Dance/Movement Therapy as a Reintegration Tool within Dissociative Identity Disorder Diagnosis

Laura Goff
lhall93@outlook.com

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

Part of the Social and Behavioral Sciences Commons

Recommended Citation
Goff, Laura, "Dance/Movement Therapy as a Reintegration Tool within Dissociative Identity Disorder Diagnosis" (2021). Expressive Therapies Capstone Theses. 495.
https://digitalcommons.lesley.edu/expressive_theses/495

This Thesis is brought to you for free and open access by the Graduate School of Arts and Social Sciences (GSASS) at DigitalCommons@Lesley. It has been accepted for inclusion in Expressive Therapies Capstone Theses by an authorized administrator of DigitalCommons@Lesley. For more information, please contact digitalcommons@lesley.edu, cvrattos@lesley.edu.
Dance/Movement Therapy as a Reintegration Tool within Dissociative Identity Disorder Diagnosis

Laura A. Goff

Lesley University

Sarah Hamil, Ph.D, LCSW, RPT-S, ATR-BC

May 5, 2021
Abstract

Dissociative identity disorder (DID) is a widely misunderstood and underrepresented diagnosis. DID is most commonly thought to be a trauma response, but lacks thorough research regarding the best means of treatment. This paper seeks to explore the literature in order to identify the possible benefits of using dance/movement therapy (DMT) as a primary form of treatment for those with DID. Because of the limited number of available resources on the topic, this thesis’s primary source of information is literature surrounding the topic of trauma, trauma responses, and the use of DMT in the treatment of trauma. The reviewed literature outlines the significant impact trauma can have within the body. This presence within the body is true of all forms of trauma, but increasingly so for those experiencing severe, complex, or persistent, traumatic events. The literature also clearly documents the root cause of DID being severe trauma. DMT has had an ever-increasing presence in published literature, and many studies have shown that DMT benefits those who have suffered from trauma. At the completion of this literature review, it was clear that future quantitative and qualitative studies should be done to thoroughly explore and document the benefits of DMT for those with DID.

Keywords: dance/movement therapy, dissociation, dissociative identity disorder, trauma, trauma response,
Dance/Movement Therapy as a Reintegration Tool within Dissociative Identity Disorder Diagnosis

This thesis seeks to explore the potential validity of dance/movement therapy (DMT) as a major form of treatment for individuals with dissociative identity disorder (DID), with a focus on the reintegration of personalities within the diagnosis. This thesis focuses on how DMT works to engage the mind-body connection. In addition to exploring the mind-body connection, DMT works to process trauma within the body, where some believe trauma is stored. This thesis seeks to draw connections between the integrative and explorative nature of DMT within the treatment of DID, and the integration of personalities back into a whole, through the processing of trauma through movement. By forming connections within the literature and between the diagnosis of DID and the theory of DMT, future researchers can be confident that the topic is worth pursuing. By demonstrating the benefits of DMT for the treatment of trauma and as an integrative tool, this research will be transferable to other populations experiencing similar diagnostic criteria as DID.

Dance/movement therapy falls under the umbrella of creative arts therapies along with other arts-based therapies including music therapy and drama therapy. In the United States, DMT is governed by the American Dance Therapy Association (ADTA). The ADTA defines dance/movement therapy as “the psychotherapeutic use of movement as a process that furthers the emotional, cognitive, social and physical integration of the individual” (Home, n.d.). The history of DMT in the United States is most commonly thought to have its foundations in the work of Marian Chace, beginning around the time of her retirement as a professional dancer in 1930 (Valentine, 2020, p. 1).

One of the approaches Chace was most known for was how she “offered dignity and compassion in surroundings bereft of such” (Marian Chace Biography, n.d.) By allowing group
members to participate in the creation of the movement and by giving them moments of self-empowerment and value, she supported the restoration of their dignity. Chace also was a believer in the power of movement. She trusted that the body would lead the client where they needed to go for their own mental health. It is from this foundational place that DMT began to grow in the United States.

Dance/movement therapy is not limited to use with a specific population; instead, DMT is used across different populations. Chace had influence in this area as well, as she believed “that dance served as a medium for communication for the most disturbed psychiatric patients, such as schizophrenics” (Valentine, 2020, p. 1). Her willingness to engage with these populations encouraged future dance/movement therapists to work “with groups and individuals of all ages who have widely differing problems” (Valentine, 2020, p. 1). Although DMT is becoming more commonplace, there is still a lack of literature and research regarding its efficacy with various populations.

Dissociative identity disorder (DID) is a diagnosis that is present in the Diagnostic and Statistical Manual, Fifth Edition (DSM-5). The DSM-5 describes the “defining feature of dissociative identity disorder as the presence of two or more distinct personalities” (American Psychiatric Association, 2013, pg. 292). The symptoms of DID are further described in the article, detecting clinical and simulated dissociative identity disorder with the test of memory malingering, “as yielding discontinuity and fragmentation in identity, memory, consciousness, affect, senses, motor functioning, and bodily control” (Brand et al., 2019, p. 2).

Despite its presence in the DSM-5, the diagnosis is still surrounded by controversy and misunderstanding. The limited understanding within the mental health community creates confusion around both the diagnosis and how to treat it. According to the previously mentioned
Before being able to treat individuals with DID, it is necessary to understand where DID originates in the lives of individuals. The most commonly discussed source of DID in the current literature is severe childhood trauma. The current understanding of trauma is that it has a compounding effect. It is believed that there is less psychological impact from a single experience of trauma than there is with repeated exposure to the same trauma or to multiple types of trauma. Brand and the other authors provide further clarification on this statement by writing that “the impact of interpersonal trauma is additive; those with multiple types of trauma and more severe traumas (e.g., childhood sexual abuse) tend to evidence more complex comorbid psychopathology” (Brand et al., 2019, p. 2). These authors go on to state that “a common outcome of childhood trauma is dissociation, which individuals may utilize to cope with unbearable trauma, especially trauma perpetrated by a caregiver” (Brand et al., 2019, pg. 2). When dissociation is understood as a trauma response, it shifts the way the treatment of the diagnosis and the treatment of the individual with the diagnosis is approached.

It is this aforementioned type of extensive or severe trauma that serves as a correlation between individuals and a diagnosis of dissociative identity disorder. When individuals experience trauma, there are mechanisms within the human body and mind designed to help protect the individual from the effects and burden of that trauma. One of the ways that the body does this is in the form of dissociation. There are several forms of dissociation, and generally speaking, “dissociative disorders are characterized by a disruption in consciousness that is most often caused by a self-defense against trauma” (Prerost, 2019, p. 1). Within dissociation, there are four known types: dissociative amnesia, depersonalization, derealization, and dissociative
identity disorder (DID). The author of the well-known book, *The Body Keeps the Score*, describes dissociation as the essence of trauma, stating that “the overwhelming experience is split off and fragmented, so that the emotions, sounds, images, thoughts, and physical sensations related to the trauma take on a life of their own” (van der Kolk, 2014, p. 66). DID is considered the most severe form of dissociation. In the case of DID, the protective response to trauma is the formation, and splitting of new personalities. This can take on several different appearances, but the most common is what is sometimes referred to as multiple personality disorder. In this disorder, individuals experience severe trauma and begin to develop protective personalities to shield themselves from the pain of the trauma. There is no formula for how many personalities will develop, though “the number usually ranges from five to ten distinct personalities that can emerge at any given time” (Prerost, 2019, p. 4). According to Prerost, “usually one personality is dominant and is termed the host and the other secondary personalities are called alters” (Prerost, 2019, p. 4). These personalities work together to protect the host. However, sometimes the presence of these alters begins to suppress the host, and the host’s life becomes negatively impacted by their presence and influence. It is at this point in the progression of the disorder that it starts to become visible to observers.

Because DID has its foundation rooted in the presence of trauma, it is important for those working to treat DID to understand trauma. If the mental health field increases their understanding of trauma, its effects on those who have experienced any of the various forms of trauma, and the best ways to support the processing of trauma, then there can be a residual effect for understanding the treatment of DID. The first thing to consider when striving to understand trauma is its prevalence in society. For the following discussion, society refers to the United States of America. Although there is much to be said about trauma in other parts of the world,
that broad scope far exceeds the limits of this paper. Trauma is not uncommon; according to the US government, “approximately 60% of men and 50% of women will experience at least one trauma in their lives” (National Center for PTSD, 2017). The presence of trauma does not equal a mental health diagnosis, but the most common diagnosis related to trauma is post-traumatic stress disorder (PTSD). According to the National Center for PTSD (2017),

About 7 or 8 out of every 100 people (or 7-8% of the population) will have PTSD at some point in their lives, about 8 million adults have PTSD during a given year, and, about 10 of every 100 women (or 10%) develop PTSD sometime in their lives compared with about 4 of every 100 men (or 4%). (How Common is PTSD: National Center for PTSD, 2017)

The second thing to consider in regard to trauma, is the response of both the mind and the body to trauma. As previously mentioned, the body often plays a role in storing the traumatic events that it experiences. The brain is the filing system that is typically used to store information about experiences; however, when an individual experiences a traumatic event, the brain is not always sufficiently equipped to process and file the experience. In The Body Keeps the Score, the author describes the effects of “bypassing the emotional-engagement system in the treatment of trauma.” (van der Kolk, 2014, p. 88). Programs designed to help treat trauma sometimes focus on the “cognitive capacities of the mind” (van der Kolk, 2014, p. 88), instead of focusing on the body-level response. When an individual experiences a traumatic event, the brain does not function as it would in normal circumstances. In addition, the negative effects of “anger, fear, and anxiety on the ability to reason” (van der Kolk, 2014, p. 88) are well documented. This impact on the brain informs the types of treatments that will be successful.
When attempting to process trauma, the brain responds in an atypical manner. Similarly, a traumatic event can change the way an individual perceives their body. It is not uncommon for a trauma survivor to experience a lack of feeling or sensation in their body. This might include a general numbness or the numbness might target specific areas of the body as a direct result of the trauma experienced. It has been established that when trauma has occurred, the body can store it instead of the brain and often has a manifestation through an individual’s loss of connection with their own body. When these things are considered in connection to each other, it makes sense that “trauma victims cannot recover until they become familiar with and befriend the sensations in their bodies” (van der Kolk, 2014, p. 102). By regaining the feelings and sensations in one’s body, the individual takes back the control and can begin to, in a managed way, process the trauma on a body level and eventually on a mental level as well.

Method

Due to the lack of specific information in the literature at this time regarding the benefits of DMT for a DID diagnoses, the researcher will use this project to find and assess articles from various related disciplines and will form hypotheses for future testing. This thesis includes a review of literature regarding severe trauma responses, other dissociative disorders, DMT with trauma survivors, and DMT as an integrative tool. By looking at these various aspects of both dance/movement therapy and dissociative identity disorder, the goal is to bridge the gap between the missing information and the connections already made in other areas. Some of the search terms used include: dance/movement therapy, dissociation, dissociative identity disorder, dance/movement therapy with trauma, trauma responses, and the brain and trauma. Articles were selected based on their perceived credibility, which was assessed by considering the date of publication, the journals that they were published in, and if it received peer reviews. In addition,
articles examining the historical perspective of the topic, the current theoretical approaches to the topics, currently practiced and accepted treatment options, and the history of DMT interacting with the DID population were read and analyzed to provide a thorough overview of the various topics and their interactions.

This information was gathered through a methodical approach of analyzing articles on related topics, pulling out quotes from these articles, writing summaries and building a literature database. These articles and documentation served as the foundation from which conclusions were drawn. In addition, a journal was kept for documenting thoughts as they arose while working with supervisors and consultants.

**Literature Review**

This review delves into the existing literature regarding dissociative identity disorder (DID), trauma responses, and dance/movement therapy (DMT). The primary purpose of this literature review is to demonstrate the importance of this topic for future study (Faryadi, 2018). The format will begin with the historical context for each of the topics outlined above and close with a summary of the current research regarding the relationship between DID and DMT. Although there is still limited literature on some of these topics, there is more access and connections being made than ever before. By exploring these three distinct topics independent of each other, the hope is that clear connections will begin to reveal themselves between the three categories.

Up until the completion of the DSM-IV update in 1994, dissociative identity disorder was known as multiple personality disorder (Muller, 2006). According to Psychology Today, the name was changed due to increased understanding about the diagnoses. Multiple personality disorder denotes a growth of a new personality within an individual, but the psychology field has
come to understand that DID is instead a fragmentation and separation of distinct parts of a single personality (Psychology Today, 2019). Each human has distinct characteristics that make them who they are. When DID is experienced, that integrated self, including memory, experience, mental processing, and body awareness, splinters, and each part of the person is then susceptible, from this fractured state, to the development of an identity to cope with the experienced fragmentation of self. With this increased understanding of the disorder, the American Psychiatric Association elected to change the name to dissociative identity disorder, and that name has remained through the most recent update of the diagnostic and statistical manual of mental disorders (American Psychiatric Association, 2013).

Despite its presence in the DSM-5, the prevalence, validity, causes, and approaches to treatment of DID within the therapeutic world are still riddled with disagreement and controversy. In some professional opinions, DID is an often-feigned disorder; in other opinions, it is a disorder that is still severely misunderstood and under-diagnosed. This lack of understanding and research makes it difficult for those with the diagnosis to get the help and support that is needed to manage the diagnosis, and it also negatively impacts the stigma around the diagnosis both in the clinical world and in western society as a whole.

DID is a diagnosis that is often believed to be a product of malingering, or falsifying experiences. Brand et al. (2019) examined the current and accepted process for distinguishing feigned and malingered DID from the true diagnosis. This study sought to expand evidenced-based testing to increase accuracy of the diagnosing process. The study accomplished this goal by administering various psychological tests in two groups and examining the test’s ability to differentiate between actual and feigned DID cases. In this study, the authors discussed the use of the Structured Clinical Interview for DSM-IV Dissociative Disorders--Revised (SCID-D-R)
stating that “The SCID-D-R is a 277-item semi-structured interview that is considered the gold standard for diagnosing dissociative disorders. The SCID-D-R has good to excellent reliability and good discriminant validity” (Brand et al., 2019, p. 5). However, this particular exam did not meet the expectations of the researchers, who were searching for an additional tool for clinicians to use in the diagnostic process. In an attempt to achieve their goal, they explored the use of the psychological test of memory malingering (TOMM). The test’s publishing company, Pearson, describes the TOMM as “a visual recognition test that helps you distinguish between malingered and true memory impairments” (Pearson Assessment, n.d.). In their studies, the authors found that the TOMM test “performed as well as or better than any standardized measure or subscale of feigning that has been studied this far regarding utility in distinguishing feigned from clinical DID” (Brand et al., 2019, p. 8).

The field of psychology is working to solve the problem of distinguishing between feigned and clinical DID. This pursuit is important for allowing those with clinical DID to have access to the support they need to heal, instead of expending their energy trying to convince people to believe their experiences. This support starts with clinicians working to understand DID and its multiple components. By understanding the formation and foundation of most DID cases, the effects of DID on an individual, their ability to function in the world, and the various accepted methods of treatment, the clinicians will better be able to offer effective support to their clients. This approach is supported by the concept of unconditional positive regard and client-centered mental health care. Unconditional positive regard was first established by Carl Rodgers. It is widely taught today and works together with client-centered care to shift the focus and intention from the clinician and textbooks, to the individual person sitting in the client’s chair. The current methods of treatment identified in the literature researched for this paper indicate a
heavy reliance on top-down, or talk, therapy. Later in this paper, the use of bottom-up approaches such as somatic psychotherapy and DMT will be discussed as alternative treatment approaches.

Although DID is not something to be desired, it is a tool, as “patients with DID have developed a capacity to separate the memory of the experience and circumstances of trauma from their ongoing memory, resulting in a temporary mental escape from the pain of their ordeal” (Somer & Somer, 1997, p. 1). This response is not adverse in itself. Instead, it is a protective mechanism for the individual. However, it becomes a problem “when the dissociation becomes extreme and begins to negatively affect every day functioning” (Prerost, 2019, p. 1). In many cases, because dissociation happens as a response to trauma, it can be considered an adaptation for the individual. One article describes this phenomenon by pointing out that “without the memory of the trauma in the conscious mind, a person can avoid the emotional turmoil and anxiety that normally would be present” (Prerost, 2019, p. 1).

As previously mentioned, DID is believed to be a response to trauma, most commonly, severe childhood trauma. Sabine Koch and Steve Harvey declare “most patients with dissociative states have suffered trauma during childhood and have recurring traumatic memories, loss of time and physical stress” (Koch & Harvey, 2013 p. 369). These symptoms support the description of fracturing that takes place in order for alternate personalities to develop. Koch and Harvey go on to describe how the presence of dissociation allows for the individual to continue existing and functioning despite the presence of something painful or traumatic (Koch & Harvey, 2013 p. 369). As the fragmentation continues and the fragments develop into distinct parts, the system of dissociation that was previously useful for survival becomes a detriment to the individual. The distinction between adaptive and maladaptive use of the various forms of
dissociation can be identified through the presence of the original danger. If the danger that caused the dissociation is present, then it is an appropriate response. If it continues after the danger has passed, then the dissociation becomes a maladaptive response. (Koch & Harvey, 2013).

The body has several built-in coping mechanisms for dealing with trauma. These are not optional; they are a result of the parasympathetic response system in the body. The most common responses to immediate trauma are the fight, flight, or freeze models. Additionally, a new response of fawning is being observed. A brief description of each are as follows: Fight - The body experiences a jolt of adrenaline and the automatic response of the body is to fight back against whatever is causing the trauma. Flight - In this response, the brain overrides the body and the body is forced to flee the situation, which might include literally running or hiding from the trauma. Freeze - The brain and body freeze, and the individual is unable to make any moves. It is important to note that these responses are not voluntary and are not easily overcome. The final and newest response is fawning. In this response, the individual seeks to please the source of the trauma. As a trauma response, the individual seeks safety through the avoidance of conflict by submitting and appeasing to the source of the trauma. (Katz et al., 2021, Koch et al., 2017) Koch and Harvey describe dissociation as “usually developing as a healthy mechanism in an unhealthy environment” (Koch & Harvey, 2013 p. 370). Dissociation, therefore, is not necessarily a negative thing and can be the body working to protect itself. This is also the case for the other forms of trauma responses discussed above. These natural responses serve as a form of protection for the individual experiencing the trauma. In that case, it is not the response that is the problem and instead the presence of the trauma is what needs to be addressed. However, sometimes this protective mechanism malfunctions and continues to fire even after the trauma
has passed. At that point, the protective mechanism itself becomes the problem. This protective response is not intended to be used long term, but, if the trauma is ongoing, then the response will be as well. When this system stays engaged, it begins to have negative effects for the individual.

The majority of these negative symptoms are centrally tied to hormones and their effect on the body. According to J. Bremner (2006), the author of Traumatic Stress: Effect on the Brain, “traumatic stress is associated with increased cortisol and norepinephrine responses to subsequent stressors” (p. 1). Both of these hormones are natural to the human body. However, when someone experiences a traumatic event, these hormones are released in greater quantities. If someone experiences prolonged trauma, and their system is continuously flooded with these hormones, the negative effects will start to take hold. The ongoing traumatic event produces a ripple effect, where the hormones have negative side-effects, and their side-effects continue the next ripple with a new set of negative effects. These negative effects from the hormones presence in the body include for norepinephrine; high blood pressure, anxiety, excessive sweating, heart palpitations, and headaches. According to WebMD, cortisol is “your body’s main stress hormone. It works with certain parts of your brain to control your mood, motivation, and fear” (https://www.facebook.com/WebMD, 2017). This hormone surging through a person’s body can result in them being in a constant state of fear. The Mayo Clinic state the following additional negative effects of too much cortisol; “anxiety, depression, digestive problems, headaches, heart disease, sleep problems, weight gain, memory and concentration impairment” (Mayo Clinic Staff, 2019).

Trauma responses can start in the pre-verbal stages of development. Human bodies are designed to have protective mechanisms within them that do not require intentional activation
and instead activate automatically when needed. One of the responses seen in pre-verbal distress is crying. Crying is the attempt of a baby to have its needs met. When the needs of an infant are not met by the caregiver for an extended period of time, the infant will stop crying and will begin to experience dissociation. Author Laura Pierce speaks to the use of parasympathetic response to trauma by stating, “from a psycho-neurobiological view, trauma-related dissociation is seen as a state of parasympathetic dominance that becomes active when first line or social engagement defenses, such as crying or vocalizations, fail to elicit a regulating response from an attuned caregiver” (Pierce, 2014, p. 2).

Historically, the human has been thought of as two distinct parts, the brain and the body. This separation, or mind/body gap, impacts the way trauma has been viewed historically and how it has been approached in treatment. This idea has its foundations in the philosophical theory of Cartesian dualism which is a theory that originated with Rene Descartes in 1641. The basic tenet of the theory is that the mind and body are two distinct entities that can exist apart from one another. Although this idea is generally rejected today, the effects of the belief that the mind and body are separated, on psychology and therapy are deep rooted. In Western culture, the mind is valued over the body, and therefore receives more attention in the psychological studies and treatments than the body. In addition, the higher value of the mind permeates our culture in subtle ways and results in individuals having a mind/body gap, where the mind is valued and the body is most often ignored. Thankfully, according to Pierce, “it is becoming widely accepted in the field of trauma psychology that trauma is a phenomenon that affects the physiological, neurological and psychological organization of the human organism” (Pierce, 2014, p. 1). As this idea continues to expand, the logical conclusion is that the body will begin to have more of a part in the treatment of trauma. Because of the multifaceted nature of trauma on an individual,
bring the body into the treatment, and elevating the significance of its role in the healing process is necessary for future trauma work. One way to bring the body into the treatment of trauma is through the use of DMT.

As documented in the introduction, dance/movement therapy has been present in the United States since the 1930’s when Marian Chace began her work with individuals hospitalized due to their diagnosis of schizophrenia. It is important to note however, that “in virtually all known cultures, dance has existed as a form of communication, ritual, and celebration” (Mills & Daniluk, 2002, p. 1). Those elements of dance that are experienced by different societies, represent some of the foundational benefits of DMT as it is implemented in the West.

Chace was a performing artist for most of her career. Because of her exposure to dance, as a form of emotional expression, or improv, she knew that it had an effect on her own mental health, as well as the mental health of her students and fellow performers. Chace was not trained in the field of psychology or mental health. If she had been, perhaps there would be more seminal documentation on why DMT is seen to be successful by those who experience it. In the current literature, there is increased understanding and documentation reflecting the psychology and mental health perspective on the benefits (Koch et al., 2019, Chabala, 2019, Goodill, 2016).

These benefits are evident in the “specific therapeutic mechanisms that are connected to techniques of DMT, such as mirroring, movement analysis, non-verbal metaphors, imaginative techniques, meditative techniques, introspection, and focusing” (Koch et al., 2019, p. 2) In a review of over 40 studies done by Koch (2019), it is noted that the “studies found evidence on the effectiveness of DMT on clinical outcomes, quality of life and cognitive skills. There was also a tendency that DMT improved interpersonal skills” (Koch et al., 2019, p. 20). This increased understanding and documentation, is in part the case because DMT is becoming more
well known. In addition, the increase in multi-profession perspectives on DMT is directly correlated to the new restrictions and qualifications necessary to become a dance/movement therapist. Although one does not have to be licensed in a mental health field to become a dance/movement therapist, the education requirements now focus heavily on the mental health aspects of the work. There is also an increasing number of dance/movement therapists that are licensed mental health counselors as well.

The recent, major, scientific discovery to support the field of DMT is that of the mirror neuron (McGarry, Russo, 2011). Mirror neurons help to explain the increased ability for empathy and understanding experienced between a dance/movement therapist and their clients. The research of mirror neurons supports the claims that dance/movement therapists have made historically about the connection, empathy and support that is offered through the experience of DMT.

The mirror neuron is utilized in a structured way within the context of DMT through the practice of mirroring within a session. Mirroring “which involves imitating qualities of movement, is an exercise employed in Dance/Movement Therapy to enhance emotional understanding between a therapist and client or among members of a group” (McGarry & Russo, 2011, p. 1). Practically speaking, this practice of mirroring involves following the motions and attempting to mimic the feeling behind the movements, of another person. This could be done between two clients, where they stand facing each other with one individual playing the part of leader, and the other, follower. The leader would begin to move their body in space, and the follower would engage in the same movements, as close to in sync as is possible. Through this shared exploration, the follower gets to experience the feelings of the other in their own body.
which can help produce sympathy, and the leader receives the benefits of being seen and having their emotions supported by another individual.

To understand how the DMT intervention of mirroring is effective, it is important to understand what the mirror neuron is and its function in the brain. In the DMT intervention example above, the two individuals are physically mirroring each other with their movements. When this happens, because they are doing the same movements, the same parts of their brains are firing. The mirror neuron causes this same reaction. For example, if person “A” picks up and eats a scoop of ice cream, and person “B” observes this, person B’s brain will light up, as if they themselves were eating the ice cream. According to DeSouza and Barnstaple (2019), “the concept of mirror neurons, emerged when a research group in Parma, Italy, found, quite by accident, that cells they were recording in a monkey, fired when the monkey saw an experimenter execute an action” (p.1). It is not surprising that when the monkey observed an action, its brain would have a response. What is surprising, and what made this discovery noteworthy, is the part of the monkey’s brain that responded was the motor cortex. The motor cortex is found in the frontal lobe of the brain. It is responsible for voluntary movements of the body. On a basic level, the motor cortex is broken down into three categories. This includes the primary, premotor and supplementary motor cortices. Each of these three, combine together to make up the part of the brain that gets the body moving. (Motor cortex, 2020). It is in this motor cortex, within the frontal lobe that the firing within the monkey’s brain took place when it observed the action. This increases the significance of the mirror neuron because “the mirror neuron system is recruited not only during one’s own movements, but also during the observation of others’ movements” (Geiger et al., 2019, p. 1).
DMT’s focus on the use of the body within the therapeutic process is an aspect that makes it unique within the therapeutic field. The use of the body helps support a bridging of the previously discussed mind/body gap. Within the field of DMT, “the body in movement is the main focus of therapy as the central medium for emotion perception and expression and an important source of personal resources and vitality” (Behrends et al., 2012, p. 1). By including the body in the process of healing, the individual is able to experience a holistic approach to healing. DMT allows for the individual to participate in traditional psychological theory as well as a body-focused approach. Koch and Harvey (2013) discussed this mutual benefit, saying, “verbal therapies address the emotions from the top down, movement therapy addresses them from the bottom up. In this way, both forms of therapy have complementary and cross-fertilizing effects on the healing process” (p. 376).

There are few studies done that demonstrate, in a quantitative manner, the benefits of DMT. There are even fewer studies done looking specifically at the use of DMT with dissociation or DID. However, in reviewing the literature for this thesis, only articles looking specifically at the use of DMT with trauma or DMT with general dissociation were discovered. Additionally, there was a single article addressing the use of an arts therapy approach to working with DID.

Because DID is a form of dissociation, the research and studies completed on that topic are invaluable to the connections being made in this thesis. In the following paragraphs, the usefulness of DMT for the treatment of DID will be explored through DMT’s relationship with the treatment of trauma and of general dissociation. Dissociation and trauma are intertwined closely because the cause of dissociation is rooted in the presence of past or ongoing traumatic events. (Koch & Harvey, 2013).
First, “because dissociation is, by definition, the dis-association of components of bodily and psychic experience, comprehensive treatment approaches will aim to support physiological and psychological integration and cohesion” (Pierce, 2014, p. 1). It is this comprehensive approach that the use of DMT seeks to support. The governing body of dance/movement therapy in America, the ADTA, speaks to the integrative nature of DMT in their description of dance/movement therapy. This integration is foundational to the theories and approaches used within the field. Pierce (2014) goes on to state, “the integrative power of DMT has the potential to re-wire dysregulated neural networks related to dissociation” (p. 1). If Pierce is correct, then the implications for the value of DMT within the treatment of trauma and dissociation are not limited to observable benefits and instead impact the individual on a brain structure level.

As previously mentioned, few studies have been done on the quantitative benefits of DMT. When considering the general processes of a therapist, choices and assessments regarding the successfulness of treatment are rarely connected in an official capacity. Somer and Somer speak to this by pointing out that the “process of change in psychotherapy is typically described in the literature by the therapist. It is usually the therapist who extracts meaning from the raw data given by the patient” (Somer & Somer, 1997, p. 1) (Curtin & Fossey, 2007). However, if DMT changes the neurological connections in the brain, then it is theoretically possible to concretely demonstrate those effects. Future studies demonstrating this would be invaluable to the progression of DMT as a major form of treatment for trauma, dissociation, and DID. If the neurological changes could be mapped, then knowing what DMT theories, frameworks, approaches, and interventions were most successful for this particular diagnosis would be possible. Combining a quantitative method with the numerous qualitative studies already done would be a beneficial next step.
Although no studies looking at brain images related to DMT were found in the current literature, there are studies that look at other forms of movement and its effects on the brain. One of these examples is discussed by Van Der Kolk in his book. Specifically looking at the use of yoga for treatment, Van Der Kolk helped to facilitate a small study of six women who had early histories of severe trauma. In the study, the research participants went through a 20-week yoga program. At the end of the 20 weeks, Van Der Kolk states that based on brain scans, the “women developed increased activation of critical brain structures involved in self-regulation: the insula and the medial prefrontal cortex” (van der Kolk, 2014, p. 276). Although one single study with a small sample size, in a related field, is not sufficient evidence for the benefit of movement as a form of treatment for DID, it is a place to start.

**Discussion**

The project was intended to identify the connections and potential benefits of dance/movement therapy (DMT) as a major form of treatment for those with dissociative identity disorder (DID). DID is a trauma response that results in the fragmentation of the individual’s core sense of self. Each of those fragments serves a different role for the individual. These roles might include personalities like comforter, protector, rebel, or child.

DMT is a relatively new field of mental health counseling that relies heavily on the body during the treatment process. DMT has a focus on reintegration between the mind and body. It is the integrative factor of DMT that presents itself as the largest potential benefit for those with DID. Koch and Harvey remind their readers that “body work with traumatized dissociative patients can be initially difficult because the history of the patients in most cases is one of trauma, pain, and hurt on the body level. After initial resistance to body work is overcome, however, it can decisively contribute to the healing process” (Koch & Harvey, 2013 p.383-384).
The literature review completed for this thesis project supports the desired outcome. Clear connections are able to be made between trauma and DID, and DMT and the treatment of trauma. The effects of trauma on the brain are noteworthy within the context of general mental health; however, the focus in the current literature on trauma and its relationship with the body speaks closely to the role of DMT in a trauma survivors’ life. To summarize the findings:

Trauma is experienced on a body level and often results in a dissociative response from the trauma survivor. In this response, the individual may experience a separation or disconnection from their body. Without the connection to their body, the healing process becomes increasingly more difficult to accomplish. In fact, the literature suggests that without a reintegration into one’s body, healing from the past trauma may not ever be completed (Pierce, 2014). Though this reintegration can be accomplished through various means of body work including yoga as a non-clinical practice, or EMDR, a clinical practice, dance/movement therapy is the only clinical approach that relies firstly on the body and secondly on the mind.

After completing the literature review it is the integrative nature of dance/movement therapy that stands out as the most beneficial aspect when compared to traditional talk therapy theories and approaches. Allowing the body to participate in the treatment process is the underlying strength of DMT, particularly, when considering the lack of integration between mind and body that is implicitly and explicitly practiced in the United States. Having an opportunity to reform connections between one’s mind and body and participate in a healing process that involves the whole self, will help to combat the fragmenting side effects of trauma. The literature supported the benefits of DMT with trauma survivors and although there are only limited connections previously made between DMT and DID, the connection to trauma is a link that can be used to validate future study.
Future studies should be done to continue the newly developed understanding of the body’s role in mental health. Particularly, there should be more research done exploring the body-based treatment needed for those facing a history of trauma. This includes conducting studies focusing on the way trauma is stored and processed in both the body and the mind. In addition, the literature review exposed a lack of research focused primarily on DID, and a more significant lack of research on DID and DMT together. The potential of the benefits of DMT on DID is clear in the current literature, but the application and scientific proof is lacking. Both quantitative and qualitative studies on this topic would be beneficial to both the field of DMT and the study of DID, but the biggest benefit of these future studies will be for those living with the burden of dissociative identity disorder.
References


DeSouza, J. F. X., & Barnstaple, R. (2019). *Looking in the mirror: Limits of mirror neuron theory (MNT) and applications for dance/movement therapy (DMT).*

https://doi.org/10.13140/RG.2.2.10012.54409


https://doi.org/10.4236/ce.2018.916219


https://www.va.gov/understand/common/common_adults.asp#:~:text=About%206%20of%20every%2010

*What Is Cortisol?* WebMD; WebMD.

https://www.webmd.com/a-to-z-guides/what-is-cortisol

https://doi.org/10.1016/j.chiabu.2020.104905

https://doi.org/10.1080/20008198.2017.1412226


https://doi.org/10.3389/fpsyg.2019.01806


https://doi.org/10.1016/j.aip.2011.04.005


https://eds.a.ebscohost.com/eds/detail/detail?vid=7&sid=f0123cb6-73a9-4c8d-821d-813f32fc1b15%40sessionmgr4008&bdata=JkF1dGhUeXBIlPXNzbyZzaXRlPWVkcy1saXZlJnNjb3I%3d#AN=94415737&db=ers

THESIS APPROVAL FORM

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

Student’s Name: Laura Goff

Type of Project: Thesis

Title: Dance/Movement Therapy as a Reintegration Tool within Dissociative Identity Disorder Diagnosis

Date of Graduation: 05/22/2021

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

Thesis Advisor: Sarah Hamil, Ph.D., LCSW, RPT-S, ATR-BC