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Strengthening the Therapeutic Relationship Through Mirroring in a Dance/Movement Therapy Group for People with Alzheimer's Disease: A Descriptive Study

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STRENGTHENING THE THERAPEUTIC RELATIONSHIP THROUGH MIRRORING IN A DANCE/MOVMENT THERAPY GROUP FOR PEOPLE WITH ALZHEIMER'S DISEASE: A DESCRIPTIVE STUDY

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Abstract

The purpose of this research was to explore the dance/movement therapy intervention of mirroring within a Chacian modality and its effects on creating, maintaining, and deepening a therapeutic relationship between two women who are living with Alzheimer's and the researcher/facilitator, a dance/movement therapy intern. This research project was part of an internship at an adult day center for people living with Alzheimer's. Six, half-hour, videotaped dance/movement therapy sessions were devoted to this thesis study.

The indicators, which exemplified that a therapeutic relationship was created, maintained, and deepened were changes in facial expressions and postural shifts. These indicators were noted through two forms of data collection and analysis. First, the researcher's journal entries were written after each therapy session and were analyzed using content and conceptual analysis. Secondly, *shape flow* (see Appendix A), defined by Kestenberg as the growing and shrinking of the body in which expressions of feelings are communicated to self and others (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999), was observed through video analysis and recorded on a movement coding sheet in response to the intervention of mirroring. Findings concluded that a relationship was created and maintained throughout the dance/movement therapy sessions as evidenced by three themes related to group cohesion, shared movement, and the expression of feelings. These themes correlated with growing shape flow as reflected in more open postures and brighter affects.

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Chapter One: Introduction

Dance/movement therapy acknowledges that the body and mind are one complete entity and therefore, work together to promote daily functioning and integrated relationships within society. As human beings we are connected internally and externally in a variety of ways: emotionally, psychologically, and physically. When a separation occurs in one of these areas problems may occur and it may not always be evident to the person affected. Disconnection between mind and body makes dealing with psychological, emotional, and physical problems more difficult.

People with *Alzheimer's* disease (see Appendix A) may be unaware of any internal separation between mind and body and may deal with struggles in their life for years. Alzheimer's disease is a disease that causes internal conflict between mind and body by progressively wearing down the connection between mind and body. It denies the person the ability to effectively deal with conflict, remember their identity, associate in social relationships, and find their place in society. People living with Alzheimer's may no longer be able to physically eat, dress, or live by themselves. In their mind they are confused and unsure at times of who they are or who is around them. The connection between body and mind has become separated. They may still see themselves as active and vital adults even when they are unable to do things they once were able to do. Alzheimer's is a disease that negatively impacts the connection between the physical, emotional, social, and cognitive aspects of self and often causes conflict for family, friends, and caregivers.

Alzheimer's disease affects about five million people in the United States (Alzheimer's Association, 2009; Namenda Memeantine HCL, 2007). It is a disease that causes changes in the brain and eventually breaks down or destroys a person's ability to

remember, learn, and carry out daily life activities (Namenda Memeantine HCL, 2007). Alzheimer's inhibits a person from being able to perform necessary and simple daily tasks, like going to the bathroom, eating with a spoon, and talking to a loved one while recognizing who they are within their relationship. Alzheimer's is a "progressive and fatal brain disease that destroys brain cells, causing problems with memory, thinking, and behavior severe enough to affect work, lifelong hobbies, or social life" (Alzheimer's Association, 2009, p. 1). It is a disease that interferes with and eventually takes over every aspect of a person's life.

According to the Alzheimer's Association, Alzheimer's is the seventh-leading cause of death in the United States today (2009). The disease does not currently have a cure, but various medical and therapeutic treatments have been developed to help maintain the current stage one is in or keep symptoms from accelerating (Alzheimer's Association, 2009; Kuhn, 1999). Alzheimer's disease is something that develops over time, and as time goes on the level of functioning decreases. Stages have been identified by researchers to help understand the disease and what occurs as it continues until life is taken. Not every individual follows these stages exactly and some may skip a stage.

Information about Alzheimer's disease has developed significantly in the past fifteen years (Alzheimer's Association, 2009). Alzheimer's disease is a major problem for many reasons. First, as Coste (2003) states, Alzheimer's is irreversible, and because of its progression, it is devastating for everyone. It deprives millions of Americans from using their ability to reason, speak, reminisce, and make decisions. "Alzheimer's destroys a lifetime of memories and whittles away at the core of a person's identity" (Coste, 2003, p. xi). Therefore, it is hard to see at times the qualities that a person living with

Alzheimer's still possesses, as one remembers who that person used to be. The disease attacks the very core identity of someone. Secondly, the disease permanently alters families and causes primary relationships between parents and children or husband and wife to be redefined. Thirdly, in 2002 the cost of caring for people living with Alzheimer's in the United States was more than $100 billion (Coste, 2003). Today that cost of caring for people living with Alzheimer's in the United States has increased to $148 billion per year (Alzheimer's Association, 2009). Fourthly, Alzheimer's is a serious problem because it is growing rapidly among the baby boomer population in the twenty-first century (Coste, 2003). As people who were born between 1946 and 1964 reach the later stage of life it is projected that Alzheimer's disease will affect more people. Since those who were born in the beginning of the baby boomer era turned 60 in 2006 and Alzheimer's disease usually begins after the age of 60, it is anticipated that Alzheimer's disease will be on the rise of older Americans (Hebert, Liesi, Beckett, Scherr, & Evans, 2001). It can also effect people as young as 30, although it is rare.

Throughout my nine month internship at a day program that offers specialized programs with trained staff for persons with memory loss, *dementia* (see Appendix A), or Alzheimer's, I had the opportunity to gain knowledge of Alzheimer's and observe its various stages. I saw, in many various stages, how life is different physically, mentally, and emotionally when someone lives with Alzheimer's. However, there seemed to be a way to connect with each person. Often, accessing parts of their past and relating them to the present allowed the person and the staff to interact. For some it was with humor; for others it was through reassurance that they were not alone. It was interesting and challenging to find the key to connecting with someone whose ability to express their

inner thoughts, feelings, and emotions through their body was constantly being challenged, often resulting in separation of self from the present moment creating an internal battle.

According to Binstock, Post, and Whitehouse, this internal battle with oneself causes a disruption in an individual's memory abilities and then, as it progresses, it impairs other intellectual abilities of language and perception (1992). Binstock, Post, and Whitehouse also state that someone living with Alzheimer's not only becomes robbed of their sense of autonomy and individuality, but so does their family. With this said, I wondered: Is an interpersonal relationship able to be maintained with someone who is living with Alzheimer's and if so, how? During my nine month internship, I had the chance to see that no matter what stage of Alzheimer's someone was living in, they still had something special to offer to our relationship, beginning with such simple things as a smile or holding hands and listening to music together.

These interactions led me to become interested in the question of whether dance/movement therapy (DMT) could have a positive influence on developing and maintaining an interpersonal relationship with someone in their current stage of Alzheimer's. I noticed changes in my relationships with the participants, specifically with two female individuals, in my dance/movement therapy groups. As I met these two women in my large groups, various themes started to arise for me, such as connection, support, and femininity, which further motivated me to work with these two women. My site supervisor and site mentor suggested that I work with these ladies in a small dance/movement therapy group. Specifically, I wanted to focus on facilitating a group based on the work of Marian Chace, whose core belief is that dance is communication.

She believed that movement is a vehicle for self-expression allowing internal feelings to be externalized (Levy, 2005). The foundation of Chace's methodology involves four main concepts that elicit movement expression, and they are body action, symbolism, *therapeutic relationship* (see Appendix A), and group rhythmic movement activity. I focused on Chace's core principle of the therapeutic relationship using the intervention of *mirroring* (see Appendix A).

I then began to ask myself the following questions: How can we relate to those whose cognition is declining? How is a relationship maintained between a person living with Alzheimer's and someone who is not? In particular, how is the Chacian modality of dance/movement therapy beneficial in relating to someone who is diagnosed with Alzheimer's? What interventions from a Chacian modality would be beneficial in creating, maintaining, and deepening the therapeutic relationship? Specifically, how might the intervention of mirroring increase a sense of relationship with someone living with Alzheimer's?

In asking myself these important questions, I decided to focus on this specific question, how did the intervention of mirroring assist in forging, maintaining, and deepening the therapeutic relationship with two female participants living with Alzheimer's? Positive changes in facial affect and posture reflected through shape flow were the indicators for knowing if there was an increase or decrease in the quality and depth of our relationship in response to the intervention of mirroring. Shape flow is the growing and shrinking of the body and vital to the formation of relationships and expression of feelings. "Through observation of changes in shape flow, emotions are most readily identified. Shape flow thus serves as an early foundation for interpersonal

communication" (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999, p. 124). In addition, my journal recordings of recurrent, positive key themes throughout all six sessions served as further data.

Neuroscience research informed my decision to use DMT as a means of focusing on the ability to create and maintain a therapeutic relationship with people who have Alzheimer's. The *mind* (see Appendix A) is a powerful component of the human body, because it emerges from the activity of neurons and structure of the brain, which is shaped by our interpersonal experiences that involve the use of our body in relationships (Siegel, 1999). According to Siegel (1999), "human connections shape the neural connections from which the mind emerges…and…the mind is a flow of energy and information" (pp. 2-3). Our ability to remember and retrieve information, develop healthy attachments, and communicate our emotions comes from the connections of neurons in our brain that are stimulated by actions, gestures, and facial expressions of another individual.

The field of neuroscience also played a role in my decision to focus on mirroring as an intervention that enhances the therapeutic relationship. According to Berrol (2006), mirroring, which is a foundational concept to the therapeutic process of dance/movement therapy, has become a major aspect of research in the neurosciences because "like a mirror image, the same sets of neurons are activated in an observer as in the individuals actually engaged in an action or the expression of some emotion or behavior" (p. 303). The activation of mirror neurons lays the foundation for a secure attachment, *empathy* (see Appendix A), and attunement, thus influencing psychosocial and cognitive

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functioning. This phenomenon is also demonstrated in the later stage of life when other areas of the brain have begun to decline.

The research (Coste, 2003; Kitwood, 1997) states that people living with Alzheimer's need to be treated as the people they were before Alzheimer's began to deteriorate parts of their brain. This means that they should not be treated as children. Rather, the abilities they still have to offer should be supported and encouraged. Being in their reality of the here and now and nurturing their self-esteem, helps to create an environment that is calm. In return, this allows them to feel at peace, which helps them to feel connected to others and bring out the abilities that they still have within themselves.

The theoretical framework that guided this research was the humanistic, person-centered theory of Carl Rogers (Ivey, D'Andrea, Ivey, and Simek-Morgan, 2002; Rogers, 1961, 1995) and Thomas Kitwood (Kitwood, 1997). In humanistic, person-centered theory, the therapist serves as a guide to the client. This then allows the client to find solutions to problems and change unproductive ways of thinking. The therapist imposes no judgments or personal opinions on the client, but gathers information from what the client presents and uses that to help facilitate change (Ivey, D'Andrea, Ivey, Simek-Morgan, 2002). In my work with the two female participants in this study, I followed this theory and attempted to form no judgments of the participants, instead accepting them for who they are. Change comes forth from the deepening of the relationship in which the therapist follows and listens to the needs of the participants by showing empathy and care.

In the realm of dance/movement therapy, Marian Chace's theoretical foundation coincides quite well with the humanistic theory of being in the person's world at the

present time, focusing on the here and now, using empathy, and listening as skills to relate to the client (Levy, 2005; Sandel, Chaiklin, & Lohn, 1993). Dance/movement therapy provides a person with the chance to be heard and seen by others, which may increase self-esteem and strengthen social interactions and connections with family and friends. Dance/movement therapy elicits responses from the body, whether it is through movement or verbal expression. Responses given by participants in groups vary, because they come from within the individuals, who are seen as unique. Marian Chace's philosophy and methodology was used in this research study, because it supports her concept that we "work with the healthy parts of the person" (Fischer & Chaiklin, 1993, p. 137). In Chace's work, she would respond and assess based on the movement expressions provided by her clients. When observing and working with clients, Chace noticed pathologies, disconnections, and negativity presented through words and body language, but she chose to use movement interventions that would trigger a much more healthy and positive response from the client (Fisher & Chaiklin, 1993).

Dance/movement therapy resonates with the humanistic, person-centered theory, because it is a way of listening to the clients or participants through the body. This is especially important for those who are living with Alzheimer's, because the use of verbal language at this point may be compromised. In order to reach past the disease of Alzheimer's and into the person one must be in the present moment. In order to communicate, body movements may need to be used as the primary medium for expressing feelings and thoughts. Mirroring is just one important movement intervention used to reflect the expression of inner emotions and thoughts, because in this interaction, two people are facing each other and sharing the chance to embody the other's movement

(Exiner, Kelynack, Aitchison, & Czulak, 1994). Taking on someone else's movement after watching them gives the chance for that person to feel accepted, heard, and understood. For people living with Alzheimer's, being heard and understood is a vital necessity in deepening a relationship, because of the debilitating effects that the disease has on one's brain. Mirroring allows communication to be given back and forth so that a relationship can be deepened.

I worked within the humanistic, person-centered theory and Marian Chace's methodology in researching the question: how did the intervention of mirroring assist in forging, maintaining, and deepening the therapeutic relationship with two participants living with Alzheimer's?

Chapter Two: Literature Review

Alzheimer's Disease: An Introduction

Alzheimer's is a disease that affects the mind, body, and spirit of many

individuals nationwide. According to Harrow (2005), "in Alzheimer's disease the mind

goes through a slow transformation becoming increasingly fragmented leaving the

sufferer increasingly more disoriented in time, place, and person" (p. 19). According to

the Alzheimer's Association (2009), it is estimated that 5.3 million Americans are

currently diagnosed with Alzheimer's disease. Symptoms of Alzheimer's include

"memory loss, difficulty in performing familiar tasks, problems with language, poor or

decreased judgment, problems with abstract thinking, misplacing things, change in mood

or behavior, changes in personality and loss of initiative" (Alzheimer's Association,

2009, p.1; Coste, 2003, p. 14; Hellen, 1998, p. 13-14). Slipping job performance and

confusion of place and time, which correlate with memory loss, are also symptoms or

warning signs of Alzheimer's disease (Medina, 1999).

According to Golczewski (1998), the average lifespan in the United States in

1998 was about 75 years (72 years for males and 78 years for females). Currently, the life

expectancy in the United States from the beginning of the twenty-first century is 74 years

for males and 79 for females (Kinsella & Velkoff, 2001). According to the U.S. National

Institute of Health and National Institute of Aging (2008), Alzheimer's disease usually

begins after the age of sixty, and as people grow older, the risk of the disease increases.

According to Morrison (1995), "Alzheimer's disease accounts for over half of all

dementias; the majority of elderly patients in nursing homes have been stricken with this

degenerative disorder" (p. 30). Alzheimer's affects a major portion of our geriatric population who suffer from dementia. It is one of the leading causes of death in America.

Alzheimer's is a specific form of dementia. The term dementia literally means "loss" and the person with dementia has progressively declined from their current level of functioning over a gradual period of time (American Psychiatric Association, 2000 & Morrison, 1995, p. 27). Specifically, according to the American Psychiatric Association (2000), there are six diagnostic criteria for Dementia of the Alzheimer's type. First, the cognitive deficit of memory impairment has developed in which new information cannot be learned or knowledge that was previously learned cannot be recalled, and there is at least one of the following cognitive disturbances: *agnosia*, an inability to recognize familiar objects (see Appendix A); *aphasia*, a roundabout way to say words that cannot be remembered (see Appendix A); *apraxia*, an inability to perform certain motor movements even if physically capable (see Appendix A); or *impaired level of executive functioning*, an inability to perform tasks of self-care (see Appendix A). A second criterion involves impairment in work or social functioning due to memory impairment and having one of the cognitive disturbances. Thirdly, the onset is gradual and the decline in cognitive functioning worsens progressively. The fourth and fifth criteria state that the cognitive deficits are not a result of any other central nervous system condition or systemic condition that causes dementia, and they do not occur only when someone is delirious. Finally, there is no better explanation by another Axis I disorder.

History.

Alzheimer's disease was named after Dr. Alois Alzheimer, who was a gifted scientist in the mid-nineteenth century. Dr. Alzheimer is known for his groundbreaking

research into the disease, which consisted of examining a patient of his who was a woman in her early fifties. This patient was experiencing intermittent memory loss (Medina, 1999). Dr. Alzheimer found that when he showed her a series of objects she at first gave the correct name for each, but soon after seeing the objects, she forgot everything she had been shown. In speaking to the patient, she would respond with "confused phrases, single paraphrasic expression (milk-jug, instead of cup), and sometimes would stop talking completely" (Medina, 1999, p. 12). As time went on, the woman eventually was unable to understand questions that were being asked and could not remember the function for which the objects were used (Medina, 1999). In addition, Whitehouse (1992) stated that Dr. Alzheimer's patient became increasingly suspicious and paranoid when it came to his concern for her health. Research today would state that this change in her personality would be considered an indicator of the onset of Alzheimer's. Eventually, after her change in personality, her cognitive and communicative abilities became impaired, such as memory, language, writing, reading, and speech. She eventually was unable to care for herself and died four and a half years after the onset of her disease.

After the woman's death, Dr. Alzheimer did an autopsy on the woman's brain and "…found that many of her brain cells had totally disappeared" (Medina, 1999, p. 12). Dr. Alzheimer then made two additional discoveries. First, as the cells disappeared, dense bundles formed, which are defined today as tangles. Tangles are thread-like structures made up of the protein tau. Second, he found that dispersed over the cortex were peculiar formations which today we call plaques (Medina, 1999). Plaques are "circular structures surrounded by abnormal looking nerve cells," which consist primarily of a protein called

beta-amyloid, as well as other substances (Medina, 1999, p. 86). As research developed

from Dr. Alzheimer's first discovery, scientists and doctors understand today that both

tangles and plaques found in this elderly woman's brain are not present in a young

person's brain (Alzheimer's Disease Education & Referral (ADEAR) Center: A Service

of the National Institute on Aging, National Institutes of Health & U.S. Department of

Health and Human Services, 2008; Medina, 1999).

Research into the disease of Alzheimer's is important, because without it we

would not be able to understand the physical and mental precursors and symptoms.

Research is also important in helping those living with Alzheimer's and their families to

understand the progression of the disease and how to best cope with it. Coste (2003) was

integral in bringing together representatives from twelve different groups in the United

States and Canada in 1979 to cooperate on research into Alzheimer's disease; this formed

the present day Alzheimer's Association, which was fully established in 1980. Prior to

1979, Joanne Koenig Coste was the founding director of the National Institute on Aging,

where she devoted her time and energy into studying and researching Alzheimer's

disease.

Symptoms and stages.

Research has shown that Alzheimer's disease has many intense symptoms that

affect the person internally as well as in their interactions with the external world. As

reflected in this field of literature, researchers have identified a progression of stages in

Alzheimer's disease that can explain the life changes each stage brings to a person and

their family. Coste (2003) states that Alzheimer's disease consists of three stages – early,

middle, and late (see Appendix B). Each stage's duration may be anywhere from one year

to ten years, depending on how the Alzheimer's affects the individual. Changes that are typically seen in one stage may appear in other stages. Some people may progress quickly through the early stage of Alzheimer's and spend most of the illness in the middle or late stages. One has to "recognize that the intensity of a change – sometimes subtle, sometimes profound – varies widely from case to case… and the most predictable part of Alzheimer's disease is the unpredictability" (Coste, 2003, p. 22). The development of stages of Alzheimer's is very important, because it is an informative guide that better prepares us, as researchers and caregivers, for the future.

According to Whitehouse (1992), "the most frequent initial symptom in Alzheimer's Disease (AD) is amnesia, most commonly the inability to remember recent events rather than remote events" (p. 24). Whitehouse (1992) goes on to say that this is commonly seen when family members say their loved one living with Alzheimer's cannot remember names or faces and has difficulty performing tasks at home and work. This occurs in the early stage of Alzheimer's, usually along with changes in personality and in the ability to execute tasks of daily living. This makes it infeasible for people living with Alzheimer's to maintain their focus or organize their lives, as they once were able to do. The most subtle change in behavior is seen through personality. A person living with Alzheimer's may become more suspicious and irritable.

As the disease progresses and more changes occur in the body, the person living with Alzheimer's moves to the middle stage, in which cognitive changes include an inability to find words, sometimes including aphasia, as well as difficulties in performing motor acts like cooking or driving. There may also be visual and auditory perceptual difficulties, and *activities of daily living* (see Appendix A) are impaired (Whitehouse,

1992). In the middle stage of Alzheimer's disease, feelings of depression or emotional outbursts may increase and become more evident in daily living (Whitehouse, 1992).

In the late (final) stage of Alzheimer's disease, those affected may even become unable to identify caregivers and loved ones, and become completely dependent on others for bathing, eating, and toileting. In addition, psychosis with hallucinations, mostly visual, and delusions may occur (Whitehouse, 1992). For example, those living with Alzheimer's may want to leave their home to go see their parents who have been gone for years, or may believe that people, such as their caregiver, are stealing things from them (Whitehouse, 1992). This occurs mostly in the period from late afternoon to late evening depending on the season in which the sun sets. This process is called *sundown syndrome* or *sundowning* (see Appendix A) (Coste, 2003). At this time, behaviors that are uncharacteristic or threatening begin to emerge (Coste, 2003).

The current research in how Alzheimer's is affecting and will continue to affect our geriatric population as the baby boomers move into that stage of life, shows that other forms of treating Alzheimer's, besides medical, need to be approached. Therefore, the humanistic approach, dance/movement therapy, and the use of non-verbal communication as seen in affect and posture, can potentially play very significant parts in creating and maintaining a relationship with our elderly population.

Humanistic Approaches to Working with Alzheimer's

Person-centered theory.

I am not here anymore. Somewhere else is where I am. A place so hard to find, you cannot see me here or visit me there or wish me out of this anywhere. If this is where I am supposed to be, why can't I find me? (p.13). Sometimes, something

is familiar to me. Most times there is no recognition of the fabric of my life. Only frayed remnants of who I once was (p. 61). You are smiling at me. I see my reflection in your eyes. I've finally found someone who speaks my language (p. 77). I've dance, I've sung, I've given birth, I've laughed, I've succeeded. Why is everyone so sad? (p. 48). I suffer most for my loss of self-esteem, not for the loss of choosing my wardrobe (p. 85). I can no longer make apple strudel, but I can chop pecans or roll the dough or peel the fruit. I am here. I've not yet gone (p. 108). I am seeking, I am not lost. I am forgetful, I am not gone. (Coste, 2003, p. 127)

The above excerpt consists of quotes that have been accumulated from people's accounts of how living with Alzheimer's makes them feel. In reading these accounts, how does one relate to the person and not the disease? One way of relating to the inner person is through the humanistic approach to therapy.

The person-centered theory is part of the existential-humanistic theory, which "…seeks to understand how the client makes sense of the world. Believing firmly in self-actualization, these therapists often listen to clients carefully in the belief that clients will ultimately find their own positive direction in life" (Ivey, D'Andrea, Ivey, & Simek-Morgan, 2002, pp. 5-6). Listening to the clients is one of the most important aspects in humanistic theory and listening to clients is foundational to all psychological approaches. The humanistic theory became popular and utilized in the counseling and clinical world by Carl Rogers. Rogers continued to develop the existential-humanistic theory with his concept of person-centered counseling (Ivey et al., 2002).

Carl Rogers had three time periods in his creation of the person-centered theory. Period one was called nondirective (1940-1950), period two was called client-centered (1950-1961), and period three was called person-centered (1961-1987) (Ivey et al., 2002). The relevance of these periods shows that as research became more advanced in understanding the human mind and body, so did Carl Rogers in his approach to helping people learn and deal with psychological issues.

"Rogers's techniques are designed to help you enter the worldviews of your clients and then facilitate clients finding their own new directions and frames of thinking" (Ivey et al., 2002, p. 234). Rogers's person-centered theory is rooted in the foundation of empathy. Empathy consists of validating and understanding one's feelings, emotions, and experiences (Rogers, 1961). In Rogers's theory, demonstrating empathy plays a fundamental role in helping a client make change in his/her life. Rogers stated that in order for the therapist to help the client grow, three things need to happen: first, an integrated congruent relationship with the client needs to be developed; secondly, the therapist must have unconditional positive regard for the client; and thirdly, the communication of empathy from the counselor to the client must occur (Ivey et al., 2002).

Let us look more closely at what Ivey et al. (2002, p. 208) call an "integrated congruent relationship" with the client. This means that both people need to be genuine and authentic. Both client and therapist need to feel as if they can speak what is truly on their minds, with no facades. The therapist allows no personal judgment to take over, but instead is constantly looking for the strengths that the client possesses in order to help create change. This is crucial in working with someone who is living with Alzheimer's,

because building a relationship in his/her here-and-now helps create a sense of peace and decreases anxiety by offering the client a greater sense of control in the present moment. Such an approach to a therapeutic relationship recognizes that every individual living with Alzheimer's disease is still an individual and cannot be categorized according to actions, but should be treated and met in a relationship for who they are. Coste (2003) states that for people living with Alzheimer's, they need to feel like they are still contributing to their own needs, family, and community: "They need to feel useful to whatever extent is possible for them" (p. 37).

In having unconditional positive regard for the client, the therapist must be able to recognize values and strengths that the client holds even when the ways the client acts and thinks are different than the therapist's own ways (Ivey et al., 2002). In order to show unconditional positive regard, a therapist must demonstrate respect and warmth. Respect can be conveyed through positive verbal affirmation, nonverbal eye contact, and body language (Ivey et al., 2002). Ivey et al., (2002), define warmth as:

> …an emotional attitude toward the client expressed through nonverbal means. Vocal tones, postures, gestures, and facial expressions are how the counselor's warmth and support are communicated to the client. Smiling has been found to be the best single predictor of warmth ratings in an interview. (p. 32)

Warmth has to be demonstrated by the therapist, because it is one of the crucial factors in having an empathic relationship (Ivey et al., 2002). This is important when working with those living with Alzheimer's, because having unconditional positive regard for someone who's physical, cognitive, and emotional world is no longer exemplifying the person they used to be illustrates that a relationship can be developed

and connections can be made. When one has unconditional positive regard, one is giving that person respect and warmth for who they are in the present moment.

In addition to showing respect and warmth, the therapist must also be concrete and immediate with the client. The therapist must shy away from abstract statements and experiences, because being concrete will help the client to work through what is happening now and find actions for resolution. Immediacy means bringing the client to the here and now of the client's experience, focusing on what they are thinking and feeling in the moment (Ivey et al., 2002). This is especially critical when communicating with someone living with Alzheimer's, because as the brain begins to deteriorate, abstract thinking is very difficult.

The third element in the person-centered humanistic theory is the client/therapist relationship where communication of empathy comes from the counselor to the client. Empathy includes listening to the client and saying back exactly what the client says with no interpretation, judgment, or thoughts of what the therapist is feeling (Ivey et al., 2002). Empathy is the ability for one person to relate to another person's emotional or intellectual experiences because they not only understand cognitively what they are saying, but have embodied the same emotions or experiences themselves (Berrol, 2006). Empathy is not about the content of an experience, but the process of dealing with the emotional and intellectual responses from the experience. Having empathy for someone living with Alzheimer's improves the chances of decreasing anxiety and enhancing a sense of trust in the relationship. Feeling heard is one of the most important needs of someone living with Alzheimer's.

Habilitation.

In working with Alzheimer's patients, the humanistic approach is widely used. Coste (2003) states that while caring for her husband who was living with Alzheimer's, she developed five tenets concerning how to interact with the person with Alzheimer's and how to be in their living environment. Her five tenets come from a humanistic approach, which she calls *habilitation* (see Appendix A). These five tenets are "to make the physical environment work, know that communication remains possible, focus only on remaining skills, live in the patient's world, and enrich the patient's life" (Coste, 2003, pp. 7-8).

Coste (2003) argues that it is important to be in the time and place of the person who is living with Alzheimer's and that communication often comes in the form of emotions and feelings that the person is still able to register in their body. Words at this point may be lost, but Coste advises us to "remember that the emotion behind failing words is far more important than the words themselves and needs to be validated" (2003, p. 7). Speaking and listening to the person with Alzheimer's disease is very important. One can validate the person's feelings through laughter and body language, and even though they may forget the exact words that were said they will never forget how one made them feel alive, important, and useful (Coste, 2003). It is also important to focus on the skills that a person living with Alzheimer's still has and "help compensate for any lost abilities without bringing them to one's attention" (p.85).

Coste (2003) gives the example of how Mary, a woman in her eighties living with Alzheimer's, was treated in a time period when using antipsychotic medication and restraints was a way of reducing physical outbursts and anger. One day Mary wanted to

see her mother who had passed when Mary was in her forties. Instead of asking Mary about her mother and joining Mary in her here-and-now, the staff member proceeded to tell Mary she was wrong. The staff member attempted to bring Mary into the reality of the present by telling Mary to remember that she was in her eighties, reminding her that her mother passed when she was in her forties. According to Coste (2003), forcing Mary to see the truth only escalated Mary's emotions, which resulted in an angry outburst and led to a physical altercation. In Coste's theory of habilitation, "…care partners place themselves in the patient's world, no matter where that world is" (pp. 33-34). By doing this, the caretaker or therapist lessens confrontation and brings calmness to the inner world of the person living with Alzheimer's. Again, as Coste states, "communication remains possible, live in the patient's world, and enrich the patient's life" (p. 34).

In Coste's (2003) theory of habilitation, the scenario between the staff member and Mary would have been different if the staff member had asked Mary to tell her about her mother, which would have helped Mary feel less defensive, because she was entering Mary's world. By not feeling defensive, Mary could go on to say that her mother was a great cook and that she especially liked her mother's pies. This conversation might have led Mary to say that she was getting hungry and she was no longer thinking about seeing her mother, and the staff member could say he was hungry too, creating a bond between Mary and the staff member. The staff member might then invite Mary to have a cup of coffee with her friend Pat. The staff member in this way would inhabit Mary's here-and-now, and, by making no attempts to correct Mary, would validate Mary's emotions of loneliness and need for nurturing. In this scenario, the staff member would validate Mary's feelings by not arguing and correcting her, and Mary's sense of dignity would

still be intact. "Never question, chastise, or try to reason with the patient. Join him or her in their current 'place' or time, no matter when or where that may be, and find joy with him or her there" (Coste, 2003, p. 108).

Kitwood's person centered-care.

Thomas Kitwood was an academic psychologist whose first encounter of Alzheimer's was in 1975, when his wife offered an elderly woman a ride home from the supermarket, because the woman lived not too far from Kitwood and his wife. At this point in time, the elderly woman's symptoms of Alzheimer's were not visibly apparent to Kitwood and his wife. As time went by, she became a good friend of Kitwood's. As she grew older, her symptoms of Alzheimer's deepened and the elderly woman's family eventually placed her in a psychiatric hospital. It was not until after her death that Kitwood wondered why he did nothing more than adopt the philosophical standard that elderly people simply go senile. "Like so many other people – then and now – I was completely seduced by the prevailing view: dementia is a 'death' that leaves the body behind" (Kitwood, 1997, p. 3). He began to wonder why, with all of his experience in psychology, he could not have helped create a connection or communication with someone living with Alzheimer's. In 1985, Kitwood, as an academic supervisor for a psychiatrist and a clinical psychologist, began to become more involved in understanding the dynamics of dementia. In this position, he was able to offer guidance in research and clinical knowledge and became interested in learning about dementia. He joined the Alzheimer's Disease Society and helped in the community of Bradford. "I found that I liked people with dementia. I often admired their courage; I felt that I understood

something of their predicament, and sometimes I discovered that I could interact with them in what seemed to be a fruitful way" (Kitwood, 1997, p. 3).

Kitwood (1997) established a theory called person-centered care, the ideas and practices of which come from Rogerian psychotherapy, "…where the emphasis is on authentic contact and communication" (Kitwood, 1997, p. 4). In his theory of person-centered care, there is a larger emphasis on the person and not the disease, thereby taking into account emotions and feelings and becoming more in tune with the body and less focused on cognitive thoughts and verbal language as the primary basis of communication. "Our frame of reference should no longer be person – with – DEMENTIA, but PERSON – with – dementia" (Kitwood, 1997, p. 7).

Kitwood's theory of person-centered care also addresses the importance of looking at two main frames of reference: an ethic and social psychology. Here he examines that the ethic of person-centered care is to have absolute value and respect for all human beings no matter how good, bad, able, or disabled they are (Kitwood, 1995). Social psychology incorporates neuroscience with knowledge of how to help people living with dementia live their lives to the fullest by maintaining relationships, executing their own choices, and feeling understood and valued as individuals (Kitwood, 1995). Kitwood (1993) states, "if those with dementia are to have any hope of continuing to feel that they are valued as persons, above all else they need understanding" (p. 16). Feeling understood, however, comes from social interaction in which a response from other individuals is needed to convey that their feelings and thoughts, whether they are joyous or distressed, are heard (Kitwood, 1993).

At the heart of Kitwood's theory of person-centered care is the concept of personhood, in which "…the category itself, the centrality of relationship, the uniqueness of persons, the fact of our embodiment" is the major concern and not the emphasis on how Alzheimer's has brought about negative differences or changes in the person (Kitwood, 1997, p. 7). According to Kitwood, personhood "…is a standing or status that is bestowed upon one human being, by others, in the context of relationship and social being. It implies recognition, respect and trust" (p. 8).

Kitwood's work focuses on the ability to have a relationship with someone living with Alzheimer's through authentic and meaningful contact and communication where the person can feel validated and understood, which in essence is a therapeutic relationship on a body, mind, and spiritual level. Kitwood's person-centered care and dance/movement therapy both work from the foundation that having authentic contact and communication derives from a psychological aspect of the mind and a physical level of the body. The body and mind work hand in hand to create inner and external relationships and feelings of self-worth, which allow individuals to be in relationship. According to Unger, a dance/movement therapist, the purpose of dance/movement therapy interventions is to stimulate a person's brain and physical self, resulting in exploring, producing, and sustaining emotion, inner strength and personal well being (1993).

Dance/movement Therapy

Our movements speak – often louder than our words. Our bodies hold our lives' experiences and memories, and a gesture or posture can betray grief, happiness, tension, pain, joy, desire, enthusiasm, or fear – despite our verbal denials. At

every moment, our mind-state is stored in the body and expressed through its

movements: this is the basis for the therapeutic modality known as

Dance/Movement Therapy. (Leventhal, 2007/2008, p. 14)

Dance/movement therapy (DMT) is a psychotherapeutic modality that uses

movement to engage the whole person: body, mind, and spirit. The American Dance

Therapy Association defines DMT "as the psychotherapeutic use of movement to further

the emotional, cognitive, physical, and social integration of the individual (2009, p. 5).

Dance/movement therapy is based in connecting both the mind and body to create one

healthy and balanced person.

According to researchers in the dance, psychology, and dance/movement therapy

fields, dance/movement therapists accept that "the mind or psyche stands for the

invisible, and body or soma for the visible aspect of the human organism" (Exiner,

Kelynack, Aitchison, & Czulak, 1994, p. 3). They go on to say that "language often

expresses the body-mind connection by showing the effects on the body of thoughts,

events, relationships and feelings" (p. 3). In DMT, interventions are motional instead of

verbal, although verbal dialogue may occur throughout the process (Exiner, Kelynack,

Aitchison, & Czulak, 1994). "We enter the movement situation of the client which

enables us to release, defuse or deflect it from the inside" (p. 59). Dance/movement

therapy offers the opportunity to connect the body and mind through recognizing and

dealing with an issue by bringing it to light through our own movement patterns.

And by dancing further about what has been discovered in the initial exploration,

more can be extracted and learned from it. Reflection can take place even if the

dancing is restricted to very simple movements. It enables recapitulation, the

discarding of what is irrelevant, retaining what is valuable and developing it

further. (Exiner, Kelynack, Aitchison, & Czulak, 1994, p. 17)

According to dance/movement therapists Shustik and Thompson (2002), DMT

programs "involve the intentional and compassionate use of breath, movement, touch,

and dance to promote the physical, psychological, emotional, and spiritual well-being of

each person" (p. 49). Shustik and Thompson (2002) are among many dance/movement

therapists who have worked with people living with dementia, and they argue that DMT

has the ability to help address specific issues such as anger, loss, grief, and abandonment,

which many Alzheimer's patients experience as their cognitive functioning decreases.

They state that DMT can help the dementia patient as their functioning declines, because

this nonverbal method provides them with an outlet in which they can express emotion,

make connections with others, work on issues, and integrate life experiences (Shustik &

Thompson, 2002).

Marshall's master's thesis on Alzheimer's and dance/movement therapy further

supports the benefits of DMT for people living with Alzheimer's of the dementia-type.

Marshall (2000) states, "as older individuals who are diagnosed with dementia begin to

lose abilities (from self-care to verbalization), they nonetheless still retain a need to

express their feelings, participate in relationships with others, and receive nurturing for

the self" (p. 23). Marshall argues that DMT is a meaningful form of therapy to help that

person regain a sense of self that is becoming lost. Her findings reveal that DMT invites

people to come together as individuals and with the use of props and verbal cues the

therapeutic experience is enhanced. Movement or music may stimulate certain positive

memories from the past, and the atmosphere of no judgment and positive reinforcement

helps in this process. Being able to remember times that brought joy and meaning to one's life can create a sense of accomplishment, self-esteem, and normalcy. Recalling the past can also bring about shifts in affect (facial expression) and posture.

Caplow-Lindner, Harpaz, and Samberg (1979), three colleagues in the fields of dance, movement education, and group work, speak to the healing power of moving within a group to enhance the well being of older adults. They argue, that "expressive and creative activities are an excellent way of establishing a sense of personal identity and developing one's inner resources" (p. 120). "The characteristic commonly found among older adults is the sense of isolation" (p. 119). Therefore, the authors state that group activities are important because they provide older adults with an outlet for negative and positive emotions where an accepting and supporting environment encourages one to rejuvenate a sense of identity and develop community (1979). "Movement sessions enable people to establish a more meaningful relationship with others. The expressive and creative activities form an extremely important part of the dance/movement program because they are necessarily nonpressured, playful, and socializing in nature" (Caplow-Lindner, Harpaz, & Samberg, 1979, pp. 119-120). Overall, dance, movement, and dance/movement therapy allow people, especially the geriatric population, to release emotions, connect socially to others, find a sense of self, and keep a healthy mind and body.

In addition, being in a group and sharing feelings and memories brings the experience of universality. "They are able to understand another's reminiscence and relate that to one of their own" (Marshall, 2000, p. 37). Marshall's study also suggests that DMT may be able to provide an experience in which someone living with

Alzheimer's is able to use the skills and abilities they still possess. This in turn can be communicated with caregivers in ways that allow the individual's accomplishments in the DMT groups to be transferred to their daily activities. Positive effects of increased self-esteem may come about in their change of affect from flat affect, which is little to no expression, to engaging with others through smiles, laughter, and tears (Marshall, 2000).

As stated by Kowarzik, a dance/movement therapist and researcher in the DMT field (2006), dance/movement therapy's approach to working with someone living with Alzheimer's is to focus on "…activating individual resources and creating a supportive environment in which personal expression is encouraged, even where an individual's physical and/or cognitive function may be diminished" (p. 17). Kowarzik (2006) states that dance/movement therapists support the philosophy and theories of Thomas Kitwood, and "for a person living with dementia a dance/movement therapy session can enhance well-being as the therapeutic environment provides a space where they can rediscover, and to some extent recover, aspects of themselves through movement" (Kowarzik, 2006, p. 17).

A study conducted by Verghese, Lipton, Katz, Hall, Derby, Kuslansky, et al. (2003), looked at one aspect of dance/movement therapy and that was the dance component. They studied the association between leisure activities and play in reducing the risk of dementia. The findings from the study concluded that leisure activities seemed to play a role in decreasing the risk of dementia. Dancing is one of the eleven physical activities the authors mention that may lower the risk of dementia. According to the researchers, future research still needs to be completed on this topic to rule out an alternative explanation. However, this illustrates that dance and movement may be vital

in the prevention of the onset of Alzheimer's, in which dance/movement therapy encompasses dance and movement to connect body, mind, and spirit. "In most types of dementia, there is a long period of cognitive decline preceding diagnosis. Reduced participation in activities during this pre-clinical phase of dementia may be the consequence and not the cause of cognitive decline" (2003, p. 2509). Therefore, observational studies need to be conducted in which leisure activities are being recorded before dementia is diagnosed.

Dance/movement therapy provides a way for those who increasingly lose their executive functioning to be in interpersonal and intrapersonal relationships. The founding mother of DMT, Marian Chace, presented ideas which are especially useful in this context.

Chace methodology.

The core concepts of Chace's methodology are body action, symbolism, therapeutic movement relationship, and rhythmic group activity (Sandel, Chaiklin, & Lohn, 1993). Chace emphasized that the role of the therapist is extremely important because "the meeting in movement of the therapist and the client assumes that both are part of the dialogue, even though one is identified as a helper and the other as needing help" (Sandel, Chaiklin, & Lohn, 1993, p.139). The therapist incorporates two basic assumptions in the therapy. First, the therapeutic relationship is vital when it comes to creating change and creating the movement structures that will develop between the dance therapist and client, and second, this interactive process is what will enable change (Sandel, Chaiklin, & Lohn, 1993). The therapeutic relationship is defined as an interactive give and take in which the therapist offers his or her thoughts, feelings, and

body, by responding through facial expressions and postures, which convey that he or she is physically and mentally present (Sandel, Chaiklin, & Lohn, 1993).

Marian Chace was a dancer, dance teacher and choreographer, which informed her ultimate development of dance/movement therapy. In her dance classes she had a variety of students from professional to recreational. She observed and assessed each student and continually went to her core belief that dance is communication. When she was centered in this belief, she was able to look at what dancing was providing for each individual.

> I began to be aware of the needs these people were expressing through their bodies. As I became increasingly involved in my interest, I spent many hours in contemplation, and I found the understanding of the communications more and more clear. Out of observing the nonverbal communication of individuals taking their first classes, I began to understand and meet the needs for which they were asking help. Instead of feeling frustrated when they lagged behind the more adequate pupils, I tried to empathize with them as people. (Chace, 1993, p. 12)

Her core belief of dance as communication led her to Saint Elizabeth's Hospital in Washington, D.C where she worked with WWII veterans on the psychiatric unit in which she employed a program that was called, dance for communication. In essence this was the foundation of dance/movement therapy, but had not been titled as that until later. Since the 1940's, many people have learned and followed Chace's methodology for dance as a psychotherapeutic tool. After her death, her knowledge and tools that she educated others on were documented and further developed.

Chace's goals of a therapeutic relationship are that the client will be able to establish their own identity, develop trust, foster independence, recreate social awareness, and develop and maintain their own integrity while being in the influences of society (Chaiklin & Schmais, 1993). Chace acknowledged that the therapist's role is to observe, assess and structure movement interventions that will allow working with the healthy attributes of the client (Fischer & Chaiklin, 1993). Chace's work parallels Rogers's and Kitwood's in the fact that she is looking at the present moment and the healthy abilities that the client has, in which tapping into these abilities of the client will create change in the maladaptive areas of a client's life.

Fischer & Chaiklin (1993) state from Chace's work, that the therapist's presence with the client is fundamental in both verbal and non-verbal *therapeutic interventions* (see Appendix A), which are important in deepening the therapeutic relationship. Therapeutic interventions are verbal statements or non-verbal movement expressions that are displayed by the therapist with the intention to shift or spark change in the client or relationship. Interventions come through our perceptions in which we respond to what we see and structure the treatment accordingly, facilitating a therapeutic relationship (Fischer & Chaiklin, 1993).

When looking at the therapeutic relationship and interventions in dance/movement therapy, "…the most basic concept is that dance is communication and thus fulfills a basic human need" (Chaiklin & Schmais, 1993, p. 77). Responses to interventions can be seen through body action and postural shifts. Body action is another one of Marian Chace's four core concepts. Body action is movement of the skeletal muscles. In body action, the client moves their muscles, which results in physical action

and postural shifts. Chace asserts that an unusual alteration in body shape and function signifies an unhealthy response to dealing with conflict and pain (Chaiklin & Schmais, 1993). Sandel, Chaiklin, & Lohn (1993) developed Chace's ideas further, stating,

> …when emotions become pathologically oriented, then the body stays in that pathological area of action, and the body image becomes distorted (p. 361). For example, some people bind energy, limit the use of space, disconnect body parts or hold their breath, to guard against feelings such as guilt, aggression, and sexuality. Others become hyperactive, exploding in time and space in response to real or imagined fears. (p. 77)

Postural shifts or body posture is defined as shifts between free and bound flow in the body resulting in growing and shrinking of the body in response to the space around it (Hackney, 2002). Free flow is defined as a fluid outward streaming of movement energy and bound flow is defined as a controlled inward streaming of movement energy (Hackney, 2002). Free flow is associated with adjustment of the body to different situations and being relaxed. Bound flow is associated with being tense and stiff. "Flow is frequently related to feelings – either outpouring or containing them" (Hackney, 2002, p.219). Our feelings and emotions are displayed through our movement and tone of voice when we speak. We can also show empathy through our movement and tone of voice when speaking words and flow of movement of understanding one's feelings.

Empathic reflection and mirroring.

Tension flow, whether it is bound or free, is a non-verbal aspect of empathy. When one recognizes this tension in someone's body and attunes to it by taking it on or resonating with it, then *empathic reflection* (see Appendix A) is occurring. Empathic

reflection is a process in which the dance/movement therapist acquires information from the client by watching their movement expressions; intervention follows by taking on the client's body expressions, which informs the movement experience between client and therapist (Sandel, 1993). "It is the dance therapist's mode for developing multiple empathic connections between him/herself and the clients, and one means by which the therapist structures nonjudgmental, supportive environment which is conducive to sharing and growth" (Sandel, 1993, p. 98). Empathic reflection is empathy on a body and movement level, sharing with clients that the therapist understands what they are saying and experiencing.

Empathic reflection in DMT is an important foundation of the therapeutic relationship, as empathy is to the psychological world of Rogers and Kitwood. In particular, empathic reflection is similar to Rogers's psychotherapeutic definition of empathy. Empathic reflection and empathy are about the flow of interaction between client and therapist, whether it is on a body or a cognitive level (Sandel, 1993).

Empathic reflection was not a term developed by Chace. In fact, Chace used the phrase "picking up" which has a variety of meanings used to describe movement patterns, effort qualities and themes developed from individual or group sessions. It also correlates with the term *mirroring* (see Appendix A) in which the dance/movement therapist takes on movement or movement qualities that the client is expressing (Berrol, 2006; Sandel, 1993). When the intervention of mirroring is used, the therapist embodies the tension flow of the client as a means of establishing empathy. "Mirroring, which may occur as part of the empathy process, involves participating in another's total movement experience, i.e., patterns, qualities, emotional tone, etc." (Sandel, 1993, p. 100).

When using the intervention of mirroring to embody the actions of another through movements, postural shifts, facial expressions, and/or tension flow, one is acting as a mirror for the client and allowing the technique of empathetic reflection to occur (Leventhal, 2007/2008). When mirroring occurs both the body and the mind are activated. Mirror neurons in the brain are being activated in the central nervous system and "…sets of CNS neurons are potentiated in the therapist when moving in synchrony with the client or when a therapist simply witnesses a moving client" (Berrol, 2006, p. 309).

When mirroring occurs as an interaction between client and therapist, the same mirror neurons in the exact same area of both brains are being activated. According to Siegel, a child, adolescent, and adult psychiatrist, "the mind - the patterns in the flow of energy and information – can be described as emanating from the activity of the neurons of the brain" (Siegel, 1999, p. 3). He also reports that human brains are experience-dependent, which means they develop by the experiences and interactions with others that activate and form the neural pathways in the brain, old and new (Siegel, 1999). The neural pathways in the brain are important for relationships to form (attachment), attunement, empathy and emotional development. When therapist and client are in relationship through empathy and empathic reflection, mirroring is occurring and the same areas of each brain are being activated and are in relationship.

Mirroring supports empathic reflection, because it is an intervention that gives the relationship a chance to deepen. If the client is feeling heard and understood by the therapist's interpretation of their movement, then empathic reflection is growing. If the client does not feel a connection, then the therapist can try taking on another aspect of the

client's movement (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999). Mirroring allows empathic reflection to grow and fosters the growth of the wider therapeutic relationship. As Leventhal (2007/2008) states, "according to practitioners, this experience of empathy and 'witnessing' on a nonverbal body level can, in and of itself, be a profound healing experience" (p. 17).

The humanistic approaches of Rogers, Kitwood, and Chace all incorporate ways to assess, intervene, and relate to clients in the here and now on a cognitive and body level. Rogers's approach focuses on listening to the individual's feelings and concerns without personal judgment or biases from the therapist. If change is going to occur on the part of the client, then creating a trusting relationship is vital to the therapy relationship. Kitwood advocates that the focus of care needs to be a wider person-centered approach that highlights the capabilities that a person still has to offer that will allow them to maintain personal relationships. Such approaches are particularly important for those who are living with Alzheimer's, because attention is focused on the person and the qualities that the individual can still utilize to create, maintain, and develop meaningful relationships. Chace's approach is centered on her core belief that dance is communication, and feelings and thoughts are expressed through facial expressions and postures of the body.

Non-verbal Communication within Relationship: Affect, Posture, and Shape Flow

Affective facial expressions and body posture, which are supported by shape flow, communicate one's thoughts, feelings, and experiences even when words cannot express them. One of the core symptoms of Alzheimer's is an inability to recognize and process facial expressions of emotion, which is represented through affect. Affect is

defined as changes in one's facial features or expression by the change in muscle tension in the face (Hackney, 2002). Recognizing and processing emotional facial expressions is foundational in healthy day-to-day relationships. When this skill is inhibited, communication begins to break down.

All forms of dementia involve memory loss. Within dementia there are specific forms of memory loss, one of them being Alzheimer's. Another form is frontal variant frontotemporal dementia (fvFTD). This specific form of dementia's main effect is compromising facial expressions, affect, and body control, which is only one effect of Alzheimer's. These two forms of dementia are similar in symptoms, but are caused by damage in different areas of the brain (Keane, Calder, Hodges, & Young, 2001).

One of the first signs in the early stages of Alzheimer's is the challenge posed to one's social interactions and relationships due to a decrease in appropriate or positive behavior (Keane, Calder, Hodges, & Young, 2001; Medina, Banks, & Weintraub, 2006). In looking at changes in one's personality, Alzheimer patients were not significantly impaired at recognizing facial expressions, but were significantly impaired with cognitively processing emotion (Keane, Calder, Hodges, & Young, 2001). Alzheimer patients' "emotion impairments were more likely due to a disruption of fundamental cognitive abilities such as face perception, naming, and abstract reasoning, rather than an emotion specific impairment per se" (Keane, Calder, Hodges, & Young, 2001, p. 656). Those living with Alzheimer's have trouble cognitively recognizing and displaying emotion rather than a problem physically expressing emotion as in other forms of dementia. Therefore, expression of emotions through facial affect remains an intact

ability for those living with Alzheimer's, and may provide an indication of the level of engagement in a relationship.

Body posture is another form of non-verbal communication in which either the whole body is involved in the movement or isolated body parts are used to convey one's message and emotions. Posture is defined by Kestenberg Amighi, Loman, Lewis, and Sossin (1999), as "all parts of the body move in a sequential and continuous fashion, supporting and enhancing a movement" (p. 101). "Postures are generally asymmetrical because part of the body acts and another part, often the leg, supports" (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999, p. 101). Postures come forth from our emotions and cognitive thoughts. Body posture reflects our involvement in relationships because it shows to what degree we are paying attention, interacting and relating, and how much we like or dislike the person we are interacting with (Knapp & Hall, 2002).

Shape flow is the growing and shrinking of the body, which creates movement patterns that elicit communication. It supports our ability to form facial affect and body postures, because it is the force that allows the body to move in space, create shapes and patterns, and makes connections in our relationships with self and others (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999). Shape flow is broken down into two subcategories: bipolar shape flow and unipolar shape flow. Bipolar shape flow is symmetrical in movement and expresses self-to-self feelings of comfort and discomfort. Unipolar shape flow is asymmetrical in movement and happens in response to internal or external stimuli in which we are repulsed by or attracted to (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999). Shape flow is the growing and shrinking of our movements that

elicits facial expressions and body postures in order for feelings and thoughts to be communicated.

According to Coste (2003), when communication with someone living with Alzheimer's through words becomes difficult, one needs to communicate through other means, such as voice tone, gestures, and facial expressions. "The overall goal is maintaining the emotion of personal value, and the less frustration the patient experiences from verbal errors, the longer he will continue to interact with others" (Coste, 2003, p. 45). "Difficulties with language often cause emotional outbursts…We must always look for human emotions and qualities that are being repressed but are ready to burst free when the afflicted person wants to make a statement" (Coste, 2003, p. 78). Coste adds that as time goes on, verbal language diminishes and the ability to retain information, comprehend verbal statements, remember, and think logically also begin to decline. For this reason, people living with Alzheimer's or related forms of dementia become quite reserved or frustrated, because they are afraid of making a verbal mistake, not being understood, and becoming frustrated and agitated when they know what they want to say but are unable to say it.

Coste (2003) explains that using gestures, pictures, tone and voice pitch, facial expressions, and body movements become an important way for those living with Alzheimer's to communicate with family, friends, colleagues, and strangers. "At times, body language seems more honest and reliable than words. People living with Alzheimer's, in trying to compensate for their cognitive and sensory losses, pay more attention to this nonverbal communication and become quite adept at understanding it" (p. 81-82). When family members or caregivers show patience and confidence through

body language, they may be able to communicate their message quicker and with less frustration when interacting with someone who is living with Alzheimer's (Coste, 2003).

According to FitzRay (2001), it is extremely important for people living with Alzheimer's to find activities, including non-verbal activities such as dance, that they can enjoy with family and friends. FitzRay identifies the following benefits:

…enjoy happier daily life, increase feelings of self-worth, enhance and maintain general health, maintain memory, enhance and maintain communication skills, improve and increase personal relationships, preserve family history, strengthen and maintain muscles, reduce muscle and joint pain, increase and maintain flexibility, reduce nervous tension, decrease pacing and restlessness, decrease repetitive behaviors, decrease wandering, and increase nighttime sleep. (2001, p. ix-x)

FitzRay also states that when engaging with a loved one who is living with Alzheimer's it is important to accept the person as she or he is; to have a calm, encouraging, and comforting demeanor; to use eye contact when interacting; to maintain their attention and focus; to use the body language of smiling and laughing; and to use touches such as pats and hugs (2001).

Overall, researchers have made a convincing case that dance and physical movement activities are vital to the overall well being of the elderly. Dance/movement therapy in particular is valuable to those who live with Alzheimer's. Movement, dance, and dance/movement therapy allow a person to move the mind and body to a healthier, more present, and more vital place of life. DMT allows those living with Alzheimer's to

feel less isolated, to rejuvenate their sense of self, to be socially active, and to stimulate the mind and body.

Conclusion

In conclusion, Shustik and Thompson (2002) stated that what is fundamental to both dance/movement therapy and person-centered (client centered) care is the core belief that the therapist must be able to emotionally meet people where they are in the present moment. This can be accomplished through having empathy and mirroring the movements elicited by the person to deepen the relationship. The DMT intervention of mirroring is a form of conveying that the therapist is present with the client and in the relationship. Carl Rogers (1961) also established that having respect and acceptance for the client will help build the relationship and give the client a sense that one understands the feelings they are experiencing, which is a fundamental part of Chace's definition of the therapeutic relationship (Rogers, 1961; Sandel, Chaiklin, & Lohn, 1993). Shustik and Thompson (2002) agree with Kitwood that in order to understand dementia we need to understand the person and be in relationship with him/her; to see the person not the disease. Shustik and Thompson (2002) stated that dance/movement therapy is a language that utilizes movements of the body to create dialogue and communicate with persons with dementia. It helps to awaken the sense of identity of the person in which it "…aids in accessing the memory/awareness held in the body" (Shustik and Thompson, 2002, p. 52). This is vital when trying to be in relationship with someone who is living with a life changing disease such as Alzheimer's. It affects many areas of a person's mind and body and extends to affecting those within the person's family and wider social sphere. The

psychological use of dance and movement has opened doors that will allow us to embark on long lasting journeys with those who are living with Alzheimer's.

While working at my nine month internship, I had the chance to interact with many people living with Alzheimer's and to lead dance/movement therapy groups. While leading these groups I began to wonder if an interpersonal relationship was still able to be maintained with someone living with Alzheimer's and if so, how? I realized that while I was moving with the ladies and gentlemen in the groups, we were building a relationship through our slow and quick movements together, smiling, and engaging in active energy in the present moment. Several times we let the music and movement lead us into a dance that engaged each other's personalities and enlivened our attributes.

As time went on, I felt that I was getting to know more of the participants at my internship and was curious to know how I could best maintain a relationship with someone whose verbal and cognitive skills were declining. I noticed that participants began to remember me at a body level. While they did not remember my name, they stated that they knew me when I came to work with them and could remember how they felt when they saw my face. At that point, I wanted to see if I could determine what factors led them to remember me on a body level. I began to wonder if it was DMT. Is DMT beneficial in creating, maintaining, or deepening the therapeutic relationship with two women living with Alzheimer's? What interventions within the Chacian dance/movement therapy modality would elicit that connection? All of my groups were based on the Chacian modality with the focus on the integration of the physical, cognitive, and emotional aspects of the participants in the present moment.

Specifically, I was curious about the intervention of mirroring. How might mirroring increase a sense of relationship between someone who is not living with Alzheimer's and someone who is? From the research by Berrol (2006) and Siegel (1999), when the intervention of mirroring occurs the same part in each individual's brain is activated through the function of mirror neurons. Chace referred to this phenomenon as the "picking up of movement" (Sandel, 1993). The intervention of mirroring allows for empathy and empathetic reflection to occur and the relationship to deepen. Mirroring is not only embodying one's movements, but validating that they are seen and heard.

From these questions and inquiries, I was led to this final thesis question, how did the intervention of mirroring, assist in forging, maintaining, and deepening the therapeutic relationship with two female participants living with Alzheimer's? Positive changes in facial affect and posture in response to the intervention of mirroring were the indicators for knowing if there was an increase or decrease in the quality and depth of our relationship.

As reflected in the literature, Rogers, Kitwood, and Chace share the belief that empathy and empathetic reflection are vital in creating, building, and deepening a relationship. Mirroring, whether verbal or kinesthetic, can support the development of empathy. The purpose of this study was to expand the research, which offers new insights, tool, and techniques (such as kinesthetic mirroring) that contribute to the respectful treatment of people living with Alzheimer's while treating then as vital human beings. This respect is rooted in relationship, which is fundamental to the theories of Rogers and Kitwood and a core concept of Chace's methodology. Chace also discussed how the intervention of mirroring can aid in creating and strengthening relationships.

There is still some stigmatism that people living with Alzheimer's are no longer capable of living their life to the fullest as they are no longer able to do everything they once were; this does not mean that they do not have something to offer. As therapists, family members, and society at large we need to be able to tap into the attributes that are still alive in someone who is living with Alzheimer's.

Chapter Three: Methods

Methodology

  As I reflected on the structure of my DMT sessions, which were based on Chace's methodology with the psychotherapeutic focus on the present moment, I decided to focus on the DMT intervention of mirroring from six DMT sessions. The data was collected as part of my internship experience at a day center for adults with Alzheimer's and dementia, which for confidentiality purposes I will use the pseudonym, Home of Comfort.

  Through a descriptive study, I investigated my research question: How did the intervention of mirroring assist in forging, maintaining, and deepening the therapeutic relationship with two female participants living with Alzheimer's? According to the National EMSC Data Analysis Resource Center (NEDARC) (2008), a descriptive study is designed for researchers whose primary goal is to assess a sample of data that occurred at a specific point in the therapy sessions. In other words, the study is no more and no less than a description of what is occurring in specific moments in time in the therapy sessions. According to Powell & Connaway (2004), researchers in research methods, the basic purpose of descriptive writing and analysis is "to describe characteristics of the population of interest, estimate proportions in the population, make specific predictions, and test associational relationships or used to explore causal relationships" (p. 87). When using descriptive writing, the goal is to engage the reader's five senses and their feelings and emotions (Orr, 2005).

  The focus of this study was to contribute to the research on Alzheimer's disease by examining whether dance/movement therapy, and specifically the intervention of

mirroring, can contribute to maintaining a relationship with someone who is losing physical, mental, and social control. Dance/movement therapy uses verbal and non-verbal therapeutic interventions to create connections between body, mind, and spirit. Therapeutic interventions, as stated in the literature, are defined as verbal statements or non-verbal movement expressions that are displayed by the therapist with the intention to shift or spark change in the client or the therapeutic relationship. Interventions come through our perceptions in which we respond to what we see and structure the treatment (Sandel, Chaiklin, & Lohn, 1993). In this particular study, a descriptive approach allowed me to see how change occurred in my therapeutic relationship with the two women living with Alzheimer's when the intervention of mirroring was used. Because Alzheimer's is a disease that progressively deteriorates the brain, it is vital to document, describe, and focus on the present moment to guide further research and to gain knowledge on how to have a relationship with someone who has Alzheimer's. A descriptive study supported the documentation of moments in the here and now that occurred in the therapy sessions.

Participants

Two female participants, one sixty years old and the other eighty-five years old, took part in six videotaped dance/movement therapy (DMT) sessions. As the facilitator of the group, I also partook in this study through engaging in a therapeutic relationship with the two participants. For confidentiality purposes, the pseudonyms of Hillary and Mary, respectively, will be used to identify the two participants. Hillary and Mary are two Caucasian females living with Alzheimer's disease.

Hillary and Mary differed in their ability to perform activities of daily living (ADLs) in order to take care of themselves. These ADLs are assessed because they help

determine what type of long-term care is needed when someone can no longer take care of themselves to their maximum capability (Illinois Department on Aging Choices for Care Assessment Form, 2006; United States Department of Health and Human Services, 1996).

Hillary needed assistance in all six ADLs. According to Hillary's most recent care plan, she needed assistance with eating that was provided by prompts and reminders to eat. Sometimes she needed the food to be physically handed to her. She needed assistance in bathing, grooming, and dressing, which was provided by her caretaker. The adult day care facility provided hairdressing once a week. Hillary needed assistance in transferring, requiring physical and verbal prompts to stand up. Staff held her hands as she came to standing and offered her assistance when moving from one activity to another. Hillary also needed assistance with continence. She was taken to the bathroom by staff twice a day and needed help undressing, as well as washing her hands.

Hillary's language exhibited significant aphasia. When one would speak to Hillary she would stare at you and occasionally nod her head, but would not respond verbally. Aphasia is a disturbance in language where words cannot be remembered, therefore, one describes what they are trying to say (Morrison, 1995). She appeared to be expressive and receptive when other people were talking to her. She communicated better and seemed more present in one-to-one conversations. The language intervention for Hillary was to address her directly with simple sentences and give ample response time. It was also recommended to frequently use non-verbal cues, such as smiles and giving of an arm when one wanted her to stand.

Hillary was in the middle stage of Alzheimer's during the time period in which I worked with her. She had difficulties understanding verbal instructions, following conversations, and exercising judgment, which is all reflective of the cognitive deterioration process in the middle stage of Alzheimer's disease. However, at various times, she was able to focus and had a good attention span. Hillary did not appear to be anxious at Home of Comfort and her vision and hearing were functional.

Hillary was born and raised in the Southern United States and was diagnosed with Alzheimer's about five years before I met her, which was when she started attending the day program. She had six children, three being triplets, and her occupation was a homemaker. All of her children are grown and have families of their own. She resides with her husband. I started interacting with her in November of 2006, and I found her to be a caring and sweet woman with a good sense of humor, great smile, and someone who expressed her feelings through various facial expressions. She was altruistic towards others, especially Mary, and always seemed to be interested in others. She demonstrated awareness of others through laughing in response to their jokes and making eye contact with expressive facial reactions. Hillary seemed to enjoy music, music therapy, dance/movement therapy, and sing-a-longs.

Like Hillary, Mary was in the middle stage of Alzheimer's disease. Mary, however, was constantly anxious and confused when I engaged with her. At Home of Comfort, assistance was given in the areas of eating and continence. Mary was able to eat on her own, but because of her memory loss she forgot that she had eaten. This resulted in Mary continually eating until she became ill, if she was not prompted to stop eating because she had already had her meal. Therefore, food needed to be given to her in small

quantities at a time. Mary needed assistance in undressing and washing her hands in the bathroom. Mary's private caretaker provided care in bathing, grooming, and dressing. The only ADL that Mary did not require assistance in was transferring: She could stand and walk on her own without mechanical equipment or personal assistance from staff.

Mary's most recent care plan stated that she had high anxiety when at Home of Comfort. This anxiety was typically due to her continual confusion of not knowing who would be there to take her home, where her home was, and who would take care of her after she left the adult day center. She would repeatedly state that she was alone even when surrounded by a large group of people. She was always worried and scared, which was often expressed by her tears and shaking hands.

Mary spoke many Eastern languages, such as Russian, Ukrainian, Polish, and German. She was able to speak English prior to the onset of Alzheimer's, but due to her memory loss, she reversed to Ukrainian, which was her primary language. She was verbal, but aphasic. Mary needed to be given simple instructions and could follow one-step directions. Mary was an altruistic woman who got upset when others were upset, and wanted everyone to be close together. Mary's vision and hearing were functional. She enjoyed dancing, singing, and active games.

Mary was born in the Ukraine and moved to the United States when she was in her early thirties with her husband. Her husband is deceased, and this contributes to her anxiety. She would constantly speak of being all alone while looking at her wedding band. Mary was diagnosed with Alzheimer's and dementia about six years ago and has a daughter with whom she resides. Mary's previous occupation was cleaning commercial buildings at night. Due to the progression of Alzheimer's, Mary constantly stated that she

was alone even if someone was sitting next to her and holding her hand. She was continually anxious and became upset when someone would leave the room or something was taken away from her, such as a song book. She was usually able to be redirected to the present moment through the use of sounds, rhythms, or movement.

I worked with Hillary and Mary from November of 2006 to July of 2007. The three of us met once a week for a half hour dance/movement therapy session. I also had the opportunity to see these women in my large dance/movement therapy groups that had anywhere from five to fifteen people, which occurred twice a week. I decided to meet with these two women in a small group to instill a sense of consistency. I wanted to be able to have a routine and focus on their needs and wants. I felt that they needed that time to be heard and have attention brought to them. I felt a deep emotional pull to work with these two women and sensed a connection between them. I spent quite a bit of time with these two women within other activities. As time evolved, I sensed a personal change or growth in our relationship and I wanted to document it. I wanted to capture a process of relationship building that had been developing since November. These two ladies also spent some time together outside of our small group, for example sitting next to each other during song fests and physical games.

Another reason why I chose these two women and not the large group was by having the same people every time I was able to personalize our sessions and give the participants more individual attention and a chance to feel comfortable and safe with each other. The large group was available to anyone who wanted to participate or whom the staff thought might benefit from it. Since the large group was offered to everyone, there

were various stages of Alzheimer's in one group, and at times it could be difficult to focus or gear the structure of the group for every stage.

Procedure

The last six sessions, occurring from June to July, of our small group therapy were videotaped and used as the data for this thesis. Sessions were a half hour long, because that was the time allotted by the supervisor and mentor due to scheduling of activities. It was also a good length of time in which the participants could stay focused and active. All six sessions were videotaped on the same day of the week, which was Wednesday, except for the July 4th holiday. The starting time of the sessions varied from late morning to mid afternoon depending upon scheduling needs and staff ratios for activities.

Before the sessions were scheduled to begin, I sent participant consent forms (see Appendix C), video/research release forms (see Appendix D), and Columbia College Chicago IRB consent forms (see Appendix E) to the participant's family members. Upon receiving the signed consent forms, I was able to set a schedule for the sessions to begin. The structure of the sessions followed a Chacian modality in which the sessions began with a check-in and *Chacian style warm-up* (see Appendix A), followed by *theme development* (see Appendix A) and a *closing ritual* (see Appendix A). The sessions were based on Marian Chace's methodology, in which she speaks of body movement (language) being louder than actual words and that our minds are not the only piece of us that speaks. Our bodies hold our feelings, experiences, pain, joy, fear, and happiness. Chace was a pioneer in demonstrating that physical, mental, and social change could occur through movement (Levy, 2005; Sandel, Chaiklin, & Lohn, 1993). Her theory and

methodology also coincides well with the humanistic/person-centered theory of Carl Rogers and Thomas Kitwood. Chace, Rogers, and Kitwood all expressed the importance of being in the participant's current reality of the "here and now" to bring to light their feelings and experiences by listening to their words and body language (Kitwood, 1997; Rogers, 1961; Sandel, Chaiklin, & Lohn, 1993).

By choosing to observe the specific intervention of mirroring, I narrowed down my data to be clear and precise. I focused on mirroring, because based on Chace's methodology (Levy, 2005; Sandel, Chaiklin, & Lohn, 1993), mirroring that occurs between a therapist and client is significant in forming empathic reflection, which is vital to the development of a therapeutic relationship. Mirroring is a movement intervention that activates both the mind and body. The indicators that I chose to assess if mirroring had deepened or maintained a therapeutic relationship were changes in facial expressions and body posture in the participants. I chose these indicators, because facial expressions and body posture communicate one's thoughts, feelings, and experiences non-verbally. One of the core symptoms of Alzheimer's is an inability to recognize and process emotion, which is represented through affect and posture. Recognizing and processing emotional facial expressions is foundational in healthy day-to-day relationships. Therefore, the hope was that by bringing attention to documenting changes in facial expressions and body posture through mirroring, recognition and processing of such expressions would be increased and would ultimately enhance the therapeutic relationship.

The video camera was used to capture the intervention of mirroring and the resulting response from the participants. The video camera was set on a tripod

approximately two feet away from Mary and Hillary due to the room being a small space. Also, I wanted to capture a close look at the responses from Mary and Hillary as indicated by body posture and facial expressions.

In planning the procedure of this study, some ethical concerns arose. The first was the potential for an increase in anxiety for the participants due to their being videotaped. If the anxiety had been produced, the videotape would not have been used. In assessing for anxiety, I began every session with verbally asking Mary and Hillary if I could videotape. Indicators for assent included shaking their head yes or maintaining steady breathing. If they had shown agitation in their body by shaking, fast-paced breathing, or constantly looking at the camera, I would have shut it off. Instead, I would have used my journals as my data in which I would have immediately recorded after each session what I remembered about the participants' responses to a specific moment in which the intervention of mirroring occurred. As it turned out, Hillary and Mary gave me assent every time and no such signals from them were given that indicated that I should have avoided videotaping on a given day.

A second ethical concern was the potential for an increase in anxiety regarding other people watching our taped sessions and seeing the participants. In asking for assent at the beginning of each session, I assured the participants that the data would not be seen by anyone other than me and potentially my thesis advisor. I assured them that the data would be destroyed when I finished analyzing it.

A third ethical concern was that my subjects did not share my belief or feeling that a therapeutic relationship had been formed. I was also concerned that I might become too emotionally involved with my subjects. Therefore, I took the time to journal right

after the sessions before I had a chance to think or deliberate about what happened, decreasing the influence of my personal feelings and biases. I also sought weekly supervision with my site and academic supervisors.

Data Collection

       The two forms of data collection used were journal entries and videotaped group sessions. I wrote in my journal immediately after every session. After, I escorted the participants to their next activity, I went back to the room in which our therapy sessions took place and put away all equipment. I then took my lap-top out and was given up to thirty minutes by my site supervisor and site mentor to journal about the sessions. I did this, because I felt that the information that was most important from the session would still be fresh in my mind to reflect on. In my journal, I wrote about highlights of the therapy session that I felt connected to, verbal and non-verbal interventions, and any emotions or themes that I thought developed during our time together. I also used the journal to record my personal emotional response to what occurred in the sessions. I wrote about significant affect and/or postural shifts in Mary and Hillary that I remembered in response to particular interventions or moments in the sessions. My journals stated my opinions, feelings, assumptions, and any themes that I felt were addressed in our sessions.

       The second way that I gathered data was from videotaped sessions, which were used to observe the non-verbal therapeutic intervention of mirroring presented by the researcher and the affective and postural shifts elicited from the participants.

Data Analysis

The journal entries were analyzed quantitatively and the videotaped DMT sessions were analyzed qualitatively. The journal entries were analyzed using eight precise steps of *content analysis* (see Appendix A) and then cross referenced using conceptual analysis (Colorado State University Writing Center, 2007). Content analysis focuses on how and what determines the importance of certain words or phrases over others that appear in a given text. Using the eight steps of content analysis, I chose to look for key single words/themes that were written in my journals. After using content analysis to identify key words, conceptual or relational analysis was then used to examine the data further. Conceptual analysis focuses on the frequency in which words or concepts appear. In using conceptual analysis, I calculated how many times each identified key word appeared in each journal entry. Then, I cross referenced the frequency of words that appeared in all six journals.

In step one, the researcher must decide on the level of analysis. This means he or she must choose to code for single words or sets of words/phrases. In analyzing the journal entries, I chose to code for single words/themes that I felt were important and relevant in showing positive growth and depth of the therapeutic relationship. In step two, the researcher must determine what concepts are to be coded (for example, positive or negative words or both) and if there will be a pre-defined amount of words that can be chosen. I circled words/themes that felt positive to me as indicated by my chest and heart feeling full. I circled them every time they appeared, and felt warmth engulf my body as the words began to appear over and over again. When deciding on how many words to code for, I did not pick a predefined number, because I wanted to be able to read the

journals and code for any single word that resonated with me in the context of indicating positive growth and depth in the therapeutic relationship.

In step three, the researcher decides to code for the existence or frequency of a concept. In other words, writing a list of words that existed in the text or counting every time each important word appeared. As the researcher, frequency was chosen when coding the single words. In the fourth step, the researcher must decide how he or she will distinguish among concepts "…i.e., whether concepts are to be coded exactly as they appear, or if they can be recorded as the same even when they appear in different forms" (Colorado State University Writing Center, 2007). I decided that I would code for words that have appeared in different forms, but similar in meaning. For example, movement was also seen in the form of move, moving, and moved.

In step five, the researcher develops rules for coding within texts. Here the researcher determines what words are relevant and irrelevant and how to make that determination in each paragraph. I chose to analyze each journal the same way every time. Coding for words remained the same for each paragraph in each journal entry. As I read the entries, words that I felt were positive in showing a relationship were circled and circled every time they appeared. A word was coded as relevant if it was both positive and described a positive feeling, emotion, or experience that would have facilitated a deeper therapeutic relationship. Only relevant words were circled in all six journal entries.

In the sixth step, the researcher must decide what to do with information that is considered irrelevant. The researcher has a choice to ignore irrelevant information or reexamine the coding process and make it apart of his or her data. As the researcher, I

chose to ignore the irrelevant data in order to delimit my data. In step seven, the six

journal entries were coded starting with the first entry. The first journal entry was read

one initial time just to get the feel for the material and what occurred in the session.

During the second reading, single words were chosen from the text that felt important

based upon my perceptions and feelings, and were written on a separate piece of paper

marked "Words from Journal One." Then, the words from journal one were counted for

how many times they were repeated. The third reading was to double check the word

count, and to see if any other single words felt important and meaningful in describing

our relationship. If deemed important, they were then added to the frequency count. The

fifth journal reading was to check for word count accuracy among all coded words. This

process was repeated for each of the six journal entries. In step eight, results were

analyzed, which will be described in the results section of this thesis.

I began noting all the words that I felt were important, positive, and meaningful to

our relationship during the sessions and tallied how many times those words appeared. At

the end of each journal entry, I noted all the words that appeared at least twice. From that

list of words, I looked to see which words appeared in all six journal entries. I diagramed

how many times those words appeared in each journal entry by creating a list. For

example, the word "body" appeared in all six entries but not the same amount in each

entry. The rest of the data at this point was ignored, but is open to further research in

looking at the words with a high volume of appearance, in three to five journal entries

instead of all six.

The second form of data collected and analyzed was six videotaped sessions, in

which I chose to focus on the intervention of mirroring. I created a movement coding

sheet that allowed me to focus on the response of the facilitator and two female

participants on one specific time when the intervention of mirroring occurred during each

of our dance/movement therapy sessions. Instead of looking at all of the movement that

occurred in the sessions, I decided to narrow my focus on examining the postural and

affective shifts resulting from the intervention of mirroring.

I created the *movement coding sheet* (see Appendices A & F), which was

reviewed by my academic thesis supervisor. A movement coding sheet is a resourceful

tool for observation at the body level, because it allows the dance/movement therapist to

note changes in areas such as posture, expression, and muscle tension when associated

with feelings, thoughts, and relationships. A movement coding sheet is created for

different populations with different areas of emphasis. For example, my coding sheet

exemplifies areas that are particular to an adult who is living with Alzheimer's. If I was

working with children my coding sheet would consist of movement areas that are

fundamental to the growth and development of a child. Movement coding sheets are a

form of assessment based on observations, and support the fundamental practice of

dance/movement therapy which "…developed as an applied practice based on the

assumption that movement reflects aspects of inter- and intra-personal functioning

including pathological conditions" (Flaum Cruz, 2006, p. 133).

My movement coding sheet was based on Kestenberg's movement profile (KMP).

"The KMP is a Laban-influenced system which expands on Laban Movement Analysis,

adding refinements, new categories, and a developmental framework" (Kestenberg

Amighi, Loman, Lewis, & Sossin, 1999, p. 212). LMA is a notation system that

encompasses the elements of body usage, spatial design, and movement dynamics in

order to analyze the effectiveness of one's movement. LMA proved to be of great value in the 1940's when Laban's concept of "eukinetics" or "effort," which he defined as different types of kinetic energies that a person's utilizes in order to complete a task, proved to be functional in the time when women joined the industrial period of working in factories (Moore, 2005).

KMP is an expansion of Laban Movement Analysis (LMA), created by Rudolph Laban, a dance notator, philosopher, and movement analyst (Moore, 2005). KMP observes a person's natural movement processes and can be used with any population or age level and with anyone who can communicate verbally or non-verbally. KMP reflects the developmental progression of movement patterns present in early child development. These movement qualities lay the foundation for the development of more mature psychological and movement patterns (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999).

In the KMP, the observer notices changes in a mover's muscle tension, known as tension flow, and attempts to attune to the mover kinesthetically. "Kinesthetic attunement is the process of translating movement qualities observed in another person into one's own body" (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999, p. 13).

Kestenberg's movement profile can be used with all ages, because it focuses on observing one's natural movement processes. "The KMP outlines an individual's level of developmental functioning, movement preferences (including strengths, potentialities, deficits, and weaknesses), areas of psychological harmony and conflict, and ways of relating to others (historically and in the present)" (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999, p. 212). We can use KMP to study, observe, and notate one's qualities of

movement and relate it to psychological, cognitive, and emotional development. When looking at the therapeutic process from a movement perspective it may be difficult to clearly describe and communicate to others the psychological issues and how the body is expressing them. Therefore, using Laban movement analysis and KMP allows dance/movement therapists to communicate their movement and psychological findings (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999). KMP is an important tool that is used in pre- and post-testing in order to determine if a treatment is effective or not. "The KMP framework can be used to guide therapeutic choices within a session, to track progress in the session over time. For example, it can be used to analyze the effect of specific movement interventions on subsequent interactions" (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999, p. 212).

Kestenberg developed two systems for analyzing movement. System one is based in tension flow and the development of effort, which informs our way of coping with the environment. For the purpose of this study, I focused on system two, based in shape flow, which relates to the growing and shrinking of body and corresponds to how we relate to self, other, and the environment. *Bi-polar shape flow* (see Appendix A) is symmetrical movement of growing and shrinking, which encourages stability and represents a relationship of self to self. It also reflects one's body image/attitude. *Uni-polar shape flow* (see Appendix A) is asymmetrical movement in response to something in one's environment in which there is an attraction or repulsion (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999, p.110).

Shaping in directions are movement patterns that bridge one to their environment and supports learning and defending against inner anxieties. Shaping in directions

consists of the horizontal, vertical, and sagittal dimensions. The horizontal dimension is correlated with being in relationship to another. The vertical dimension relates to the internal and external self, meaning that a person expresses and copes with the internal feelings and emotions that they have and the external being in which they present themselves to the world. The sagittal dimension relates to moving forward in action and committing to that action or moving backwards, which relates to protecting and defending oneself (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999). Shaping in planes is the most complex movement pattern in relationship to space, because it supports relationships with others that are multi-dimensional and move through all three spatial planes. It relates to being in more complex relationships with others and self in the world. For example, being in relationship with more than one person at a time and how we cope with all the different relationships we have in the different aspects of our world, such as family, work, and social relationships (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999).

Shape flow design (see Appendix A) relates to the path in which the movement was expressed. Included in this category of shape flow design, I have focused on the space used in relationship to the body: near space (also known as near), intermediate space (also known as mid), or reach space (also known as far). "In system two this means that we focus more on the movement of the body in space and the kinds of structures and shape it creates. We use these movement qualities to help understand the relationship of the mover to self and to others" (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999, p.110). System two also looks at whether the pathway design was centripetal (toward the body) or centrifugal (away from the body).

I watched the videos a total of five times. First, I watched the sessions to familiarize myself with the video data. In the second viewing, I chose one instance in which the intervention of mirroring occurred. I narrowed my search by looking at the warm-up and theme development part of the session and chose a moment of mirroring from one of those two areas. Third, I watched the affective and postural movement qualities in response to mirroring. This process was repeated a fourth time, in which Hillary's movement qualities were noted on her coding sheet. The process was repeated a fifth time, in which Mary's movement qualities were noted on her coding sheet. The process was repeated a sixth time, in which my movement qualities were noted on my coding sheet.

Chapter Four: Results

In this research study, the data was collected in accordance with my internship experience at Home of Comfort, a day center for adults living with Alzheimer's. The focus of this study was to further the research on the use of DMT with those living with Alzheimer's, specifically looking at the intervention of mirroring and its role in creating, maintaining, and deepening a therapeutic relationship with someone who is losing physical, mental, and social capabilities.

My research findings came from using content and conceptual analysis of the data from my six journal entries. In step eight of content analysis, I chose to use conceptual analysis, which is used in identifying the frequent repetition of words in a text and drawing conclusions from the quantitative data.

Figure 1. Main words and themes in journal entries
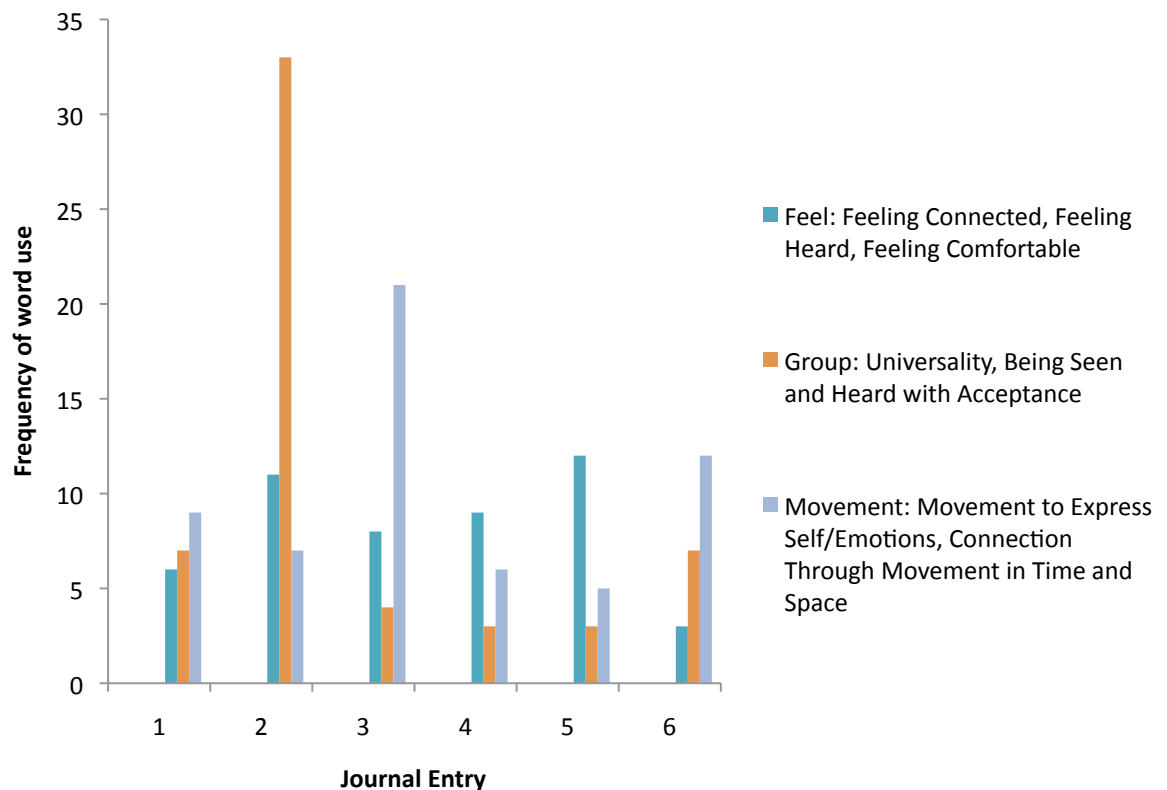
From the data, I concluded that the intervention of mirroring created and maintained a therapeutic relationship on a body and emotional level between the two female participants and myself. The three words that appeared most often in all six journals have important and positive connotations in the realm of dance/movement therapy and in creating and maintaining a therapeutic relationship. They are also words that I felt a true connection with in describing our time together. The three key words that appeared twice or more in each of the six journals entries were: feel, group, and movement. From each of these three words appeared vital themes that were highlighted through content analysis.

Derivatives of the word *feeling* appeared in every journal entry. In this analysis of the data the word feeling was also seen in different formats, such as feel, feels, feelings, and felt. From the different derivates of the word feel and the examples from the journal entries, three themes around the word feel developed: *feeling connected, feeling heard,* and *feeling comfortable*.

For example, in one journal entry I had written that Mary was interacting more with Hillary and me. She was engaged in the group with physical eye contact and body movement. It appeared easier for her to connect with us in the smaller group than in the larger DMT group as evidenced by her increased ability to focus directly on what was occurring in the group. My journal entries also conveyed that I felt that Hillary had expanded her movement repertoire and became more connected with Mary and I. This was reflected in her interactions, which included more physical touch and eye contact and expression of feeling through words and facial expressions. Feeling connected allowed the three of us to come together, express ourselves, and share our feelings.

The word feel also represented my ability to be present in the group, which allowed me, as the DMT therapy intern, to listen, engage, and mirror Hillary and Mary's movement. As the intern, I set the space to be open, inviting, and friendly, which allowed for feelings to be heard whether it was through physical or verbal communication. I wrote in one journal entry, "I think that because they know me and feel comfortable with me they follow me, and I do a lot of following their movement to show empathy and understanding. Picking up their movements validates how they feel, and moving with them shows that we are a group and we can learn from each other. They feel that I hear them and am truly listening to what they are saying. It deepens the therapeutic relationship in which we build together."

For people living with Alzheimer's, it is vital that they feel heard and have the space to feel comfortable enough to communicate their individual feelings and feel respected. Feeling comfortable in a group leads to expansion in showing empathy, which leads to trust. Feeling comfortable is important for people living with Alzheimer's, because it lessens their feelings of anxiety and uneasiness. Feeling connected with other individuals, feeling that their emotions and thoughts are important enough to be heard, and feeling comfortable in the space that surrounds them are three important needs for someone living with Alzheimer's.

Communication of feelings is displayed verbally, but is also displayed in non-verbal ways, such as through movement. In DMT, communicating feelings and emotions through movement is another way to form a therapeutic relationship. The word movement was cross-referenced in all six journal entries, and from the journal entries two

important themes surrounding the word movement emerged. These themes are *movement to express self/emotion* and *connection through movement in time and space.*

Movement allows for empathy, respect, and understanding to be conveyed through verbal affirmations (moving of our mouth and voice) or non-verbal movement, such as eye contact and body language. This movement allows one to express self and emotions. For example, in my third journal entry I wrote, "at the end of group I presented my hand to Hillary and she reached out and took it. When I extended my hand earlier in the group, she nodded, but did not accept it. At the end of group, I extended my hand to her and she took my hand and squeezed it. I squeezed her hand in return and we both smiled at each other. This movement allowed us to extend an expression of our emotion and self to each other."

Our movement was a vital aspect in our time together, allowing different aspects of the self and the self in relationship to other to be explored through our bodies. For example, in one journal entry I wrote, "Today Hillary was fabulous when she moved her arms to slide down her legs to her feet and initiated the arching of her back, which I mirrored with her. It showed me that there is life in this body that is stunted by lack of words. Even though she can't always verbally communicate her thoughts and feelings in sentences to make a two way verbal conversation, she did it in her raise of an eyebrow and a slight push forward with a shrug of her shoulder." Another example occurred during the end of group when Hillary and Mary stood up and Hillary put her hand slightly on Mary's back to show what I think was altruism, caring and support. Mary had been expressing how alone she felt that day by stating it verbally and nonverbally with the shaking of her hands and a lack of smiling and eye contact. Hillary's movement showed

support and empathy to another participant. Hillary was extending the self-expression of care to Mary who was expressing the feeling of loneliness.

Through the movement of self/emotions comes connection in time and space. By showing one's self and emotions in movement we create an emotional and physical connection in the time we spend together within space. For example, in one session, the movement in our group was initiated by Hillary and Mary. "I felt us moving together and everybody's person or individual self was present in our circle. I remember sitting and watching the interaction of our hands move around in a circle, turned over, taking of fingers, and pushing and pulling of hands which allowed the motion to move to our upper body, forward and backward, and then down to our legs, feet, and toes." We filled the space that was near to us and beyond to our far reach space with movement. We allowed our time together to be fully enlivened while being present in our bodies and engaging in each other's needs.

By allowing movement to surface and feelings to be shared, a cohesive group was established and maintained. The word *group* was also seen in each journal, which often reflected our connection to one another through an ability to be present within our own bodies. For example, in journal five I stated, "…as a group we always made a circle, usually holding hands, which we did a lot together today and for once it felt like it was a mutual feeling in which we were all involved in the process," which speaks to the universality of the group. I also stated that repetition is good for the Alzheimer's population, because it allows them to know that it is okay to repeat movements or statements and no one is judging them in the group. Movements and feelings were explored through group interactions. For example, Hillary interacted with the group by

making eye contact with others, smiling, and laughing. The group interactions allowed Mary to feel less lonely by being close to others in her near space, which speaks to the theme of being seen and heard with acceptance in the group.

In our groups we were expressive in our faces through smiling and making eye contact with each other. The word *group* expressed two important themes of *universality* and *being seen and heard with acceptance*. In my journal, I wrote that DMT has been beneficial for these two ladies in maintaining a therapeutic relationship, because it kept their bodies active and the mirror neurons in their brains activated through making connections with others in the group. It also showed that they can build new and sustainable relationships when one meets them with movement, such as facial expressions and posture changes.

These three words show that we entered a physical (*movement*), emotional (*feeling*), and non-verbal relationship that connected us (*group*). Our group dynamic supported the expression of feelings through our movement indicated by facial expressions and body postures. Our bodies (*movement*) were one of our main sources in which feelings, thoughts, and emotions emerged through our authentic contact. Movement proved to be a meaningful way for the group to communicate such that they felt validated and respected, important aspects of the therapeutic relationship.

The second form of data used was six videotaped therapy sessions in which the goal was to observe the participants' movements in response to the intervention of mirroring. Observations focused on changes in their affect and body posture as indicators that a therapeutic relationship had been created, deepened, and maintained. The following

tables 1-3 display the changes in facial expression and body posture according to changes in shape flow and use of space from near to far in shape flow design.

Within the interaction of mirroring in video session one, Hillary's facial expression was a neutral/ blank stare even when making eye contact with Mary and myself. Mary's facial expressions involved widening of the mouth (smiling) and eyes, and making eye contact. I mirrored Mary's affect by smiling and making eye contact with a growing shape flow in my eyes and mouth. Hillary's movements were more shrinking in shape flow where-as Mary's movements reflected more growing qualities.

In video session two, Mary and I primarily engaged in shrinking movements as reflected in closed movements in the horizontal and vertical dimensions. However, we were both growing in the sagittal dimension extending forward, supporting an effort to connect across the circle with Hillary. Hillary demonstrated shrinking in all directions, suggesting a lack of connection to the rest of the group. Hillary and I utilized near reach space, bringing movement toward our bodies, centripetally. However, since Mary extended her movement to Hillary her shape flow design was more intermediate and centrifugal. We were clapping together in rhythm and making eye contact with each other. In addition to eye contact, Mary's affect included smiling. Hillary's affect included making eye contact, smiling, and raising her eyebrows, a change from her flat affect in the last session. My affect displayed laughter, excitement, smiling, and eyes open and wide.

In video session three, Hillary's facial expression was open, as demonstrated through making eye contact, smiling, and raising her eyebrows suggesting a connection with Mary and myself. Mary's facial expression was more unfocused, flat, and blank than

in the past, and she gave less attention in looking at Hillary and me. My affect was open, smiling, making eye contact and laughing with Hillary, and when interacting with Mary, I would make eye contact and have a soft expression that was relaxed and engaged with a subtle smile on my face. Hillary and I grew in our movements in all directions utilizing intermediate and reach space, which conveys a posture change of growing towards each other. Mary, however, displayed more shrinking movements, but did display some movement in her uni-polar shape flow of bulging forward and utilized her intermediate space when interacting in the group.

In video session four, Hillary was smiling, making eye contact, and raising her eyebrow, reflecting growing shape flow. Mary's expression had a neutral/blank state. My facial expression incorporated eyes wide, smiling, and laughing. Hillary's movements utilized growing in shape and space and making connections within the group. She utilized her intermediate space with Mary and myself. Mary's movements utilized growing movements in shape and space in which she would move towards us instead of away from us. Hillary and Mary's movements utilized growing in directions such as moving up and forward in their movement. We all utilized our intermediate space when moving together.

In video session five, responses from the intervention of mirroring led Hillary and Mary to be more vibrant and playful in their movement. Here we all grew in our movement together. We lengthened in our torso and moved toward each other in movements. Mary was the only one who would move in and out of growing and shrinking in her movements. Hillary and I utilized our reach space and Mary kept her movement to her intermediate space.

In video session six, our facial expressions displayed eyes wide, smiling, and making eye contact. All of our movements grew in bi-polar and uni-polar shape flow, and shaping in directions and planes. We moved together in lengthening our torsos, widening and spreading our arms and moving forward in our movements, as seen by the swinging of arms together towards the middle of the circle.

By adjusting my shape flow to mirror their shape flow in movement and affect, I was able to bring a connection of empathy and understanding to the group, non-verbally strengthening the foundation for a therapeutic relationship. The following tables summarize my findings.

Table 1

Changes in Facial Expression

Facial Expressions	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6
Mouth Wide	F					
Eyes Wide	FM	FM	HM	F	H	FHM
Smiling	FHM	FHM	FH	H	FH	FHM
Eye Contact	FHM	H	FH	H		FHM
Neutral/Blank Stare	H		M	M	M	
Laughing		F	F	F	F	
Eyebrows Raised		H	H	H	F	
Frowning		M			M	

Note. F = Facilitator; H = Hillary; M = Mary.

Table 2

Changes in Posture Supported by Shape Flow

Shape Flow	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6
Growing	FM	M	FH	FHM	FH	FHM
Shrinking	H	FH	M		M	

Note. F = Facilitator; H = Hillary; M = Mary.

Table 3

Changes in Posture Supported by Shape Flow Design

Shape Flow	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6
Near Space		FH				
Intermediate Space	FHM	M	FHM	FHM	M	M
Reach Space			FH		FH	FH

Note. F = Facilitator; H = Hillary; M = Mary.

Shifts in movement came about in part because of the intervention of mirroring. By session 6, I noticed positive changes in affect after the intervention of mirroring in both participants and myself in all three areas of smiling, eye contact, and eyes wide. I also noticed an overall growth in shape flow. Hillary demonstrated growing postures in sessions 3-6 and Mary demonstrated growing postures in most sessions except for sessions 3 and 5.

I noticed for Hillary that her facial expressions began to shift from a neutral/blank stare to focusing on Mary and myself by making eye contact and smiling with bi-polar shape flow and raising of her eyebrow using uni-polar shape flow. Her facial expressions

became more dramatic and her personality began to show as she demonstrated more growing qualities of shape flow with the rising of one eye and pursing of her lips. This supports the shifts that she made in her posture from being more closed to being more open, specifically spreading in her horizontal dimension and moving forward in her sagittal dimension. For instance, her posture began to change from retreating in her torso along her sagittal plane with her arms enclosed along her horizontal plane to moving her body forward in the sagittal dimension with her arms extended in far reach along the horizontal dimension and standing tall or rising in her vertical dimension. Thus, her use of shape flow shifted from shrinking movements to growing movements resulting in a more open posture.

Her growing movements and facial expressions support that she was connecting with the group in a positive way and was able to express her feelings. For example, in the last two to three sessions Hillary would come in ready to be engaged with everyone by making eye contact, wanting to hold hands, making faces such as a pout or raising an eyebrow, or sticking out her tongue and then laughing. She made connections with Mary and myself in her time and space as evidenced by her willingness to hold hands, and moving her body with less prompts or guidance from me. Hillary would sit in her chair with a more forward/advanced movement in her torso rather than sitting back/retreating in her chair, which she did the first few sessions. She was seen, heard, and accepted by the group, which supported her ability to trust the group and make these connections. Her movements of smiling, making eye contact, laughing, initiating holding hands, and moving by either mirroring or leading the group in movement, supports the theme of feeling heard, comfortable, and connected.

Mary's facial expressions shifted over the sessions. Some days she would make more eye contact and smile with wide eyes. Other days she would be looking around the space in an inattentive manner or have a neutral/blank stare. Her shifts in facial expressions support her movement tendencies to grow and shrink in shape flow. For example, in sessions 1, 2, and 6, Mary's movement was more growing in bi-polar shape flow than the other three sessions. When Mary was smiling and engaging in eye contact with Hillary and myself, her movements tended to grow in shape and space.

Mary's posture fluctuated from shrinking movements to growing movements in the sagittal and horizontal dimensions, but she never moved much or stood tall in the vertical dimension. The horizontal dimension is about being in relationship with other people and the sagittal dimension is about taking those relationships into the world around us (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999). Mary's growing and shrinking along the horizontal and sagittal dimension correlated with her vertical expression of not wanting to be alone, as she spent most of the time engaging with Hillary in movement. Sometimes, Mary appeared nervous, tired, or confused, but she always wanted to be near others.

Mary's growth in her movement showed trust in the group and a connection in which she felt comfortable to share herself and emotions reflecting the themes that arose from the words feel, movement, and group. By growing and shrinking in her movements she responded to the actions of Hillary and myself. She connected to the group through the universal experience of movement, actively participating in the group. In order to participate in a group to one's fullest, one must feel comfortable, connected, and heard by

the therapist and other participants. When this happens, growth can occur in response to sharing of feelings and enhancing relationships through movement.

I, as the facilitator, had an expression of being happy to see the ladies, eyes wide and open, making direct eye contact with them, smiling, laughing, and raising of eyebrows most of the time. My posture was constantly moving from vertical to horizontal to sagittal to be in relationship with Hillary and Mary as I mirrored their movements and led a movement idea or exercise. I have included my movement characteristics to show how I shifted my shape flow through mirroring to better acknowledge the participants' thoughts and feelings, which is a primary goal of mirroring. Mirroring another's movement shows acceptance and understanding, allowing one to feel comfortable in expressing oneself to a group.

Chapter Five: Discussion

The intervention of mirroring assisted in forging, maintaining, and deepening the therapeutic relationship within a dance/movement therapy group with two female participants living with Alzheimer's by allowing trust, understanding, and empathy to develop. In mirroring the two female participants' movements, connections were made physically, mentally, and emotionally. The intervention of mirroring allowed for social relationships to grow between the two women and the facilitator and stimulated the brain to activate memories and feelings in one's own life.

In analyzing my data, I concluded that a therapeutic relationship was established and maintained within a Chacian dance/movement therapy group with the intervention of mirroring. In using content and conceptual analysis of the journals, three words were cross-referenced between all six entries appearing more than twice. They were *feel*, *group*, and *movement*. From these words developed important themes that captured how the therapeutic relationship was formed and maintained: feeling connected, feeling heard, feeling comfortable, universality, being seen and heard with acceptance, movement to express self/emotions, and connection through movement in time and space. These words and themes correlate with the movement tendencies of the participants to grow in shape flow.

The word feel and its related themes supported the expression of emotions and/or physical touch, such as holding hands or a pat on the back, which was vital in creating a sense of trust and enhancing a connection on a body and cognitive level. For example, in every group we held hands and passed an energy squeeze, which expressed a sensation of peace, togetherness, and understanding, as a part of our closing ritual. Sharing feelings is

our pathway to empathy, because our feelings are what enhance our experiences and allows us as individuals to connect with others in meaningful relationships. It is important that people feel comfortable and heard in order to share their feelings. According to Chace (Sandel, Chaiklin, & Lohn, 1993), Rogers (1961), and Kitwood (1997), having empathy allows a relationship to form because trust is created.

The word movement and its corresponding themes to express self/emotion and connection through movement in time and space, supported how movement allows for emotions to be released, worked through, and brought to attention. By using movement we are able to connect the body and mind and deal with issues that come to our attention through our movement patterns. Moving with Mary and Hillary may have helped to reinforce their memory of our sessions. Connecting with a memory can enhance a sense of identity for a person with Alzheimer's and is a very important aspect of person-centered care. For example, during one of our sessions I had stated my name and said good morning to Hillary and Mary. Mary turned to me and asked, "Who is Jennifer?" I was shocked and a little hurt that after all this time of moving together they did not remember me. Mary turned to me when she saw my shocked expression and said, "We don't know your name, but we know when you come." As stated by Kowarzik (2006), DMT is beneficial in creating and maintaining a therapeutic relationship with someone living with Alzheimer's, because movement awakens and enlivens someone's feelings, thoughts, or memories. According to Siegel (1999), movement activates the mirror neurons of the brain, which is a vital aspect in creating interactions between client and therapist and awakening thoughts within the brain. Siegel (1999) expressed that the mind is a flow of information and is formed from our experiences, which develop due to our

interactions with others. Connecting through movement with the two women in the group

activated our mirror neurons and facilitated the development of body-based memories,

empathy and consequently, the strengthening of the therapeutic relationship.

By using our body to create movement we are allowing connections to be made

and feelings to be communicated. As Kitwood (1997) stated, when we become more in

tune with the body, we become less focused on verbal language as our primary source of

communication, and there is a larger emphasis on the person, not the disease. In the DMT

theory, movement enables us to release feelings and engage in relationships with one

another. It offers the opportunity for the mind and body to connect, allowing for the

expression of psychological issues through the body. In the group, feelings of trust and

respect developed through the use of movement to express oneself and relate to others,

supporting the maintenance of the therapeutic relationship. For example, Hillary would

come into the sessions mostly with a neutral/blank stare, occasionally nodding her head

as you said hello, and would sit down in her chair and cross her legs. Halfway through

the sessions Hillary's demeanor changed and Hillary entered the room smiling, laughing,

and giving a sassy look to me with one eyebrow raised. Particularly in session five, as

Hillary made her way to join our group she was laughing with other participants and

putting her hands on their shoulders as she said, "I've got to go."

The word group and the developed themes of universality and being seen and

heard with acceptance support Yalom's statement that group work generates the

reinforcing loop of "trust-self-disclosure-empathy-acceptance-trust" (2005, p.56).

According to Chace, Kitwood, and Rogers, group interaction allows individuals to be

seen and heard as a participant in relationship with others. It also allows people to feel

encouraged and know others who are dealing with the same issues as them. Feeling nurtured by others is vital in the therapeutic relationship and comes from having relationships with other people. DMT invites people to come together as individuals and decreases the feeling of isolation. For example, Mary who had lost her husband years ago, would continually verbalize and show in her movement that she felt alone, even when surrounded by a room full of people. Her feelings of isolation were seen through the shaking of her hands and arms, constantly looking around to see if people were nearby, and wanting to hold someone's hand. One day she looked at my hand with my wedding ring on it, held it up to her left hand, smiled at me and said, "We are the same." Mary needed physical reinforcement to help her feel that she was not alone. Together on a constant basis we would hold hands or pat each other on the back or leg. One day, Mary was not able to focus on the group and was shaking her hands in her lap, which she often did when expressing how alone she felt. At that point, Hillary reached over and put her hand on Mary's hands and legs. This brought Mary's attention back to our group in which she made direct eye contact with Hillary and they held hands nodding to each other. Hillary's empathic response to Mary demonstrated that she understood how alone she felt and through movement they connected and listened to each other.

Through group movement and verbal communication, the participants were able to reminisce and relate to one another's experiences by sharing their feelings or memories, enhancing the therapeutic relationship. As stated in my literature review, one of the most common characteristics found among older adults is isolation, and group work allows older adults the chance to share their personal identities and inner resources.

This is especially vital for those living with Alzheimer's, when their sense of self seems to be deteriorating.

Yalom (2005) stated that group therapy is extremely beneficial in creating change and "...therapeutic change is an enormously complex process that occurs through an intricate interplay of human experiences." He refers to these as, "therapeutic factors" (p. 1). According to Yalom (2005), the themes of universality and being seen and heard with acceptance are two therapeutic factors. Universality allows individuals to see that they are not alone in their feelings and experiences and they can find acceptance in learning from other people's experiences (Yalom, 2005). According to Yalom, universality merges with other therapeutic factors and when people are able to share similar experiences, empathy and acceptance occur.

Being seen and heard with acceptance evolves from having universality within the group. Group work allows participants to become more focused and clear in thought, and more accepting and nonjudgmental in their observation of other's thoughts, feelings, emotions, and experiences (Yalom, 2005). Greater clarity of thought and acceptance of others can enhance the well being of those living with Alzheimer's. It also helps in reducing stress, anxiety and susceptibility to depression (Yalom, 2005), all of which can be experienced by those living with Alzheimer's. According to Yalom (2005), feeling valued, accepted, and supported by the members of the group creates a sense of belonging and warmth, known as cohesiveness. Cohesiveness is not something that can be measured or seen. It is something that everyone can feel, like dignity.

The intervention of mirroring helped to cultivate a cohesive group experience where feelings could be expressed through shared movement. This safe place fostered the

expression of empathy and the establishment of trust, which support the development, maintenance, and deepening of a therapeutic relationship. This was evident in the participants' brighter affect, more open growing postures, and greater use of space as revealed in the data analysis of my coding sheets.

Facial expression and posture changes were my indicators for change in the therapeutic relationship. At this point, in the middle stage of Alzheimer's, verbal skills are not always available for self-expression. According to Chace (1993), movement and dance are forms of communication. The body is able to release and provide information through changes in our facial expression and body posture, reflecting how we feel, think, and speak. The information comes through our words or movement and we engage in relationships with others in our world.

Mirroring facilitated a shift in facial affect and body posture, which resulted in the participants demonstrating more growing shape flow that indicated a desire to be in relationship with one another. According to Loman & Merman, "the main method in initiating trusting and meaningful contact with patients is mirroring, or joining them in movement" (1999, p. 211). Marian Chace's theory and methodology was developed on the concept that when one takes on another person's body movement he or she is taking their nonverbal communication seriously and wanting to understand it and deepen it so change can occur (Loman & Merman, 1999). When meeting the person in the present moment and taking on their body movements, the therapist is creating a foundation for a relationship and effective change (Loman & Merman, 1999). Kitwood's and Roger's humanistic theories correlate well with Chace's methodology because of their belief that

change and growth can occur when working in the person's "here and now" and looking at the qualities of life that each person has to offer.

In our Chacian style group, most of our movement reflected growing shape flow such as smiling with eyes wide open to make contact with each other. Our hands and arms reached out to each member in the group, supported by growing movements in the torso indicating a desire to connect with each other. The circle formation often utilized in a Chacian group, allowed the women and I to be seen by each other and to witness each other's movement in the group. The growing shape flow as seen in our facial expressions and body postures reflected acceptance and universality within the circle. Furthermore, Sandel (1993) describes how empathy and empathic reflection are based on the flow of verbal and nonverbal information and interaction between one person and another. Growing facial expressions and postures witnessed by one another in the circle helped to create and sustain the therapeutic relationship, because it fostered empathy and empathic reflection.

Facilitating a Chacian group was instrumental in communicating and developing themes that are vital in having a therapeutic relationship with this population. A Chacian style warm-up is a main part of Chace's methodology of dance/movement therapy. In the Chacian style warm-up, initial contact and introduction of members occurs "…to establish direct communication and contact" (Levy, 2005, p. 24). Movement begins with the initial goal to warm-up the body and get the senses stimulated. The movement that is created at the beginning is used to deepen the process in which themes are able to emerge. The themes that developed from the words feel, movement, and group,

correlated with the movement data from the coding sheets, which represented growing changes in shape flow in the participant's facial expressions and posture changes.

These positive changes in shape flow reflected a desire to connect with one another in the group and supported increased self-expression. The intervention of mirroring facilitated the development of acceptance and trust, which fostered growing shape flow as seen in a positive change in facial expression and body posture. The resulting openness, rapport, and trust in the group reinforced the development and maintenance of a therapeutic relationship. It also supported greater theme development in which the group was able to develop and emerge to its furthest potential with an emphasis on "…developing individual and group rapport in order to build trust and openness in the group" (Levy, 2005, p. 25). For example, as Hillary, Mary, and I moved our arms up and forward toward the center of the circle we touched fingers. As we began to descend our movement we linked fingers and naturally joined hands looking at each other with an expression of love, understanding and peace.

Mirroring also facilitated Chace's core concept of group rhythmic activity, which emphasizes "…developing group trust by initiating and facilitating activity that reflected group needs and developing full body movement by extending the dance action to include the entire body" (Levy, 2005, p. 25). For example, in our session after the 4th of July Holiday, I mirrored Hillary and Mary's movement in which they embraced the qualities of a firecracker. As we moved together Mary initiated sound and rhythm and brought greater depth to our facial expressions of smiles, eyes wide and eye contact.

In our closing ritual of each session we sent encouraging and affirmative energy around by either squeezing each other's hands or patting each other on the back, always

making eye contact with each group member. This closing ritual was vital to supporting the therapeutic relationship because it showed participants that even to the very end of the session we were leaving with a sense of connectedness, empathy, and trust as reflected in open and engaged facial expressions and body posture. According to Chace, repeating movements that were used throughout the session by the participants provides them with a sense of connection, unity, support, and sense of well-being (Levy, 2005). The closure was a time for the participants of the group to verbally share feelings, memories, or experiences that arose during the session (Levy, 2005). It also allowed a chance for everyone to be seen, heard, and validated and to make connections on any of the themes or movements that were shared.

Conclusion

In looking at both sets of data it was interesting to find that the journal entries and videotaped sessions supported each other in showing that a therapeutic relationship was created and maintained. Through the observation of growing shape flow in response to the intervention of mirroring, it is concluded that both participants and myself grew in our connection together by changing our posture and facial expressions, showing an attraction of wanting to be near each other. These changes in movement reflected the themes of feeling comfortable, feeling seen, and feeling heard. The resulting cohesive group supported the validation of each individual and a sense of universality emerged. In addition, growing in shape flow supported the themes of self-expression and connection with others in time and space, further strengthening the therapeutic relationship as seen in brighter affects, more open postures, and reaching further out into space to connect with the group.

These results support existing research in the field of dance/movement therapy. According to Exiner, Kelynack, Aitchison, and Czulak (1994), dance releases psychological feelings and thoughts. My results reflect that through movement, specifically the intervention of mirroring, the participants were able to express their thoughts, feelings, and emotions of isolation that developed into connections with others. There was a shift from disengagement in activities to becoming more aware and attentive in groups, and changes from flat facial expressions to brighter and more open affect. These changes can be attributed to an increase in trust, enhancing the therapeutic relationship. Movement allowed a connection to be made between the participants and me. This connection allowed them to express themselves and was reflected in the changes in facial expressions and body posture.

> And by dancing further about what has been discovered in the initial exploration, more can be extracted and learned from it. Reflection can take place even if the dancing is restricted to very simple movements. It enables recapitulation, the discarding of what is irrelevant, retaining what is valuable and developing it further. (Exiner, Kelynack, Aitchison, & Czulak, 1994, p. 17)

The authors go on to state that in DMT the mind and body are integral, because thoughts and feelings go hand in hand with the movements that one produces. This relates to my study, because it is important, especially for those living with Alzheimer's, to rely on other forms of communication than verbal to express themselves. Movement is a form of expressing the self and allows for connections to be made in time and space. This can create trust, which is foundational to the therapeutic relationship. For the Alzheimer's population, verbal expression of thoughts declines, but mirroring one's

movement activates the body along with mirror neurons. This mirroring of movement is the physical form of repeating what one says and shows understanding and empathy, which begins the formation of the therapeutic relationship.

As stated by Marshall in her master's thesis (2000),

…the prospect of using dance/movement therapy (DMT) with this population is heartening; the client is losing ability to express him/herself through verbal means, and can employ DMT as an alternative to the usual verbal psychotherapy, expressing emotions through body movement and accessing previous life experiences (reminiscing) through movement, music, and social memory. (p. 3)

Marshall's findings support my results, which demonstrated that the intervention of mirroring is a movement experience that facilitates the expression of emotions through the body and accesses memories, feelings, and thoughts from the past and present when words are not accessible.

When one looks at humanistic theory, developing an integrated congruent relationship is one of the most important aspects of the therapy session, and in order for change and growth to thrive, this relationship must develop. Mirroring the participants' movement in the here and now proved effective in non-judgmentally supporting and validating the group experience, which nourished the therapeutic relationship. It allowed for the participants', who often sat quietly with little unprompted interaction with others, to build a relationship, access feelings, thoughts, and emotions, and express themselves in a safe and trusting environment.

Genuine and authentic contact and feelings can emerge when the client feels respected and has unconditional positive regard from the therapist. I demonstrated this

through mirroring the client's movement and experiences in the present moment, and they responded by growing in their shape flow and in some instances shape flow design, as reflected in their facial expressions, body postures, and use of space. According to Kestenberg's Movement Profile (KMP) (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999), shape flow, the growing and shrinking of the body, corresponds to one's relationship with self, other, and the environment wherein growing movements indicate that empathy and trust are present. Furthermore, as one's use of space in shape flow design expands from near to reach space, there is necessarily a corresponding growing shape flow.

Yalom (2005) states, "if the here-and-now focus is to be therapeutic, it must have two components: the group members must experience one another with as much spontaneity and honesty as possible, and they must also reflect back on that experience" (p. 30). One form of reflection comes from mirroring the participant's movement to show acceptance and understanding in the present moment. Mirroring is vital in forming empathy, which is foundational to the therapeutic relationship. Mirroring is a movement intervention that activates the mind and body and bridges thoughts, feelings, and emotions to outside relationships with others in the environment.

Thomas Kitwood advocates that the focus of Alzheimer's care needs to shift from a narrow neurological approach, addressing a person's impairments, to a wider person-centered approach, that highlights the capabilities that a person living with Alzheimer's is able to maintain. He advocates that working in the participant's present moment is ideal for change and acceptance. Cheston and Bender (1999) point out that many people confuse the technique of therapy with the purpose, and a one-hour talk session would not

be beneficial for people living with Alzheimer's. Cheston and Bender (1999) state, "we want to suggest that the purpose of therapy is to improve people's sense of well-being; to increase the resources they have available to relate to their physical and interpersonal world, and to improve their quality of life" (p. 102). Cheston and Bender (1999) go on to say that if verbal communication is not the only method of therapy, then we need to be flexible and pay attention to the members' interests, needs, and abilities in order to help someone maintain their quality of life. Mirroring one's movement is one way to establish trust, empathy, and rapport as a means of building a relationship when verbal communication is lacking. Working with those living with Alzheimer's in their current environment using an accessible form of communication, allows for change, acceptance, and trust to form. Growing shape flow as reflected in changes in facial expressions, body postures, and use of space in shape flow design indicated that the intervention of mirroring is a way to communicate empathy and trust supporting the forging and maintenance of a therapeutic relationship.

Cheston and Bender (1999), support Kitwood and Rogers with their idea of focusing on the person in order to understand their experiences and how they see the world. They support Kitwood's theory in moving away from a stagnant form of therapy that relies on cognitive thinking to a person-centered form of care that utilizes the person's current capabilities in their daily life. Focusing on the person's current identity and being "actively engaged in creating and holding on to a sense of who he or she is" (Cheston & Bender, 1999, p. 170). He talks about looking at what a person living with Alzheimer's has to offer, which correlates with looking at the body and the movement that is being used to express the inner self. Specifically, in using the intervention of

mirroring to activate the mirror neurons and send a sensation that is felt rather than spoken verbally. This sensation can reveal emotions or thoughts that aid in forming a secure, trusting, and empathic relationship. This is especially key for those living with Alzheimer's, because they have to utilize other senses when verbal communication is declining. DMT looks at the non-verbal communication and person as a whole rather than narrowing the focus to cognitive thinking. As demonstrated by my study, Hillary and Mary were able to form a positive, secure and trusting relationship with me and with one another through movement instead of relying on verbal communication.

Further research can be taken from this study in which other DMT interventions can be studied in regards to how they impact the therapeutic relationship, such as looking at interventions which promote rhythmic group activity. While verbal and non-verbal interventions were used throughout the sessions, verbal interventions were not the primary focus. This leaves room for future research in comparing and contrasting verbal and non-verbal interventions of a dance/movement therapy session and their effects on the therapeutic relationship.

The intervention of mirroring assisted in forging, maintaining, and deepening the therapeutic relationship within a dance/movement therapy group with two female participants living with Alzheimer's by allowing trust, understanding, and empathy to develop. The intervention of mirroring allowed the individuals to interact using their primary form of communication, movement. In mirroring the participants' movements, connections were made physically, mentally, and emotionally, which was seen through growing postures and facial expressions and the development of key themes from all six videotaped sessions. Alzheimer's is a disease that takes over one's being and changes all

aspects of one's life. Therefore, it is important that our society focus on and promote other forms of therapy for people with Alzheimer's disease that do not primarily rely on verbal communication in order to engage in relationships and maintain one's sense of self-worth.

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Appendix A

Definition of Terms

Activities of daily living (ADL)

"The basic daily activities, including bathing, dressing, eating, toileting, and sleeping,

that health professionals use to judge an Alzheimer's person's need for assistance with

physical care" (Coste, 2003, p. 203).

Agnosia

A cognitive deficit in which recognition of objects is impaired even when sensory

function is still intact (Morrison, 1995).

Alzheimer's disease

According to the Alzheimer's Association (2009), Alzheimer's disease is a brain disorder

that is progressive and fatal. The disease destroys brain cells that are essential in memory,

thinking, and behavior. When these brain cells are destroyed many aspects of a person's

life are affected including language, learning, thinking, reasoning, work, social activities,

and family life.

Aphasia

Literal definition means "a disturbance of language use" and this is due to the brain

pathology in which a person is unable to use words as symbols because of deterioration

of language (Morrison, 1995, p. 15). "Patients may use circumlocutions to get around

words they can't remember. Increasingly, they may come to depend on clichés; they may

become vague, circumstantial or even mute. Use of language is usually spared until late

in the disease" (Morrison, 1995, p. 28).

Apraxia

Apraxia is impairment in executing motor activities even when the capability physically is still present (Morrison, 1995). "These deficits may be shown by inability to build with blocks or copy designs and figures. Overlearned motor behaviors such as the use of a fork and knife are usually preserved until late in the course of the dementia" (Morrison, 1995, p. 28).

Bi-polar Shape Flow

Bi-polar shape flow specifically refers to the body expanding and contracting symmetrically, and relates to a sense of stability and internal balance. Bi-polar shape flow is also related to feelings of comfort and discomfort (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999).

Chacian style warm-up

A warm-up is part of a methodology of dance/movement therapy created by the founding mother, Marian Chace. In the Chacian style warm-up, initial contact and introduction of members occurs "…to establish direct communication and contact" (Levy, 2005, p. 24). Movement begins with the initial goal to warm-up the body and gets senses stimulated. The movement that is created at the beginning is used to deepen the process in which themes are able to emerge. Here, small movements would be initiated, which would lead to full body movement that would help release tension and loosen the body (Levy, 2005).

Closing or Closing Ritual

Marian Chace's structure included ending the groups with "…a supportive closure that allowed patients to leave with some sense of satisfaction or resolve" (Levy, 2005, p. 26).

Conceptual Analysis

Conceptual analysis is used to examine how many times words appeared in the given text (Colorado State University Writing Center, 2007).

Content Analysis

"Is a research tool used to determine the presence of certain words or concepts within texts or sets of texts. Researchers quantify and analyze the presence, meaning and relationships of such words and concepts, then make inferences about the messages within the texts, the writer(s), the audience, and even the culture and time of which these are a part" (Colorado State University Writing Center, 2007). This data is then examined using conceptual analysis or relational analysis.

Dementia

Means "loss" and therefore, there must be a decline from a previous level of functioning not related to any other medical condition. All dementias involve memory loss or amnesia, which in mild cases "may only involve recent memory; as a dementia worsens, more remote memories are also affected." Severely demented patients may fail to recognize their relatives or long-time friends, or even answer to their own name. (Morrison, 1995, p. 27).

Descriptive Study

According to the National EMSC Data Analysis Resource Center (NEDARC), a descriptive study is designed for researchers whose primary goal is to assess a sample of data that occurred at a specific point in the therapy sessions or in a laboratory setting. In a descriptive study, all that is being reported is a description of what is occurring in that specific moment in time. There are two types of descriptive studies: case reports and

cross-sectional. These types of studies are useful in helping to reveal patterns or connections that might otherwise go unnoticed in research. Three primary reasons why a descriptive study may be conducted are to identify areas for further research, plan resource allocation through a needs assessment, and provide informal information about a condition or disease (NEDARC, 2008, p. 1).

Empathy

According to Celebi, (2006), empathy is "the ability to be in tune with each other non-verbally – is seen in DMT as the most important tool for establishing trusting and safe, holding relationships" (p. 150-151). Empathy is when one validates and understands another person's experiences and feelings, through verbal or non-verbal communication, because they have experienced similar or identical encounters and emotions (Rogers, 1961).

Empathic Reflection

Empathy in dance/movement therapy is often established through empathic reflection, in which "…dance therapists incorporate clients' spontaneous expressions into the ongoing movement experience and respond to those expressions in an accepting way. It is the dance therapist's mode for developing multiple empathic connections between him/herself and the clients, and one means by which the therapist structures a nonjudgmental, supportive environment which is conducive to sharing and growth" (Sandel, 1993, p. 98). "Empathic reflection is both a means of acquiring information and a method of intervening in dance therapy" (Sandel, 1993, p. 98).

Habilitation

"An approach to caring for a person with a progressive dementia that focuses on validating the patient's underlying emotions, maintaining dignity, creating moments for success, and using all remaining skills" (Coste, 2003, p. 204).

Loss or impairment of executive functioning

When a person has "difficulty in planning, organizing, sequencing, or abstracting information" (Morrison, 1995, p. 15). Executive functioning is the area in life where people organize simple concrete ideas and behavior to form more abstract, complex behaviors, such as dressing and other functions of self-care. Once executive functioning is affected, people have a hard time making decisions, interpreting new information and adjusting to new situations, which effect their work and social life (Morrison, 1995; & American Psychiatric Association, 2000).

Mind

"A definition – the mind can be defined as an embodied process that regulates the flow of energy and information. Regulation is at the heart of mental life, and helping others with this regulatory balance is central to understanding how the mind can change. The brain has self-regulatory circuits that may directly contribute to enhancing how the mind regulates the flow of its two elements, energy and information" (Siegel, 2006, p. 1).

Mirroring

A movement intervention used by the therapist to deepen the therapeutic relationship by kinesthetically and visually experiencing what patients are experiencing and communicating. "In essence, Chace would 'mirror' or reflect back via her own muscular activity and verbal narration what she perceived and experienced in the body action and

the body of the patient…Mirroring of action and meaning, also referred to as kinesthetic empathy, or empathic reflection, is a powerful tool and one of the major contributions that Chace made to dance therapy" (Levy, 2005, p. 24).

Movement Coding Sheet

Is a form of assessment that is used by dance/movement therapists in observing movement, which includes postures, facial expressions, integration of body parts, and muscle tension. This form of assessment focuses on the client or participant's body and movement and is used in making movement goals and interventions, which support psychological goals and interventions (Flaum Cruz, 2006).

Relational Analysis

Relational analysis also looks at how many times words appear in a text, but then explores the relationship between those words. "The focus of relational analysis is to look for semantic, or meaningful, relationships" (Colorado State University Writing Center, 2007).

Shape Flow

Shape flow is the growing and shrinking of the body and vital to the formation of relationships and expression of feelings. "Through observation of changes in shape flow, emotions are most readily identified. Shape flow thus serves as an early foundation for interpersonal communication" (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999, p. 124). Shape flow supports our ability to form facial affect and body postures, because it is the force that allows the body to move in space, create shapes and patterns, and makes connections in our relationships with self and others (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999).

Shape Flow Design

"Is the study of the qualities of movements which individuals use to traverse the space around themselves known as the kinesphere" (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999, p. 139). There are three parts to shape flow design: (a) how an individual uses his or her surrounding space in regards to near, intermediate, or reach space; (b) spatial pathways which are centrifugal or centripetal; and (c) design factors of movement, which are looping/linear, high/low amplitude, and rounded/angular reversals (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999).

Sundown Syndrome or Sundowing

A term used to identify unusual, deviant or aberrant behavior from the norm in a patient with Alzheimer's that occurs late in the afternoon and evening when the sun begins to go down (Coste, 2003).

Theme development

Theme development begins in the warm-up phase of a Chacian group, when the therapist is able to observe and pick up movement expressed by the clients. These movements are then processed and reflected back verbally or nonverbally to the group. Themes develop from using verbalization, movement, imagery, and actions that are theme-oriented (Levy, 2005, p. 26).

Therapeutic interventions

Are defined as verbal statements or non-verbal movement expressions that are displayed by the therapist with the intention to shift or spark change in the client or relationship. Interventions come through our perceptions in which we respond to what we see and structure the treatment accordingly (Fischer & Chaiklin, 1993).

Therapeutic relationship

The therapeutic relationship is defined as an interactive give and take in which the therapist offers his or her thoughts, feelings, and movement expression (meaning physically and mentally present) (Sandel, Chaiklin, & Lohn, 1993).

Uni-polar Shape Flow

Is the asymmetrical growing and shrinking of the body in response to an attraction towards or repulstion away from internal or external stimuli, resulting in mobility (Kestenberg Amighi, Loman, Lewis, & Sossin, 1999).

Appendix B

The Progression of Alzheimer's Disease

_____

Behavioral Change   Probable Stage

_____

Not remembering appointments   Early

Not recognizing once familiar faces

Losing track of time

Not storing recent information or events

Getting lost

Having difficulty finding words

Misplacing needed items

Being unable to make decisions or choices   Mid(dle) Early

Finding it hard to concentrate

Acting accusatory or paranoid

Being unable to separate fact from fiction

Being unable to translate thoughts into actions

Misunderstanding what is being said

Making mistakes in judgment

Withdrawing, being frustrated and/or angry   Late Early

Losing ability to sequence tasks

Speaking in rambling sentences

Misusing familiar words

Having difficulty writing

Requiring supervision for "activities of daily living"

Showing impaired computing abilities

Reacting less quickly

Losing fine motor skills (such as buttoning a shirt)   Early Middle

Having more serious difficulties with ADL

Not recognizing objects for what they are

Being unable to understand written words

Possibly displaying more sexual interests

Engaging in repetitious speech and action   Mid(dle) Middle

Having hallucinations and delusions

Having problems with social appropriateness

Experiencing altered visual perception

Showing frequent changes of emotion

Having minimal attention span

Reacting catastrophically (overreacting, having

        outbursts)

Needing assistance with all ADL

Exhibiting frustration, anger, or withdrawal

Walking with a shuffling gait

Being incontinent   Late Middle

Being mostly unintelligible

Exhibiting a downward gaze

Being unable to separate or recognize sounds

Losing all language   Late or Final

Losing gross motor skills (sitting, walking)

Having swallowing difficulties

Needing total care

Note. From " Learning to Speak Alzheimer's: A Ground Breaking Approach for Everyone," by J.K. Coste, 2003, *What to Expect: Making the First Decisions,* p. 22-23. Copyright 2003 by Houghton Mifflin Company.

Appendix C

Dear Family Member:

We have the opportunity to collaborate with Columbia College dance/movement therapy intern, Jennifer Pierce, on her thesis project. The project will include video recorded therapy sessions with your family member in which Jennifer will look at the dance/movement therapy interventions being used. The video will only be a part of the data process for observational reasons, specifically, for viewing the dance/movement therapy interventions used and the affective and postural shifts displayed by the participant. Jennifer will be looking at both verbal and non-verbal interventions. Verbal interventions are statements or words stated with the purpose of deepening the experience and non-verbal interventions are presented through body movement and expression. Your family member's name will not be used anywhere in the thesis nor any personal information. The video will only be seen by the dance/movement therapy intern and her thesis supervisor. When the data is analyzed the tape will be destroyed for confidentiality. Again, the focus of the data collection and analysis will be on the use of dance/movement therapy interventions and the response elicited through body posture and affect.

Jennifer will be filming at our location for six weeks starting in the middle of June to the end of July. It is estimated that your family member will be taped during three to six dance/movement therapy sessions. If you are willing to have your family member participate in this project, please sign and return the enclosed release in the envelope provided at your earliest convenience or by Monday June 11, 2007. Your decision whether or not to participate will in no way affect your services at the House of Welcome.

Please print your family member's name on the first line of the video release form and the Columbia College Chicago informed consent form. The responsible family member/power of attorney for health care must sign the video release form and Columbia College Chicago informed consent form where indicated.

If you have any questions, please call me at 847-242-6250. Thank you for your kind consideration.

Sincerely,

Director

<u>VIDEOTAPE/RESEARCH CONSENT</u>

I hereby grant permission for Jennifer Pierce, dance/movement therapy intern from Columbia College Chicago; and her internship site to videotape the Home of Comfort participant named below for the purpose of a master's thesis in dance/movement therapy. The intention of the videotape is to better understand the dance/movement therapy interventions that evoke change in participants. The videotapes will be destroyed after the information about successful therapeutic interventions is recorded.

Name of HOC Participant:
Address:
City/State/Zip:
Signature of responsible family member/legal representative *(required)*
Relationship to participant
Date

Jl/4-07/Jennifer release

Columbia *&*

C O L L E G E   C H I C A G O

Informed Consent Form

TITLE OF RESEARCH STUDY: The influence of dance/movement therapy interventions with two female Alzheimer's patients.

PRINCIPLE INVESTIGATOR: Jennifer A. Pierce-Knapp

RESEARCH SUPERVISOR: Lenore Hervey

DEPARTMENTAL RESEARCH COORDINATOR: Lenore Hervey

INTRODUCTION

Your family member is being asked to take part in a research study at Home of Comfort under the direction and supervision of Columbia College Chicago. This consent form contains information you will need to know to help you decide whether your family member will participate in the study or not. Please read the form carefully. You may ask questions about the purpose of the research, what I may ask of your family member, the possible risks and benefits, your family member's rights as a volunteer, and anything else about the research or this form that is not clear. When I have answered all your questions, you can decide if your family member will participate in the study. This process is called 'inform consent.' You will receive a copy of this form for your records.

PURPOSE OF THE STUDY

The purpose of this study is to identify the dance/movement therapy interventions that seem to result in affective and postural shifts in two women diagnosed with Alzheimer's disease.

PROCEDURES

If you agree to allow your family member to participate in this study, she will be asked to do the following things:

- Participate in continual dance/movement therapy sessions where no new interventions or changes to the therapeutic process will occur. Your family member and I have been meeting generally once a week since November 2006.
- To participate in six half-hour dance/movement therapy sessions, one per week. Three to six of the sessions will be videotaped to more carefully observe the dance/movement therapy interventions being used.

POSSIBLE RISKS OR DISCOMFORTS

One of the risks for your family member in this study is becoming anxious due to being videotaped. If this does create anxiety, I will not use the videotape for that session. I will always ask before each session if they feel comfortable being videotaped. If the videotape creates repeated anxiety for your family member then the use of the videotape will be discontinued. A second possible risk for these participants' is developing anxiety over knowing that the videotapes will be seen by other people. The precaution I will take to minimize the anxiety is reassurance that the videotape will not be seen by anyone but me and my supervisor. Once the videotape is no longer needed it will be destroyed. A third possible inconvenience for these clients is that six of their therapy sessions may be interrupted due to the video recording process. To minimize interruptions I will take every precaution before the beginning of the therapy session to be sure that all of my equipment is working correctly.

If your family member has concerns about this process or is upset by any part of the procedure she will be encouraged to speak to me, other staff members and/or administrators at the Home of Comfort about her feelings and concerns.

POSSIBLE BENEFITS

Participation in this research study contributes to the development of dance/movement therapy methods for those who are diagnosed with Alzheimer's disease.

CONFIDENTIALITY

Anything your family member does or says in the research study will only be described anonymously in reporting. This means that the investigator will keep the names and other identifying information of the research participants private. The investigator will change the names and identifying information of the research participants when writing about them or when talking about them with others, such as the investigator's supervisors. The videotaped data (information) that comes out of the study will be kept in a locked filing cabinet and will be destroyed upon completion of data analysis. No one else besides the investigator and her supervisor will have access to the original data.

RIGHTS

Being a research participant in this study is voluntary. You may choose to withdraw your family member from the study at any time without penalty. You may also refuse to have them participate at any time without penalty. If you have any questions about the study or your rights as a research participant, you may contact the researcher or the research supervisor listed above.

COST OR COMMITMENT

Commitment is to six half-hour dance/movement therapy sessions once a week with three to six of those sessions being videotaped. There is no fee and this will not affect your family member's services at Home of Comfort.

PARTICIPANT'S STATEMENT

This study has been explained to me. I volunteer my family member to take part in this research. I have had opportunity to ask questions. If I have questions later about the research or my family member's rights as a research participant, I can ask one of the contacts listed above. I understand that I may withdraw my family member from the study and they have the right to refuse to participate at any time without penalty. I will receive a copy of this consent form.

_____   _____
Printed name of participant   **Signature of participant if applicable   Date**

_____   _____
Printed name of family member   **Signature of family member   Date**
or legal representative   **or legal representative**

_____   _____
Printed name of principle   **Signature of principle   Date**
investigator   **investigator**

Appendix F

Coding Sheet

Video Session: __ Date: _____ Time: _____
Place: <u>HOC Library Room</u>
Intervention of Mirroring Description: _____

_____

<u>Facilitator's Response</u>
    Affect/Facial Expression_____
    Body/Posture
        Breath: Shallow   Neutral   Deep
        Overall Posture: Rigid   Erect   Neutral
        Slouched
        Gestures:_____ Body Part(s) Used: _____
        Movement Initiation: Proximal   Distal
        Attention: Describe: _____

System II

Bi-Polar Shape Flow: self feelings (Mark with an "X" where Facilitator is on the
   continuum)
                   <u>Fighting</u>   <u>Indulging</u>
Horizontal: Narrowing -- Widening
Vertical: Shortening-- Lengthening
Sagittal: Hollowing-- Bulging

Uni-Polar Shape Flow: attraction vs. repulsion (Mark with an "X" where Facilitator is on
the   continuum)
                   <u>Fighting</u>   <u>Indulging</u>
Horizontal: Medial Narrowing -------------------------------- Lateral Widening
Vertical: Shortening Down/-------------------------------- Lengthening Up/
                 Lengthening Down   Shortening Up
Sagittal: Hollowing Back/ -------------------------------- Bulging Forward
                 Bulging Back   Hollowing Forward

Shaping in Directions: boundaries (Circle if Affective/Present)
        Horizontal: Across   Sideways
        Vertical: Down   Up
        Sagittal: Backward   Forward

Shaping in Planes: complex relationships (Circle if Affective/Present)
        Horizontal: Enclosing   Spreading
        Vertical: Descending Ascending
        Sagittal: Retreating   Advancing

Shape Flow Design: (Circle most salient)

Kinesphere:	Near Space	Intermediate Space	Reach
Space Pathway Design:	Centripetal	Centrifugal	

Hillary's Response

Affect/Facial Expression_____

Body/Posture

Breath:	Shallow	Neutral	Deep
Overall Posture:	Rigid	Erect	Neutral

Slouched

Gestures:_____ Body Part(s) Used: _____

Movement Initiation:	Proximal	Distal

Attention: Describe: _____

System II

Bi-Polar Shape Flow: self feelings (Mark with an "X" where Facilitator is on the continuum)

	Fighting		Indulging
Horizontal:	Narrowing ---		Widening
Vertical:	Shortening--		Lengthening
Sagittal:	Hollowing--		Bulging

Uni-Polar Shape Flow: attraction vs. repulsion (Mark with an "X" where Facilitator is on the continuum)

	Fighting		Indulging
Horizontal:	Medial Narrowing ------------------------------------		Lateral Widening
Vertical:	Shortening Down/--------------------------------------		Lengthening Up/
	Lengthening Down		Shortening Up
Sagittal:	Hollowing Back/ --------------------------------------		Bulging Forward
	Bulging Back		Hollowing Forward

Shaping in Directions: boundaries (Circle if Affective/Present)

Horizontal:	Across	Sideways
Vertical:	Down	Up
Sagittal:	Backward	Forward

Shaping in Planes: complex relationships (Circle if Affective/Present)

Horizontal:	Enclosing	Spreading
Vertical:	Descending	Ascending
Sagittal:	Retreating	Advancing

Shape Flow Design: (Circle most salient)

Kinesphere:	Near Space	Intermediate Space	Reach

Space Pathway Design:	Centripetal	Centrifugal

Mary's Response

Affect/Facial Expression_____

Body/Posture

Breath:	Shallow	Neutral	Deep
Overall Posture:	Rigid	Erect	Neutral

Slouched

Gestures:_____ Body Part(s) Used: _____

Movement Initiation: Proximal   Distal

Attention: Describe: _____

System II

Bi-Polar Shape Flow: self feelings (Mark with an "X" where Facilitator is on the
   continuum)

                <u>Fighting</u>   <u>Indulging</u>

Horizontal: Narrowing --- Widening

Vertical: Shortening--- Lengthening

Sagittal: Hollowing--- Bulging

Uni-Polar Shape Flow: attraction vs. repulsion (Mark with an "X" where Facilitator is on
the   continuum)

                <u>Fighting</u>   <u>Indulging</u>

Horizontal: Medial Narrowing -------------------------------- Lateral Widening

Vertical: Shortening Down/-------------------------------- Lengthening Up/

               Lengthening Down   Shortening Up

Sagittal: Hollowing Back/ -------------------------------- Bulging Forward

               Bulging Back   Hollowing Forward

Shaping in Directions: boundaries (Circle if Affective/Present)

Horizontal:	Across	Sideways
Vertical:	Down	Up
Sagittal:	Backward	Forward

Shaping in Planes: complex relationships (Circle if Affective/Present)

Horizontal:	Enclosing	Spreading
Vertical:	Descending	Ascending
Sagittal:	Retreating	Advancing

Shape Flow Design: (Circle most salient)

Kinesphere:	Near Space	Intermediate Space	Reach

Space Pathway Design: Centripetal   Centrifugal