics used by dance/movement therapists. There is a need for future research that will further explore the sequence of a session. Questions regarding when, in a session, these treatment methods are used will help researchers and practitioners alike understand how the body can be involved in the treatment of PTSD among women. If a body-oriented intervention can be manualized and tested as a potential evidence-based practice, then it can become more widely used. With an increase in the awareness of PTSD and the subsequent problems that those living with PTSD face, there is need for social workers with diverse skill sets who can use new and varied treatment options in helping these individuals.

Limitations

Although findings from the present study are promising, interpretation of the findings should be made within the context of the study's limitations. Firstly, the study is qualitative, and both collection and interpretation of data in such studies can be susceptible to subjective bias and preconceived ideas of the researcher (Seidman, 2006). Additionally, there are methodological challenges in assessing the practice of dance/movement therapy using semi-structured interviews. The principal investigator who conducted all of the interviews holds a PhD in social work and has a background in performing arts, specifically in dance. Backgrounds in these two relevant fields not only manifested in rich conversation about the material, but also presented potential for bias. A second coder helped to reduce bias by achieving triangulation. Therapists were recruited using a nonprobability convenience sampling method; therefore, findings may not represent the broader population of dance/movement therapists. However, due to the exploratory purpose of the study, the sampling method is considered to be appropriate. Additionally, the sample size is small. Although this is not unusual for qualitative studies and saturation was reached, the findings should be considered within the limitation of a small sample size that may not be representative of the population.

Despite these limitations, this study is an important step in the process of developing an effective, evidence-based social work intervention to treat women with PTSD. The next step is to conduct a Q-sort analysis on selected statements from the interviews and, by means of factor analysis, determine when in a treatment session these treatment methods are used. Gaining information on the timing and sequencing of a session will be important data to inform the production of a body-oriented intervention manual for social workers treating women with PTSD because one currently does not exist. Manual-based protocols are essential in evidence-based

practice. Further research, both at quantitative and qualitative levels, which supports the use of DMT and improves the overall exposure and use of this modality, is needed.

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