

**The Utilization of Movement and Dance to Support Children in the
Aftermath of Community Disaster**

A Thesis

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Dedications

I dedicate this thesis to my wonderful family who has always supported and believed in me throughout my professional journey. I would not be where I am today without your unconditional love, encouragement, guidance and advice. Special thanks to my mother, Joyanna Silberg, who has been by my side throughout this process with continual positive regard. I am so grateful for your wisdom and your dedication to my professional growth. You have inspired my future work as a clinician.

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Abstract

The Utilization of Movement and Dance to Support Children in the
Aftermath of Community Disaster
Dahlia Nissa Silberg

The presence of natural disasters and man-made disasters, have been significantly increasing over the past twenty years. These disasters are devastating, overwhelming, and potentially traumatizing for the communities and individuals involved. Children exposed to these disasters are especially at risk because they are still developing socially, emotionally, cognitively, and physically. Given the large body of literature regarding the relationship between trauma and the body, it is important to examine how body based approaches such as dance and movement can provide support in the aftermath of traumatic experience.

The objective of this research study is to investigate how movement and dance are utilized with children who have experienced community level disasters. The study employed a descriptive qualitative design in which the researcher interviewed 10 individuals who have utilized dance and movement techniques in their work with children after disasters. Interviews lasting 50 minutes were conducted over the phone and Skype and included questions about demographics, context of disaster work, and nature of the dance/movement support. The researcher initially noted the participant's common and variant responses to the interview questions. In addition, the researcher analyzed emergent themes that crossed questions and created a sub-group of creative arts therapists to look at emergent themes specific to this group. The common themes that emerged from all the participants included, focused breathing, play, sustainability, flexibility, be a witness/be present, and culture as comfort. Three themes emerged solely from the creative arts therapists' sub-group including, structure, hope, and attune to the child's

needs. These themes along with the shared responses suggested a need to create a safe holding environment and build trust with the children. Movement and dance served an important role in this process by allowing for self-expression and play which let the children return to normal. Integrating cultural beliefs and rituals was also an essential component of sessions, which could be explored and created through movement. The themes also reflect the importance participants place on having a supportive team, coping strategies, and a flexible and receptive attitude. The researcher has utilized these results to create a set of guidelines for future therapists, teachers, and other youth workers who wish to work with children after community disasters.

CHAPTER 1: INTRODUCTION

As the researcher, I have always had a fascination with community level disasters. Although I have never been involved in one, I have had experiences that directly relate to this phenomenon, which have peaked my curiosity and led me to explore their impact. When I was about six, my parents took me to the Johnstown Pennsylvania flood museum to learn about the Great Flood of 1889. After touring the museum and learning that the flood killed over 2,000 people, I refused to take baths for the next three weeks. I was afraid the bathtub would overflow and flood the room, causing me to drown just like the people in Johnstown. Looking back, it seems childish to equate a bathtub with a flood, but at the time it was an extremely real fear. The idea that Mother Nature could cause utter destruction and loss of control seemed horrifying and bizarre even at the age six. Although I may not have been able to verbalize what I was feeling at the time, my anxiety, fear, and horror were expressed through my behaviors.

After watching the Wizard of Oz as a young child, I had a similar immediate fear response but was instead terrified of tornadoes. During every thunderstorm, I hid in the basement and refused to leave until I was positive the storm had subsided. As I became older, I realized my irrational fear and instead noticed how the movie portrayed growth and resilience after a traumatic life-altering event. After the tornado destroyed Dorothy's house and family, she had to rely on her own self-confidence and creative thinking to resolve her situation. She entered the magical fantasy world of Oz to escape her problems, and soon realized that this imaginative environment could provide support and build maturity and self-reliance, which could help her cope with her loss. This made me

wonder how other children could use creative means after real life community disasters like tornados or floods to build resilience and cope with their trauma.

This study will address the impact of community level disasters on children through an exploration of recovery supports, specifically movement and dance-based supports, for children who have experienced community level disasters. Many researchers have documented the significant effects of exposure to natural or man-made disasters on children. The documented consequences of living through these terrifying events can include Posttraumatic Stress Disorder (PTSD), depression, somatic symptoms, anxiety, and negative affect (Lonigan, Shannon, Taylor, Finch, & Sallee, (1994), Weem, Pina, Costa, Watts, Taylor, & Cannon, (2007), Hensley & Varela, (2008). There is theoretical and empirical support for considering creative interventions utilizing movement and dance to address the needs of this population.

In the past 20 years, the number of natural disasters across the globe has doubled, and man made-disasters such as terrorism have been rapidly increasing in number worldwide. (Trends in natural disasters, (2005), National Counterterrorism Center (2010). The prevalence of community level trauma has affected children globally making it essential to explore and understand how children can recover from these tragedies.

It has been proposed that creative arts therapies may be especially useful for children recovering from traumatic experiences. According to Johnson, (1987) the creative arts allow traumatized children to express their feelings nonverbally which provides a non-threatening way to process and cope with their experiences. Thom (2010) demonstrated the power of creative movement in a non-clinical preschool population;

creative movement helped children explore their somatic and emotional experiences and integrate their emotional needs with their bodily reactions.

Researchers Condly (2006), Metzl (2009), and Waaktaar, Christie, Borger, & Torgersen, (2004), studied resiliency and coping strategies as protective factors that have a moderating effect on the experience of traumatic events. This research demonstrated a link between creativity and resilience, which further supports the use of creative arts therapies and the creative process for helping children cope with trauma.

In addition to these studies linking resilience with creativity, the literature supports art therapy specifically as an aid in recovery from natural or man-made disasters. Orr (2007) conducted a content analysis, which reviewed art interventions with children after experiencing a disaster and concluded that semi-structured art interventions were helpful to children after disaster.

A number of arts-based programs have offered support to children after community level disasters. For example, in 2004, after the tsunami in Asia, Kaiff (1973) developed a sand play program for preschoolers to help them deal with their trauma using creative expression (Lacroix Rousseau, Gauthier, Singh, Giguère, & Lemzoudi, 2007). Creative interventions using art have also been utilized in the aftermath of September 11th to help children cope. The Children's Museum of the arts in SoHo New York created an outreach program called Operation Healing, in which art therapists and art therapy students facilitated art making sessions to help children exposed to September 11th process the traumatic events (Gonzalez-Dolginko, 2011).

In addition to art therapy and art-based programs, there is a small body of literature on utilizing music therapy and drama therapy after community level disasters

(Shih, 2011; Altinay, 2003). There are also organizations such as BuildaBridge, which have offered a range of arts modalities, to children in sites of devastation across the globe (BuildaBridge, <http://www.buildabridge.org/>). Other support workers have integrated song and movement rituals to help children overcome war trauma (HaLevi, 2008).

While dance/movement therapy and creative movement approaches have been used to support children in the aftermath of community level trauma, there is almost no scholarly literature that describes this work. Yet, literature exists that addresses dance/movement therapy to assist clients coping with other forms of trauma.

There is vast literature on DMT with both child (Goodill, 1987; Loman & LeMessurier, 2008; Trupi, 2001) and adult (Mills & Daniluk, 2002; Valentine, 2007) survivors of sexual abuse in the United States. This literature explores how movement and dance can facilitate change and promote healing. Dance and movement approaches have also been utilized to help child survivors of sexual abuse in India (Senroy & Senroy, 2007).

Loman & LeMessurier (2008) speak of using DMT interventions for children with early trauma to build attachment, increase self-regulation, express unspeakable emotions, and promote healing. They assert that DMT allows children to cope with pre-verbal memories in developmentally appropriate ways through non-verbal communication and bodily expression. Harris (2007) has developed a dance/movement therapy approach to support the recovery of child combatants in Africa. Pylvanaienen (2003) suggests the utility of DMT for enhancing body awareness, an important component in recovery from trauma. Pylvanaienen's literature-based study examined the concept of body image and the potential treatment interventions for dance/movement therapy. Pylvanaienen proposes

that DMT can enhance an individual's body image by encouraging awareness of the body self, acceptance of one's image properties, and establishing healthy routines using body memory, also helpful in decreasing somatic symptoms developed from traumatic experiences.

There is also a large body of literature outside of DMT describing the relationship between trauma and the body. The psychotherapy literature suggests that traumatic memories are stored in the body so that trauma must be addressed on a somatic level. One feature of PTSD is that these somatic memories are re-experienced in the body (Herman, 1992; Rothschild, 2000; Van der Kolk, 1987). Therefore, therapeutic interventions involving movement might uniquely address the needs of traumatized clients.

The significant benefit of somatic interventions following personal trauma was demonstrated by Lescho & Maxwell (2010) who found that creative movement helped traumatized women embrace and reclaim their bodies, cope with stress, and experience the sacred within which provided resiliency.

Although there is no specific research examining DMT as an effective intervention after community level disasters, DMT literature regarding work with trauma populations and research studying the benefits of movement and dance in the recovery process may be applicable to this arena of trauma. The literature presents theory, case example, and research that supports DMT as a process that increases resiliency, helps build emotional regulation, provides children with coping skills, and facilitates positive body images and a deeper awareness of the body (Hensley & Varella, 2008; Heyman et al., 2010; Lescho & Maxwell, 2010; Pylvanainen, 2003; Thom, 2010). These DMT

interventions may be beneficial in decreasing post-traumatic symptoms, anxiety, and somatic symptoms after disaster.

The research question is: How are movement and dance utilized to support children in the aftermath of community disasters? The study interviewed practicing arts-based therapists, disaster workers and other child specialists, who used dance and movement in their work with children in the aftermath of disasters.

A delimitation of the study is that it only addresses trauma following community level disasters; other kinds of trauma were not included. For the purposes of this study, community level disasters included natural disasters, which manifest through external nonhuman sources, and have a direct and devastating impact on a given community, as in the case of earthquakes, hurricanes, and tsunamis. Community level disasters also included human vindicated trauma, which manifests through external human causes, that occur within a discrete amount of time and cause community level devastation, such as the 9/11 terrorist attacks, a school shooting or a bombing.

The researcher gathered information through interviews rather than observing this work directly. A study limitation is that interviews were conducted in English, which limited access to indigenous dance/movement approaches. An additional limitation of this study is the small sample size, which may limit the generalizability of findings.

This descriptive study identifies dance and movement methods currently used to support children in the aftermath of community level disasters. Relief workers, who do not currently incorporate arts based approaches, may consider doing so. The study may help generate and conceptualize theory and practice for those who are involved or

interested in working in dance and movement with this population and indirectly support the children who are the beneficiaries of their work.

CHAPTER 2: LITERATURE REVIEW

2.1 Trauma

2.1.1 Overview of Trauma

Before addressing community level trauma, it is important to have a basic understanding of trauma. According to the American Psychiatric Association, (2000) a traumatic experience involves serious threat of death or severe injury in association with feelings of intense fear, horror, and helplessness. Johnson (1987) describes this as a process, which significantly alters a person's sense of self. Herman (1992) similarly points out that after a traumatic experience, individuals lose a sense of meaning, connection, and power. They are catastrophic events that overwhelm basic human adaptations to life (Herman, 1992). Van der Kolk (1987) adds that trauma creates difficulty in managing affective states including anxiety and aggression. In addition to these difficulties, trauma can lead to a variety of psychological responses including hallucinations, flashbacks, dissociative states, psychosomatic symptoms, depression, violent outbursts, manic behaviors, and PTSD (Johnson, 1987).

Individuals who experience trauma are affected in a variety of ways. There are a number of resiliency factors that help those affected overcome their traumas. Resiliency factors include social support, creativity, and ego-strength (Hobfoll, Horsey, & Lamaoureux 2009; Herman, 1992; Metzl, 2009). Some researchers suggest that individuals who endure trauma can experience posttraumatic growth, which leads to greater self-awareness and discovery (Tedeschi & Calhoun 2004; Ungerledier, 2003; Cryder et al., 2006). Unfortunately, other trauma victims develop symptoms of PTSD. These symptoms include intrusive memories and re-experiencing of the event, avoidance,

emotional numbing, and hyper-arousal (American Psychiatric Association, [*DSM-IV-TR*], 2000). In children, symptoms of PTSD can manifest through repetitive play surrounding themes of trauma, nightmares and disorganized or agitated behavior. Without proper treatment, PTSD can persist for many years, causing severe emotional and cognitive impairments in functioning (Fan, Zhang, Yang, Mo, & Liu, 2011).

2.1.2 Trauma and Children: A Neurological Perspective

When discussing children and trauma it is important to be aware of the unique ways that children process information. This neurobiological perspective illuminates the ways in which the mind, brain, and body are all interconnected and influence childhood development. When children are exposed to traumatic events, their emotional, social and cognitive developmental functioning is at stake. When their developmental process is disrupted, they have a heightened sense of vulnerability and any feelings of safety are compromised (Van der Kolk, 1987). Traumatic experience can significantly change the brain because such experiences produce overwhelming arousal responses that over activate the autonomous nervous system. When confronted with a situation in the future, a traumatized individual may falsely interpret danger or fail to take action based on their brain's deregulated response system (Keeton, 2009).

Children and adolescents are particularly vulnerable to trauma because their brains are not fully developed. During childhood, new neuronal pathways and interconnections form because the brain is constantly being shaped by new experiences (Ford, 2009). When experiences involve trauma, the brain cannot learn new information because it is focused instead on avoiding harm and danger. When children experience

trauma, “there is a shift from a brain (and body) focused on *learning* to a brain (and body) focused on *survival*” (Ford, 2009, p. 32).

When children experience trauma they either react within the hyper arousal continuum or the dissociative continuum, which involves acting out, or surrender responses (Perry, Pollard, Blackley, Baker, & Vigilante, 1995). These continued states can become maladaptive traits, which are internalized and affect the brain development. A child who has a dissociative response during a traumatic experience is predisposed to dissociative disorders because over time the child internalizes this state. The presence of these neuropsychiatric symptoms has implications for research, treatment and preventative measures. Perry et al. (1995) warns that assuming children are resilient results in ignoring their trauma responses and maladaptive traits. The neurobiology of trauma perspective emphasizes the need to intervene as soon as possible after a crisis, to help curtail these negative responses and stop them from becoming maladaptive traits that persist over time.

Perry (2006) recommends a variety of interventions to help children recover from traumatic experiences. According to Perry (2006) “Therapeutic interventions seek to change a person by changing the person’s brain,” (p. 30), therefore it is important to have an understanding of brain development when choosing specific interventions. It is imperative to provide interventions that are safe, predictable, and establish healthy relationships. If children lack a sense of safety and trust in others, they may produce unmanageable arousal responses, which can have a profound impact on how children think and act (Perry, 2006). It is also important to utilize interventions that are suited to the child’s neurodevelopmental level which include assessing their physical, behavioral,

cognitive, emotional and social functioning. Interventions should work from the bottom up to first regulate the arousal and stress response systems to create safety and then offer additional enrichment activities to advance a child's developmental level. Perry (2006) recommends using movement and rhythmic activity to create this safety and calm the overactive brain regions.

2.2 Trauma and the Body

2.2.1 Body Memory

Within the trauma literature, there is much discussion of the relationship between trauma and the body. This section will cover the various techniques and theories that utilize body-based approaches for healing trauma. The psychotherapy literature suggests that traumatic memories are stored in the body so that trauma must be addressed on a somatic level. One feature of PTSD is that these somatic memories are re-experienced in the body (Levine, 1997; Rothschild, 2000; Van der Kolk, 1994).

Van der Kolk (1994) explains how traumatic memories are stored implicitly, meaning the memories are still connected with emotional responses, habits, and sensations. After trauma, individuals experience speechless terror, in which the emotional impact cannot be captured through words. Van der Kolk (1994) makes reference to Piaget in concluding that failure to store memories semantically can lead to a somatic/sensory memory organization. These somatic memories can include nightmares, flashbacks, behavioral enactments and somatic sensations and are elicited by heightened arousal.

Levine (1997) further explains how traumatic memories are stored in the body and re-enacted after a reminder of the traumatic event. He describes how one traumatized

individual began to shake for an hour after recalling a terrifying memory from her childhood of being strapped to a table for a tonsillectomy. Her body “had literally resigned itself to a state where the act of escaping could not exist. Along with this resignation came the pervasive loss of her real and vital self as well as loss of a secure and spontaneous personality” (Levine, 1997, p. 30). His central idea is that:

“When we are unable to flow through trauma and complete instinctive responses, these incomplete actions often undermine our lives. Unresolved trauma can keep us excessively cautious and inhibited, or lead us around in ever-tightening circles of dangerous re-enactment, victimization, and unwise exposure to danger (Levine, 1997, p. 32).

In other words, every person who is traumatized has the innate capacity to heal. In order to do so, individuals must identify their incomplete action from the past, and respond in an active way to master the situation instead of freezing and losing control described in the example above. When individuals fail to act based on their instincts and master their situations, they are stuck and immobilized by their trauma (Levine, 1997).

Rothschild (2000) describes these reactions as psychophysical experiences. Even if a traumatic event does not inflict physical bodily harm, the trauma greatly affects the mind and other bodily processes. Patients with PTSD can experience bodily symptoms including rapid breathing, cold sweats, increased heart rate, heart palpitations, and hyper startle responses (Rothschild, 2000). These bodily sensations are implicit memories of trauma and in order to heal, patients must identify these somatic memories to create connections between their past, present, and future. Body awareness can also trigger positive memories and sensations. It “can be a superhighway to the past, a tool for helping the client connect not only with forgotten traumatic memories but also with forgotten resources” (Rothschild, 2000, p. 180).

Price (2005) conducted a study to further examine the relationship between the body, trauma and body memory. Price (2005) specifically examined the effects of body-oriented therapy on women with a history of sexual abuse. Twenty-four adult female with sexual abuse participated in the study and were assigned to either the body-oriented therapy group or the massage therapy group. The body-oriented therapy involved massage, body literacy, and body awareness exercises. The results indicated that the abuse survivors perceived body connection as important in their recovery from sexual abuse. The psychological and physical well being of the participants were improved for both the massage and body-oriented therapy groups. These findings show the importance of body-oriented therapy in healing female victims of sexual abuse.

Traumatic experiences create a rift between mind and body, in such a way that images, emotions, and sensations from the body self become disconnected from facts and the related meaning in the mind. Bodily approaches integrate these various aspects by connecting bodily sensations with cognitive meaning and understanding (Rothschild, 2000).

2.2.2 Sensorimotor Psychotherapy

Ogden, Pain, & Fisher (2006) describe how sensorimotor psychotherapy specifically addresses the somatic symptoms of traumatized clients. In talk therapy, “as the narrative or explicit memory is retold, the implicit, somatosensory components of the memory are simultaneously activated, frequently leading to a re-experiencing of somatoform symptoms” (Ogden et al., 2006, p. 3). Sensorimotor psychotherapy, on the other hand, gives attention to the bodily experience where the implicit somatosensory memories are stored. This is a “bottom-up” approach (Ogden et al., 2006) in which the

therapist focuses first on the body directly which in turn affects cognitions, emotions, and other higher-level functions. When individuals experience trauma, their cognitive capacities often become disorganized because of the intense sensorimotor and emotional reactions. Their cognitions are unable to process the trauma and they experience “speechless terror” as described above by Van der Kolk (1994). When they experience strong sensations on the body level, they misinterpret these sensations based on illogical and disorganized cognitions. Within sensorimotor therapy, clients are asked to track their own bodily movements and sensations and observe the interplay between their bodily reactions, perceptions, emotions, and thoughts. With this body awareness, clients can actively transform their somatic experience from one of passivity to one of mastery, by physically mobilizing an action with conscious intention.

2.2.3 Dance/Movement Therapy and Trauma

Dance movement therapy is a specific body-based approach, which can help survivors of trauma through an awareness of their somatic sensations and experiences. Dance movement therapy relies on the assumption that the mind and body are connected. In order to heal the mind, it is necessary to address the felt experience of the body. Dance movement therapy has been utilized with both adults and children who have been exposed to a variety of traumas.

LeMessurier & Loman (2008) speak of using DMT interventions for children with early trauma to build attachment, increase self-regulation, express unspeakable emotions, and promote healing. They assert that DMT allows children to cope with pre-verbal memories in developmentally appropriate ways through non-verbal communication and bodily expression. Children use movement and play in order to master their

experiences, so attuning to this expression somatically is crucial in building empathy on a body level and facilitating healing and growth (LeMessurier & Loman, 2008). Each child has a unique movement repertoire, which provides detailed information about the child's current state of being. DMT allows for these differences while providing a safe and trusting environment in which the therapist can build body-felt empathy based on the child's bodily expressions (LeMessurier & Loman, 2008).

DMT approaches have also been utilized to help child survivors of abuse. Goodill (1987) presents an article proposing the use of DMT to support children with a history of abuse and neglect. Often children who have experienced abuse and neglect are frightened to verbalize their experiences but can express them non-verbally through symbolism. DMT allows these children to dance out their stories to express their feelings and memories (Goodill, 1987). DMT also enables the development of assertive qualities, which can be shown through powerful, strong, and bold movements. Goodill (1987) presents case examples to demonstrate how DMT can also build body image, enable group sharing, create self-awareness and help create trust and safety.

Meekums (1999) presents a recovery model based on the creative art therapies, which includes dance, music, and art therapy, for women with histories of sexual abuse trauma during childhood. This model was created from a research study involving adult female clients in British mental health services who had histories of sexual abuse. The clients were recruited through voluntary participation in creative art therapy groups. The data was collected in four cycles over the period of four years (Meekums, 1999). Clients were interviewed about their experiences two months after each cycle of the creative art therapy program. These interviews were coded and synthesized into a creative recovery

model. Meekums (1999) found that first clients experience striving, and the therapist would establish safety, which leads to incubation, an immersion in the arts. This then leads to illumination, in which the client gains a new perspective, which ultimately leads to evaluation, so that the abuse can be put to rest. In conclusion, the creative arts therapies allowed the clients to realize unconscious thoughts and conjure images, which could then be assessed and explored (Meekums, 1999).

Pennebaker and Krantz (2007) conducted a dancing and writing study, utilizing techniques from dance movement therapy to examine the effect of bodily expression of personal experiences on the physical and psychological health of a non-clinical population. The population consisted of 64 female and male college aged students assigned to one of three groups. Two experimental groups were told to create an expressive dance about a traumatic life experience. One of these groups was asked to write about the experience and the control group was asked to engage in a physical activity concentrating on rhythm and coordination and unrelated to emotional content (Krantz & Pennebaker, 2007). The results indicated that the men and women in the dance and writing group had higher grades and greater improvements in health. Participants in both the dance and dance/writing group reported positive psychological benefits and had improved mood. These findings suggest the therapeutic benefit of expressive dance and verbal reflection when dealing with traumatic or emotionally intense life experiences (Krantz & Pennebaker, 2007).

Gray (2001) also found the benefit of dance/movement therapy for intense life experiences, in her work with adult torture survivors. Torture survivors have a continuous and extreme physical sensation because torture occurs to the physical body. These

memories therefore are especially stored within the body. DMT is useful for this population because it can work through the body to reintegrate the self, build trust, repair object relations, create socialization, and most importantly, it builds a therapeutic relationship (Gray, 2001).

Pylvanaïenen (2003) presented a literature-based study to examine the concept of body image and the potential treatment interventions for dance/movement therapy. According to Pylvanaïenen, (2003) body image involves three categories including image properties, body-self, and body-memory. This tripartite model offers a deeper understanding of bodily experiences and emotional and psychological reactions, which becomes important when evaluating the effects of trauma on a body level. Dance/movement therapy can enhance an individual's body image by encouraging awareness of the body self, accepting one's image properties, and establishing healthy routines using body memory, which can also help decrease somatic symptoms developed from traumatic experiences.

2.2.3.1 Dance/movement therapy and other creative techniques cross-culturally.

Some dance/movement therapists applied their techniques and skills within a cultural framework. Harris (2007) used DMT techniques cross-culturally and developed a dance/movement therapy intervention with male adolescent orphans who were formerly involved in wartime atrocities in Sierra Leone. The adolescents attended ten DMT sessions, followed by a 12-week break and an additional six sessions. The DMT groups were infused with Western notions of expressive dance along with cultural rituals and popular music to create comfort, safety, and community (Harris, 2007). Symbolism was utilized to help the teenagers reflect on their personal involvement while enhancing their

awareness of community and humanity. They engaged in a public performance in which they explored their roles as both victims and perpetrators. The researchers found that the number of self-reported symptoms including depression, anxiety, and aggressive behavior greatly decreased after the sessions. The researcher concluded that the group gave these stigmatized, unwanted orphans a sense of belonging and empowerment, while strengthening their coping skills and building empathy (Harris, 2007).

Harris (2009) expanded his understanding of creative arts therapy with war-affected children by exploring the connections between cultural rituals, healing, community, and creativity. In sociocentric cultures, there is a focus on the collective rather than the individual. Rituals within cultures help enforce community belonging and sustain social cohesion even in times of war and disaster. As Harris (2009) noted, after the civil war in Mozambique from 1970 to 1992, using cultural rituals helped restore social harmony. Children affected by war may experience a loss of verbal expression but can instead find expression through artistic means. The creative arts must work within these cultural rituals, to provide an opportunity for self-expression that is culturally syntonic. The creative arts can help provide additional symbolism, creative expression, and structure, for existing rituals, which foster community and social cohesion (Harris, 2009).

Within communities that have experienced trauma, Levine (2002) recommends using the creative arts with infants and mothers to generate trust and bonding, and cultural openness. In order to break the cycle of trauma, it is necessary to develop healthy attachment as soon as possible. In Norway, there is a program in which mothers and infants from varied cultural backgrounds are brought together in a community center to

share their customs and traditions. They take turns teaching folk songs from their cultures, and use movement, instruments and rhythm to enhance the experience. They also hold their babies while rocking and singing to them. “The movement, rhythm, and singing strengthen the neurological patterns that produce peaceful alertness and receptivity. As a result, the hostility produced by generations of strife begins to soften” (Levine, 2002, p.150). This is an example of how the creative arts can help traumatized children and their communities.

Gray (2008) specifically utilized DMT with children in Haiti who had been victims of organized violence. When working within this culture it was imperative to integrate the cultural practices with dance movement therapy techniques. Gray (2008) was surprised to find that the cultural rituals of Vodou shared similar principles with dance/movement therapy. Similar to DMT, Vodou dances are done in a circle, which creates a safe container for healing and group expression. The mirror is another important concept in both Vodou and DMT. In Vodou practices, the ocean represents a mirror, in which their ancestors reflect their individual and collective actions (Gray, 2008). In DMT, mirroring techniques are used to reflect movements and create kinesthetic empathy. Within the sessions, Vodou practices were infused with DMT techniques to create a communal culture. At some points the Haitian children taught dances from their culture and then the dance/therapist would respond by teaching some West African traditions that she had learned. This exchange was essential in creating a common language built on trust, safety, and cultural openness and understanding. Gray describes the unique ways dance/movement therapy can be applied within different cultures:

“The flexibility and fluidity inherent in the practice and application of dance/movement therapy create a medium in which the cultural and social practices essential to recovery from extreme stress, even if the individuals or social structures that carry them are disrupted or in part destroyed by the acts of violence, can be cultivated and integrated into a larger-scale healing process (Gray, 2008).”

DMT is a specific approach, which can be used to help traumatized individuals express themselves on the body level in a variety of cultures. The literature on dance movement therapy and trauma supports the notion that bodily expression and nonverbal communication through movement can provide safety, body and cultural awareness, and help build a unique empathetic connection through body-felt sensations. Other creative techniques have also been helpful to survivors of trauma. These creative methods involve the creation of rituals, building trust, and fostering group identity and cultural awareness.

2.2.4 Dance, Movement, the Body and Trauma

The following literature extends beyond DMT and addresses additional ways dance, movement, and exploration of body image have been utilized to help victims of trauma. This section describes general movement techniques that do not involve a specific therapeutic approach.

Researchers Lescho & Maxwell (2010) conducted a study to examine how dance and creative movement could offer personal coping strategies for women who experienced trauma. They interviewed 29 women, ages 16-67 with varied cultural backgrounds about their experiences with dance/creative movement to cope with trauma. They found re-occurring themes of transformation, healing, empowerment, and spiritual connection. The dance/movement helped these women of all ages embrace and reclaim their bodies, cope with stress, and experience the sacred within which provided a sense of

resiliency (Lescho & Maxwell, 2010). These findings suggest that these women were using movement and dance in a therapeutic way to cope with their traumatic experiences.

Creative movement was found to be useful in preschoolers, allowing them to integrate emotional processing. After infusing a preschool curriculum with creative/expressive movement techniques, Thom (2010) noticed that the children were more comfortable exploring their somatic and emotional experiences and began to integrate their emotional needs with their bodily reactions (Thom, 2010).

Senroy & Senroy (2007) have explored using dance with child survivors of sexual abuse in India. They use the Sesame approach, which involves utilizing movement and drama to help child victims of sex trade and child labor. It is a non-confrontational form of therapy that relies on metaphor and nonverbal language, which is explored through movement, drama, improvisation, story enactment, and play. The Sesame approach allows for a therapeutic environment in which the girls can reclaim their inner child and develop healthy attachment (Senroy & Senroy, 2007).

Dance and movement have also been shown to reduce anxiety, which is a common symptom of trauma. Leste & Rust (1990) conducted a study to examine the relationship between dance and anxiety. Participants consisted of 114 college students in the London area. Subjects were assigned to one of four groups including, dance, sport, music, and math. The State-Trait Anxiety Inventory was used to assess trait anxiety and state anxiety. A pre and post-test design was utilized to assess anxiety before and after the experiment. The researchers found that modern dance was associated with reduced anxiety (Leste & Rust, 1990).

The aforementioned literature explores the healing potential of dance and movement for child and adult survivors of trauma. The research suggests that dance and movement can support the recovery process for trauma survivors by providing coping strategies, reducing anxiety, and reclaiming their bodies and inner selves.

2.3 Differences Between Relational and Natural Trauma

Trauma can be caused from community level disasters either natural or relational such as hurricanes, tsunamis, earthquakes and terrorism, or it can occur on a personal individual scale such as domestic violence, sexual abuse, or torture. This section will focus on the differences between natural and man-made community level trauma.

According to Herman (1992), humans understand and process traumatic events differently based on the source of the trauma. In both types of community level trauma, the traumatic event fundamentally ruptures an individual's sense of safety in the world and causes feelings of abandonment and disconnection (Herman, 1992). When the events are natural disasters, they are often considered acts of God, and these destructive acts can cause an existential crisis and loss of faith in the divine. When there is a human source, individuals may lose faith in humanity and see the evil in human nature. There is also a tendency to blame the victim in cases of man-made disasters or human conflicts, in which mental health professionals look at the victim's vulnerabilities and psychopathology as a reason for their situation. Trauma victims may be described as having masochistic, self-defeating, or dependent personality structures, and in this way are responsible for their circumstances (Herman, 1992). The victim and the victim's support network may blame

the perpetrator for the traumatic experience. In natural disasters, there is less discussion of blaming the victim or the perpetrator and a greater loss of faith in the natural world.

Volkan (1999) also discusses the differences between natural disasters and human acts of terror. According to Volkan, (1999) disasters stemming from human sources are different in that they may lead to traumatic responses, which extend across generations. This phenomenon is known as transgenerational grief, which occurs when one generation consciously or unconsciously transmits their traumatic responses to their children because they have not finished grieving their losses (Loewy, 2002). If the human vindicated trauma was due to a cultural conflict, the traumatized group might be especially prone to remembering the tragic event and focusing on retaliation and revenge instead of mourning their losses. Community traumas caused by humans to harm a group create shared psychological experiences and lead to paradigmatic shifts in the society (Loewy, 2002).

As mentioned above, these human acts of terror cause mistrust and disbelief in human nature and lead to the question; why do humans purposefully traumatize others? Levine (2002) explains the etiology behind trauma and points out that when humans are the cause of trauma they are re-enacting their own previous experienced trauma. When an individual is traumatized they continue to re-experience parts of their trauma and are drawn to situations, which resemble their traumatic experiences.

Benight & Bandura (2003) assert that traumatic stress responses are not necessarily based on the type of trauma, but rather result from a person's perception of their self-efficacy and control over their situation. Some factors within natural disasters, which may cause posttraumatic symptoms include, loss of material resources such as

homes, pets, cars, and sentimental possessions. However, individuals who utilized active-problem solving to change their reality and believed that they had control over their lives, showed less signs of posttraumatic symptoms after natural disasters. Similarly, individuals who experienced trauma from a human source were more likely to overcome posttraumatic symptoms when they had a higher level of self-efficacy and perceived control over their lives, which led to better coping strategies (Benight & Bandura, 2003). The difference between human and natural trauma lies in the degree of control. Traumas that come from human sources can be mastered in a variety of ways including self-defense classes, escaping from the perpetrator, and prevention program. In natural disasters, there is less control because the events are often less predictable and therefore cannot be mastered. This contributes to greater difficulty achieving self-efficacy and a perception of control, but it does not exclude this possibility (Benight & Bandura, 2003).

No matter what the traumatic situation, some individuals overcome these extreme circumstances, while others cannot. This appears to be dependent upon an individual's level of resiliency, which will be explored in a later section. It is important that individuals who have experienced trauma find a connection to something greater than themselves. "In the task of healing, therefore, each survivor must find her own way to restore her sense of connection with the wider community" and "needs to discover greater meaning that extends beyond personal tragedy (Herman, 1992, p. 73)."

2.4 Vicarious Trauma

In the words of Herman (1992), "Trauma is contagious" (p. 140). Working with someone who has had a traumatic experience can be emotionally overwhelming for the

therapist and can lead to fear, rage, anger, and depression, which could create alienation from others. This concept is often referred to as vicarious trauma or traumatic countertransference (Herman, 1992)

Figley (1995) describes this concept as compassion fatigue, which is a type of caregiver burnout. Therapists work on building empathic connections and treating their patients with compassion. When trying to empathize with client suffering and view the world from their perspective, the therapist also must suffer. When burdened by suffering, the therapist may experience compassion fatigue, and will have a diminished capacity for bearing their client's suffering (Figley, 1995).

McCann and Pearlman (1990) explain how individuals working with trauma survivors can experience profound psychological effects in response to their work that can be painful and disruptive, and can persist for months or years. Work with survivors of trauma can produce powerful feelings of vulnerability, loss of control, numbness, and horror. Additionally, it can cause a major shift in the way therapists perceive themselves, others, and the world around them (Trippany, Kress, & Wilcoxon, 2004). According to McCann and Pearlman (1990), these traumatic experiences overtime may alter a therapist's cognitive schema and/or imagery system of memory. Basic core concepts within a therapist's schema can be threatened through this work, including ones sense of safety, trust, power, independence, perception of benevolence, ability for intimacy, and access to a meaningful frame of reference. Caregivers working with trauma may develop disruptions in their imagery systems, which could involve flashbacks, and powerful affective states, as the traumas of their clients become incorporated in their memory system.

In order to help curtail vicarious trauma, it is recommended that therapists find personal and professional support networks that can normalize their responses and provide healthy coping strategies. It is also important for therapists to have an awareness of their own schemas and psychological needs, to process traumatic experience more effectively and limit personal impact (McCann & Pearlman, 1990).

Trippany, Kress, & Wilcoxon, (2004) suggest additional factors for coping with vicarious trauma including, undergoing training on traumatology, maintaining a balance of work, play and rest, and accessing spirituality and a sense of meaning.

Figley (1995) believes therapists can prevent compassion fatigue when they have a high sense of achievement and satisfaction and are able to disengage by creating distance between themselves and their clients. Figley (1995) also recommends self-care strategies such as stress management and self-soothing techniques.

Loewy (2002), a music therapist, discusses a training program for caregivers of trauma survivors to help them cope with their own emotional reactions. This program was implemented after September 11th for both personal and professional caregivers as well as survivors of the attacks and included eight weeks of musical experiential activity. The sessions promoted coping strategies and awareness about communal issues from experiential learning (Lowey, 2002).

Because of the intense physical and emotional responses that arise from survivors of trauma, it is essential for therapists working with this population to engage in their own self-care. It is important to provide care and support for therapists working with trauma victims in order to intercept the potential effects of vicarious trauma.

2.5 Resiliency

Some individuals and communities recover from trauma and are able to cope and return to normal functioning while others experience severe posttraumatic symptoms. Even therapists working with traumatized clients are susceptible to these traumatic responses. Individuals who have the ability to overcome traumatic situations and bounce back, are considered resilient. According to Metzger, (2009) resilience is a multidimensional process, which is demonstrated through persistence over time and adaptive coping strategies that are suited to each traumatic situation. Resiliency is also described as the ability to return to previous levels of functioning before the traumatic exposure with a capacity for positive emotions (Malchiodi, Steele, & Kuban, 2008).

Herman (1992) points out that resiliency factors have less to do with individual personality characteristics and more to do with severity of the traumatic event. The greater the exposure and severity of the traumatic event, the greater the likelihood of posttraumatic symptoms. That said individuals who experience the same level of traumatic exposure are not impacted in the same way because individuals have different levels of resiliency. Studies involving diverse populations showed that resiliency for both adults and children were based on high sociability, an active coping style, and perception of their ability to control their situation (Herman, 1992). Individuals who had strong communication skills and a strong sense of their own internal locus of control have been found to be more resilient in times of hardship. Individuals who already feel disempowered and disconnected from their life are at a higher risk for developing posttraumatic symptoms (Herman, 1992).

The International Resilience Project explores what actions children, parents, and caregivers can do to promote resilience in children (Grotberg, 1997). Three main factors were identified that contribute to resilience, which relate to three mantras: I have, I can, and I am. The first factor is based on what the child has in terms of external supports such as trusting relationships, access to welfare, and stable environments. The second factor is about a child's inner personal strengths such as their self-esteem and autonomy, and the third factor concerns a child's interpersonal skills (Grotberg, 1997).

Environmental factors, named as the first factor above, play a key role in resiliency. Social support and the development of trust is a key protective factor in the aftermath of trauma. Love and support from family and friends is crucial in reestablishing safety and connection (Herman, 1992). The community response is also important and can determine how an individual recovers from a traumatic experience. The community must respond with both recognition and restitution in order to restore justice and order for an individual (Herman, 1992).

Volkan (1999) agrees that the community plays an important role in how trauma is experienced for an individual. He believes that large group rituals within a specific culture can help maintain and strengthen group identity, which can lead to greater resiliency. Instead of focusing on healing traumatized individuals, health workers should develop community-based strategies to create support and belonging and defend against transgenerational trauma (Volkan, 2000).

Hobfoll, Horsey, & Lamaoureux (2009) look specifically at resiliency and risk factors in children who have experienced trauma after community level disasters. According to these researchers, the availability of resources is an important factor,

determining resiliency. Children who had extra teachers, school supplies and health care workers after 9/11 had better outcomes than children without these resources. Other important resources that foster resiliency include, stress-resistance, ego strength and hardiness. It is also critical for children to have strong adult role models in order to overcome their trauma. Caregivers should model flexibility, adaptability, impart values, and show their ability to cope. In addition to loving parents who model adaptive behavior, it is important for children to have a larger network of social support. Within this network, children who know how to engage in their environment by acquiring necessary resources in a time of crisis are more resilient (Hobfoll, Horsey, & Lamaoreux, 2009). When parents encourage their children to maintain a normal routine, children experience fewer posttraumatic symptoms, which again suggests the importance of a strong parental model.

There is not much literature on cross-cultural resilience factors even though researchers agree that context, population, and traditions are all important aspects of resilience. Fu, Leoustakos, & Underwood (In Review) conducted a study using the Connor Davidson Resilience Scale (CD-RISC) to assess resiliency factors in children and adolescents one year after the 2008 earthquake in Sichuan, China. The participants were split into an experimental and control group and included 4,120 males and females ages six to sixteen who were located in post disaster areas. The experimental group was given a psychosocial intervention through a humanitarian organization called Mercy Corps, from July 2008 to July 2009 to reduce risk for PTSD and improve resilience by using play, sports-based activities, and group challenges (Fu, Leoustakos, & Underwood, In Review). The CD-RISC as well as other self-report questionnaires about symptoms of

PTSD and depression were administered. Data was analyzed through exploratory factor analysis and two resilience factors were identified including rational thinking and self-awareness.

Fu, Leoustakos, & Underwood (2009) conducted a second study, which used the same sample and data, to look at the differences between resilience in the control and intervention group. The researchers found that an increase in rational thinking was related to a decrease in PTSD symptoms while an increase in self-awareness was actually related to an increase in PTSD symptoms. The notion of rational thinking is deeply connected with Confucius and Taoist philosophies of cognitive control over one's emotions. Self-awareness, on the other hand is a foreign concept, because the Chinese concept of self is based on community and interdependence. Therefore, increasing self-awareness might have threatened the communal, relational aspects of Chinese culture, which caused an increase in PTSD symptoms (Fu, Leoustakos, & Underwood 2009). The results from the following study demonstrate the importance of cultural awareness in creating interventions. It also suggests the need for strengthening the youth's cognitive problem solving skills, increasing a sense of security, and rebuilding social support to foster community resilience and efficacy, a main ideal within Chinese culture (Fu, Leoustakos, & Underwood 2009).

This research was compared with other studies using the CD-RISC and the fundamental resilience factors that spanned different populations and socio-cultural contexts included tenacity/hardiness, optimism/positive and rational thinking, strength/tolerance of negative affect/adaptability, and spirituality (Fu, Leoustakos &

Underwood, 2009). More research on the relationship between culture and resiliency is needed to provide effective interventions within a cultural framework.

2.5.1 Creativity and Resiliency

Creativity might be an additional factor in determining an individual's resiliency. The literature in this section focuses on the relationship between resilience and creativity or creative thinking for child survivors of trauma.

Art therapist Riley endorses using sensory modalities like drawing, music, and play to heighten the parent child relationship, which is considered to be the most crucial resiliency factor for children who have experienced trauma. These activities reinforce positive bonding and attachment and reprogram maladaptive behaviors. Relying on implicit sensory activities helps children feel safe and powerful in a modality they can understand (Malchiodi, Steele, & Kuban, 2008).

Malchiodi, Steele, & Kuban (2008) describe other creative interventions which promote resiliency in children which promote safety, self-esteem building, positive memories, and enhancing the parent-child relationship. For children ages 3-6, these interventions include, two way scribble drawing, co-creating environments for toys, exploring art materials, and singing songs. With children 7-12 creative resilient strategies include, co-creating a collage of a positive memory or about the child's strengths, and co-creating an invention to solve a problem. These activities create self-empowerment and reinforce attachment (Malchiodi, Steele, & Kuban, 2008).

Metzl (2009) looked at resiliency and creativity as it applied to community level trauma. He conducted a research study after Hurricane Katrina, focusing on the relationship between resilience and creative thinking. This cross-sectional study with

supplementary qualitative data included 80 survivors of Katrina, who responded to measures of perception of adversity, creative thinking, and well-being. They were also asked to fill out a demographic questionnaire and personality inventory, and seventeen of the participants were involved in in-depth interviews (Metzl, 2009). Although creativity was not found to be a predictor of resilience on its own, originality and flexibility, which are subcategories of creativity, were significant predictors of well-being, clinical stress, and life satisfaction for African Americans, but not for European Americans. In the interviews, however, flexibility and originality were central themes for all ethnicities, which suggests their importance for resiliency. Themes of art making were also present which suggests the importance of utilizing art production as a coping mechanism (Metzl, 2009).

Before conducting this research, Metzl & Morrell (2008) explored the theories surrounding creativity and resilience to generate hypotheses about their potential link. Within their article, the authors discuss the benefits of using the creative process to promote resiliency. Creativity offers a non-linear, elastic, nonverbal approach, which builds therapeutic relationships in an abstract language appropriate to all cultures (Metzl & Morrell, 2008). It utilizes imagery and artistic medium to expand the therapeutic relationship and find unique symbolic connections through creative expression. This focus on expressive, artistic explorations can help clients manage complexity and ambiguity and reframe problems using creative solutions, which could promote resiliency. This article presents important theoretical background, which influenced the study examined above, and could also spark other research regarding the link between

creativity and resiliency in different cultures, as well as encourage the investigation of specific creative modalities as they pertain to specific disasters.

Another study conducted by Waaktaar, Christie, Borger, & Torgersen, (2004) further explored resiliency factors in relation to traumatic experience. The researchers created an intervention for children who had experienced trauma and through this intervention facilitated and examined four resiliency factors including, positive peer relations, self-efficacy, creativity, and coherence (Waakataar et al., 2004). Fifty-eight children with a mean age of 12.3 were split into nine treatment groups consisting of four to nine participants. The groups were led by a psychotherapist, artist, and teacher and were centered on the interests of the children including dance, arts and crafts, music, and drama. Although the researchers did not find conclusive evidence of treatment effects, they did notice that the focus on creative activities encouraged the foreign speaking and traumatized youth to express experiences using symbolism and nonverbal communication (Waakataar et al., 2004).

The study conducted by Kipper, Green, & Prorack (2010) examines the relationship between creativity, spontaneity and impulsivity, which further addresses the role of creativity in therapeutic intervention. In this correlational study, 117 undergraduate and graduate students were given three measures to test the aforementioned traits. As expected, spontaneity was positively correlated with creativity, which supports the underlying theory of drama therapy, which focuses on this fundamental link. Therapists can incorporate these findings into their practice by encouraging creative problem solving, self-reflection, and helping guide spontaneous behaviors through increased impulse management (Kipper et al., 2010).

More research is needed on the combination of resiliency factors, and the role of creativity in reducing symptoms and increasing coping mechanisms within a given clinical context.

2.5.2 Posttraumatic Growth

Some researchers have suggested that individuals who have experienced traumatic events, beyond demonstrating resiliency and return to normal functioning, may in fact demonstrate personal growth. For children, posttraumatic growth can involve increased psychological and emotional maturity compared to peers, a deeper understanding and appreciation of life, greater empathy, increased resiliency, and a greater value on interpersonal relationships (Tedeschi & Calhoun 2004; Ungerledier, 2003).

Although not all children will experience posttraumatic growth, certain activities and interventions can promote coping skills and help children identify resources, which creates the potential for growth. Malchiodi, Steele, and Kuban (2008), suggest using creative activities like creating a collage about times of power and powerlessness, or creating a personal power shield using descriptive words about what causes feelings of power and strength. These researchers also suggest creating a photo collage of the child's support group to help the child recall positive memories and identify resources. With younger children, the butterfly life cycle activity can be utilized in which children create butterflies and caterpillars and the adults tell the story of a caterpillar becoming a butterfly to help children understand how things can change after a crisis (Malchiodi et al., 2008). These activities demonstrate a few ways to foster posttraumatic growth in children after a traumatic experience.

Other researchers looked at posttraumatic growth specifically in the aftermath of community level disasters. Cryder, Kilmer, Tedeschi, & Calhoun, (2006) conducted an exploratory study to examine posttraumatic growth (PTG) in child survivors of Hurricane Floyd. The researchers distributed measures to 46 children ages 6 to 15 to test their competency beliefs, ruminative thinking, PTG, and level of social support. The researchers found positive correlations between competency beliefs and social support which suggests the importance of supportive family and friends who provide validation, and encourage self-expression to increase a child's competency beliefs. The findings also indicate that beliefs about competency were related to PTG, which is consistent with the research on resiliency (Cryder et al., 2006). Children first need positive expectations and beliefs about their future, to achieve resiliency and master their traumatic circumstances, and then with these competency beliefs in place, they could begin to experience posttraumatic growth.

Karanci & Acartuk (2005) looked at factors contributing to posttraumatic growth for survivors of the Marmara Earthquake in 1999. They collected data 4.5 years after the earthquake from 200 survivors, 100 of which were volunteers at a neighborhood disaster organization. The researchers used a questionnaire to examine coping strategies, severity of experience, psychological distress, perceived social support, and stress related growth for both the volunteer and non-volunteer survivors. They found that using problem solving/optimistic and fatalistic coping strategies as well as being a disaster volunteer significantly predicted posttraumatic growth (Karanci & Acartuk, 2005). This suggests a powerful relationship between helpers and those being helped, in which moving from a

victim role to that of a volunteer could increase someone's potential for posttraumatic growth.

2.6 Community Level Trauma

2.6.1 Overview of Community Level Trauma

This section will provide a deeper understanding of the way community level trauma affects individuals and communities around the world. For the purposes of this study community level disasters will only include events that occur within a discrete amount of time and cause devastating impact on the community. This excludes war, torture, abuse, and other forms of trauma that either occur repeatedly or are specific to an individual. In the past 20 years, the number of natural disasters across the globe has doubled, and man made-disasters such as terrorism have been rapidly increasing in number worldwide (Trends in natural disasters, (2005), National Counterterrorism Center (2010). Natural disasters include tsunamis, earthquakes, floods, tornados, fires and hurricanes and man made disasters include terrorist attacks, shootings, and bombings.

According to Raphael (1986), author of *When Disasters Strike*, disasters are overwhelming events or circumstances that challenge the healthy adaptive responses of communities and individuals. They lead to devastating destruction and disruption of life on both the individual and community level. It can occur in a matter of seconds or take years, but the effects can last a lifetime. Norwood and Ursano (2003) describe three categories of disasters, “1) natural disasters described as acts of God, 2) technological accidents resulting from human error, and 3) intentional human acts such as terrorism” (p. 37-38). There is controversy over which of these categories evoke the most severe

mental health problems. Additional factors, which predict mental health outcomes, include preexisting symptoms of the affected population, individual vulnerability, resiliency factors, other life events, and coping strategies. No matter what factors are examined, the mental health response follows a certain model of stages including the honeymoon phase, disillusionment, and eventually equilibrium.

Raphael (1986) further explains what occurs in the aftermath of these terrifying events. When there is no warning of a disaster ahead, shock predominates along with feelings of fear and numbness and intense arousal. Later feelings include a sense of helplessness, abandonment, and disbelief. In order to cope with all these negative emotions, individuals and communities strive to create attachment with others and find group belonging (Raphael, 1986).

It might be difficult to find community bonding, when outside help arrives, because each individual helper brings his or her own subjective experience of the disaster. Cultural differences might arise that hinder the ability to connect with the victims on a deeper empathetic level. Raphael warns the helpers that they may become victims themselves when working with such a vulnerable population (Raphael, 1986).

2.6.2 Community Level Trauma and Children: Effects and Interventions

The following studies explore the impact of community disasters on children in various locations in the United States. It is important to distinguish traumatized children from traumatized adults because children's defenses and coping skills are underdeveloped and inherently less effective than adults. This leads to a greater risk of vulnerability, and a shift in their perceptions of the world around them. Trauma disrupts the developmental process, which affects their ability to trust, sense of safety, self-

esteem, and interpersonal relationships (Ursano & Norwood, 2003). It can also be difficult for children to find connection and community because during mass trauma, the perception and reality of their web of resources, which provides familial and cultural safety has been shattered (Hobfoll, Horsey & Lamoureux, 2009). This notion that one's parents and the overall community create a safe protective environment is known as the protective shield. After a community disaster, it is hard for children to continue to trust this shield, which normally provides safety and security.

The studies below address how children are affected by community level disasters, and what symptoms appear after their exposure to these events. The literature will show that community disasters lead to a variety of symptoms in children involving manifestations of PTSD, trait anxiety, and somatic symptoms. The reviewed studies will also describe some interventions that have been utilized with child survivors of disasters.

Lonigan et al. (1994) conducted a cross-sectional study after Hurricane Hugo, examining the effect of exposure variables on PTSD symptoms in child survivors. Three months after the hurricane, researchers surveyed 5,687 school age children about their experiences of the disaster and administered the PTSD reaction index (Lonigan et al., 1994). The findings revealed that although increased exposure was positively correlated with PTSD symptoms, level of trait anxiety and immediate emotional reaction were the strongest predictors of PTSD. This suggests a need for psychological intervention that identifies children at risk for anxiety and negative emotions in order to minimize those predictive factors (Lonigan et al., 1994).

Some researchers have attempted to identify these traits in populations before the disaster strikes. Researchers Weems et al. (2007) are one of few who conducted a

quantitative prediction study with 52 youths that explored the relationship between child trait anxiety before Hurricane Katrina, and post traumatic and generalized anxiety disorder symptoms after the storm. The researchers measured symptoms of PTSD, depression, anxiety, and affect, 17 months before the storm and then conducted phone interviews, and sent out surveys after the storm to assess level of exposure and symptoms of PTSD and anxiety (Weems et al., 2007). The researchers found that trait anxiety predicted post-traumatic symptoms after Katrina, and also found that children, especially girls with negative affect are at risk for developing PTSD symptoms after a disaster. Being aware of these predictive traits and gender differences helps the therapist make informed decisions about targeting the most vulnerable children with specialized interventions. A focus on anxiety reduction may be particularly useful given that predisaster trait anxiety predicts PTS and anxiety related symptoms (Weems et al., 2007).

Researchers Hensley & Varela (2008) also explored the impact of Hurricane Katrina using a quantitative prediction design to study the relationships between trait anxiety, PTSD, somatic complaints and anxiety sensitivity. They surveyed 302 sixth and seventh grade students living in New Orleans five to eight months after the storm. Their results showed that level of exposure, trait anxiety and anxiety sensitivity were all predictors of somatic and PTSD symptoms. Anxiety about social experiences was positively correlated with somatic symptoms, which Hensley & Varela (2008) suggest may be related to the somatic changes the sixth and seventh graders were experiencing as a result of puberty. This suggests the need for interventions that address body image as it relates to somatic complaints and trait anxiety after natural disasters (Hensley & Varela, 2008).

All the studies described above rely on observational data after a specific natural disaster. Cain, Plummer, Fisher, & Bankston, (2010) conducted an experimental study using a treatment intervention called Psychological First Aid with children displaced by Katrina. This program was based on five principles, including safety, calm, efficacy, connectedness, and hope, which teaches children relaxation techniques using art and imagery, and helps them connect to their community. The program was implemented 20 months after Katrina with 99 children ages 5 to 15 and lasted for six weeks. The researchers used a pre-post test design to measure PTSD symptoms and analyze coping strategies. They found that post intervention scores showed a significant improvement in PTSD symptoms. They also discovered that the majority of the children in the study used distraction as a coping mechanism (Cain et al., 2010).

Man-made disasters, such as the attacks on September 11th, are another example of a community level disaster that had a profound effect on children. Researchers Heyman et al. (2010) examined a full range of mechanisms for coping after September 11th. They conducted a correlational study to measure the effect of event exposure on types of coping, intrinsic religious motivation, and psychological distress. They distributed questionnaires to 642 graduate students living in New York six months after September 11th. The researchers found that event exposure stress was positively correlated with problem-focused coping, and psychological distress. They also discovered that lower levels of psychological distress were related to higher levels of intrinsic religious motivation, which suggests that religion plays an important role in helping survivors of disaster cope (Heyman et al., 2010).

The effects of community disaster can be so profound that children outside of the disaster location can experience PTSD symptoms merely from viewing these horrific events. Holmes, Creswell, & O'Connor (2007) researched this phenomenon by investigating the effects of September 11th on London school children who had viewed these events on television. In this quantitative study, 76 children ages 10-11 were given questionnaires regarding their level of exposure, posttraumatic stress symptoms, and intrusive imagery at two months and six months after witnessing the attack. After six months, only a small minority of the children still reported posttraumatic stress symptoms. When intrusive imagery combined with experience of the threat, traumatic stress symptoms persisted for 6 months (Holmes et al., 2007). These findings suggest that visual/intrusive imagery can have a large impact on children and can lead to PTSD symptoms. Future research could explore how the power of imagery could be utilized in a therapeutic way to promote resilience.

2.6.3 Community Level Trauma Globally

Comparing the research on the effects of community level disasters within the U.S, to disasters in foreign countries, expands the scope of the phenomena and provides insight on the role of culture. Researchers (Tol et al., 2011) conducted a meta-analysis of child and adult interventions in humanitarian settings after disasters within a variety of cultures. A meta-analysis of four Randomized Controlled Trials (RCTs) for children exposed to mass trauma showed that symptoms of anxiety and depression were greatly improved after psychological interventions including group interpersonal psychotherapy, school-based interventions, and meetings with parents (Tol et al., 2011).

Elski & Braun (2009) conducted a quasi-experimental study to examine the effects of cognitive behavioral therapy (CBT) on children with PTSD symptoms and depression who had survived the 1999 earthquake in Istanbul. One month after the earthquake, they implemented CBT with 74 students who had PTSD. After the therapeutic intervention, many students still experienced anxiety but only 14 met the full criteria for PTSD. This demonstrates the significance of CBT in treating children after natural disasters but more research is needed to uncover factors that contribute to resiliency (Elski & Braun, 2009).

In addition to CBT, school based intervention programs are useful in helping reduce PTSD in children exposed to disaster. After a tsunami devastated the southern coast of Sri Lanka in 2004, Berger & Gelkopf (2009) conducted a quasi-experimental study to evaluate the efficacy of a school based intervention aimed at decreasing symptoms of stress and PTSD after the disaster. One hundred and sixty six student survivors of the tsunami ages 9-15 were randomly assigned to either the control group or 12-session program called Erase Stress Sri Lanka (ES-SL). The intervention included a wide variety of techniques and therapies including art therapy, story-telling, meditative practices, development of cognitive behavioral skills, and home assignments, which encouraged the involvement of the caregivers. These particular methods were chosen based on an awareness and understanding of Sri Lankan culture. The results indicate that symptoms of PTSD, stress, and somatic complaints were greatly improved in the ES-SL group compared to the control group (Berger & Gelkopf, 2009). These findings suggest that universal interventions can be successful through school-based programs but the researchers also recognize that some students with more severe symptoms may need

specialized interventions. Constructing psychosocial programs, based on cultural awareness is also crucial in addressing the particular needs of the children within a community.

The children in China also experienced symptoms of PTSD along with anxiety and depression after the 2008 Wenchuan earthquake. In a cross-sectional study, researchers Fan, Zhang, Yang, Mo, & Liu (2011) examined the effects of the earthquake among 2,250 adolescents six months after the disaster. They found that 15.8 % experienced PTSD, 40.5 % had symptoms of anxiety and 24.5 % of the participants reported symptoms of depression. The results also showed that children living in urban areas were less likely to develop psychological symptoms, while children who had experienced loss or injury of a family member were more likely to develop them (Fan et al., 2011). Future research is needed to examine more specific socio-cultural factors that can lead to culturally sensitive interventions for children in different communities.

2.7 Creative Arts Therapy and Community Level Trauma

The following literature explores how the creative art therapies can help child survivors of community level trauma. Art, music, dance, and drama therapy are discussed in terms of their healing potential for child victims of trauma. Johnson (1987) suggests that the creative arts allow traumatized children to express their feelings nonverbally which provides a non-threatening way to process and cope with their experiences. Because traumatic memories may be stored through a visual process, art therapy can specifically help children gain access to these images. The artwork provides distance from the patient to help them express their trauma in a safe media (Johnson, 1987). The

creative arts offers a “transitional space of the artwork, music, role-play, or poetry” (p. 11) that allows the therapist and client to create a safe space to express feelings. The trauma can become disowned in this space that is also controlled within these creative forms. The creative arts create an abstract external structure to re-work the experience both directly and indirectly.

Art therapy has been utilized specifically in response to natural disasters. Orr (2007) conducted a content analysis, which reviewed 31 communications that focused on art intervention with children after experiencing a disaster. These consisted of television shows, news and journal articles, books, and interviews. From these communications, the researcher analyzed the data and identified a variety of patterns and themes (Orr, 2007). The art interventions varied; some encouraged free choice, while others utilized structured craft activities, but in each context the therapist had to be resilient, compassionate, courageous, and inventive. The researcher concluded that semi-structured art interventions were helpful to children after disaster, but more research needs to be done to further evaluate its effects (Orr, 2007).

Although there are only a few research articles showing effectiveness, some programs across the globe are still using art therapy as a protective intervention after natural disasters. In 2004, after the tsunami in Asia, Kaiff (1973) developed a sand play program for preschoolers to help them deal with their trauma using creative expression (Lacroix et al., 2007). Creative interventions using art have also been utilized in the aftermath of September 11th to help children cope. The Children’s Museum of the arts in SoHo New York created an outreach program called Operation Healing, in which art

therapists and art therapy student's facilitated art making sessions to help children exposed to September 11th process the traumatic events (Gonzalez-Dolginko, 2011).

Music therapy has also been utilized in response to community level disasters, however there is not much research on using this therapeutic approach in this context. After the Sichuan Earthquake in China, a music therapy program was implemented for three months (Shih, 2011). This was a stabilization-oriented program, which involved stabilizing survivor's psychological states to mobilize inner resources. There were three different approaches within the program, which included a community orientation approach, small groups, and a hybrid sub community approach. The researchers found that in the community oriented approach the music therapy interventions did stabilize the psychological state of survivors as well as reduce the number of interpersonal conflicts in the community (Shih, 2011). In the hybrid sub community approach, the therapists utilized drum circles, which led to group support through shared rhythm. Within the small group, therapists designed activities based on guided imagery and relaxation techniques, which increased positive thinking and overall feelings of relaxation (Shih, 2011). These outcomes suggest the importance of music therapy in helping survivors of disaster recover from trauma.

Drama therapy and psychodrama are another creative art therapy technique, which has yet to be researched in depth as a method for healing community level trauma. Altinay (2003) describes some interventions, which utilize psychodrama in the aftermath of the earthquake in Istanbul. The psychodrama interventions were implemented one month after the earthquake and consisted of five steps, including understanding their fear of earthquakes, clarifying the irrationality of the fear, identifying associated feelings with

the fear, discovering connections between their perception of the world and significant people in their lives, and exploring ways to alter their irrational fears and feelings. To accomplish these steps, the therapists used a variety of techniques including role-reversals, re-enactments, group sharing, and symbolism. The psychodrama sessions allowed unconscious material to surface and relieved symptoms of fear, anger, and desperation in many survivors (Altinay, 2003).

2.7.1 Creative Interventions with Children Following War-Trauma

Although the researcher's definition of community trauma does not include war because these events do not occur in a discrete amount of time, it is constructive to review some of the literature of use of creative arts for survivors of war trauma, which can apply to community trauma as well.

In northern Uganda, a Randomized Controlled Trial (RCT) of a school-based intervention using music, drama, movement, and art showed improvements in resilience for children ages 7-12 (Tol et. al, 2011).

Art activities were utilized by the Center for Grieving Children's program set up for children who had experienced war related trauma. This program focused on creating safety and building trust to enable creativity, socialization and safe play. In addition to art, the children engaged in spontaneous movement, imagery, music, and verbalization to process their experiences. (St. Thomas & Johnson, 2007)

Graham (2005) presents a content analysis pilot research study exploring the benefits of art therapy after war trauma. This master's thesis examined artwork created by child survivors of war through out the world. One hundred pieces of art were used and collected from a variety of wars from 1938 to 2004. Three raters marked for seven

categories of content present in the artwork, including emotions, war paraphernalia, buildings/structure, nature, animals and people (Graham, 2005). The researcher found that 70% of artwork included people and over half included war paraphernalia. This indicates that children might depict violence in their artwork because of their violent war experiences and also provides support for art therapy as potential therapeutic intervention.

Music and movement were also utilized in an intervention to help children in Israel who were experiencing war-related trauma. In Sderot, a small village in Israel, an art therapist, Shachar Bar developed a song and movement ritual to help children overcome the trauma of constant rocket fires from Gaza (HaLevi, 2008). This song normalized and acknowledged the stress responses by encouraging the children to feel their heart race and then use breath to calm themselves down. The song also provided safety instructions about what to do during a rocket fire, so that the children were prepared and it eased their frozen and numb responses. Movements accompanied the song to help the children embody a feeling of safety and understanding, and seeing the other children participating in this same ritual fostered a sense of community belonging. The words of the song also helped the children master their traumatic experience by recounting it through a narrative in which the child survived (HaLevi, 2008).

2.7.2 Dance and Movement and Community Level Disaster

Although dance therapy has been utilized after a variety of traumas, there is little research on the effectiveness of this approach in the aftermath of community level disasters. There is research regarding the use of DMT after war traumas as seen above, but for the purposes of this study, war does not qualify as a community level disaster.

Although there is no research, which utilizes DMT after disasters, expressive/creative movement and techniques from DMT have been utilized to support community level trauma in a variety of ways. There are many relief organizations that provide creative services cross-culturally to youth after disasters.

These organizations help children across the globe through various arts based recovery models that utilize dance, music, visual art, play therapy, sports activities and other forms of creative expression. There is minimal research on the effectiveness of these programs. The following programs listed are just a few of the many programs utilizing creative approaches that involve movement and dance for child survivors of community level disasters. These include, BuildaBridge, Indigenous pitch, Kidsmart, Art Reach Foundation, UNICEF, Save the Children, Louisiana Spirit, the Red Cross, Mercy Corps, Rainbow Dance, and ART on wheels.

There is reason to believe that using dance/movement therapy interventions in community level disasters with children could be a helpful and important component of their recovery. These activities can help trauma survivors connect to their body, support creativity and resilience, and establish community rituals, which help people reconnect after the losses from community disaster. This thesis explores the potential value of interventions with movement and dance, which are not widely described currently in the professional literature.

CHAPTER 3: METHODOLOGY

3.1 Design of the Study

This is a descriptive study that involved an interview based survey. The researcher interviewed adults who had been engaged in dance and movement arts based work with children who had experienced community level trauma. The study describes the nature of dance and movement work that has been used to support children in the aftermath of community level disaster. Purposive sampling was employed to recruit a range of participants from different disaster situations and practice orientations, and included creative art therapists, teachers, dancers and other youth workers. The researcher aggregated and summarized the responses to interview questions based on variant and common responses and identified themes that crossed questions, in order to describe the nature of this work.

3.2 Location of the Study

The study was conducted over the phone or Skype from the researcher's apartment in Center City Philadelphia. The participant spoke from a location of his or her choosing.

3.3 Time Period for Study

The period of time for this study followed IRB approval on December 21st 2011. The interviews were conducted from January 23rd to March 29th, 2012 and data analysis was conducted from April 3rd to April 17th.

3.4 Enrollment Information

The researcher recruited 10 participants. The participant age range was 23-55 years old. There were no exclusions based on race, ethnicity, sex, or gender.

3.5 Participant Type

The participants were a non-clinical population. The recruitment pool included individuals who have worked with children in the aftermath of after community level disasters in some capacity, whether it be through their personal practice, through relief organizations, creative based therapy programs, or other arts based programs.

3.6 Participant Source

The participants came from the community at large with an interest in recruiting participants from a variety of work and disaster contexts. The researcher used purposive sampling. The source for volunteers were referred by professional contacts of the investigators, public list servers, professional/organizational websites, publications, conference brochures, and organizations involved in related work.

3.7 Recruitment

The researcher recruited 10 participants who met the criteria for this study. The recruitment employed purposive sampling. The researcher identified prospective participants through referral by personal and professional contacts of the investigators, public listservs, professional/organizational websites, publications, and conference brochures. The researcher contacted prospective individuals as they were identified

through a recruitment e-mail (Appendix A: E-mail Recruitment Script). The researcher also e-mailed organizations involved in related work to request e-mail contact information for someone in the organization who may be willing and interested in participating in the study (Appendix C: Organizational Recruitment E-mail).

When gathering prospective participants, the researcher favored diversity of disaster and a range of background work experience. The researcher initiated recruitment contact in the order in which prospective participants were identified. However, as participants were enrolled, the researcher used purposive sampling by initiating subsequent recruitment contact on the basis of diversifying the representation of background work experience and disaster event. If there was more than one prospective participant identified within a specific disaster, the researcher contacted the first participant identified and continued the selection process to maximize diversity of disaster. If there was more than one prospective participant identified with similar work experience, the researcher contacted the first participant identified. If the researcher was unable to identify prospective participants with a broader range of disaster experience and expertise, the researcher would contact the prospective participants who were originally eliminated.

The researcher contacted 10 people that are identified as prospective participants based on the recruitment procedure described above. The researcher initially contacted each prospective participant through a study specific e-mail address:

DancedisasterStudy@gmail.com to briefly describe the study and to inquire about interest in study participation (Appendix A: E-mail Recruitment Script). Phone contacts were made in the order in which the prospective participants replied to the initial e-mail. If

interested, the prospective participant was asked to return contact via e-mail with communication about schedule availability for an informational phone contact and a phone number or Skype address. The researcher confirmed a schedule for the follow-up phone or Skype contact and attached the interview guide (Appendix D: Interview Guide) via e-mail. The researcher then called each participant at the arranged time to provide further information about the study, answer questions, review participant rights, and determine their interest and eligibility for participation (Appendix B: Phone Recruitment Script). If the prospective participant was eligible and willing to participate, they were enrolled and the researcher proceeded with the interview at that time or arranged another phone or Skype contact for interview purposes. The interviews were 50 minutes in length.

Participants self-selected according to the following criteria:

Participant Inclusion Criteria

1. Individual is between the ages of 22-75
2. Individual must have worked with youth in the aftermath of at least one community level disaster
3. Individual has used movement and dance as part of their work with these youth
4. Individual is able to speak and comprehend English

Participant Exclusion Criteria

1. Individuals who identify that they are experiencing post traumatic disturbances, after personal exposure to community level disasters that cause significant distress or social/occupational impairment.

2. Individuals who have only worked with adults after community disasters
3. Individuals who are unreachable by phone or e-mail.

3.8 Investigational Methods and Procedures

3.8.1 Phone/Skype Interview (50 minutes)

Following recruitment, the researcher engaged in the interview procedure. The interview was guided by an Interview Guide (Appendix D: Interview Guide) designed by the researcher, which the participant had the opportunity to review beforehand. The interview included basic demographic questions about the participant and the context of the work, followed by closed and open ended questions that focused on the participant's experiences working with youth after community level disasters. Questions included the nature of the children's issues, goals of the work, movement and dance methods employed, and perceptions about how their work supported the children with whom they worked. The interview was a responsive process, which allowed for follow-up questions and elaboration of responses (Interview Guide Appendix D).

3.8.2 Data Collection

The researcher recorded the names, e-mail addresses, and phone numbers or Skype addresses, of prospective participants for recruitment purposes in order to make contact to disclose study information and conduct the interview. This information was kept in a record separate from the phone or Skype interviews. Interviews were audio recorded and transcribed.

3.8.3 Data Storage

Audio recorded and transcribed data was stored with a participant identification code number and stored without identifying information. A record linking personal information (participant name, e-mail address, phone number or Skype address) with the participant code was stored separately from the data. This information, as well as the participant contact information/code record, was shredded following data analysis. Digital audio recordings were deleted once transcribed. Interview transcripts were stored on a cd in a locked file cabinet in the Department of Creative Art Therapies. Any presentations or publications that resulted from the study will not include identifying information.

3.8.4 Data Analysis

The researcher aggregated and summarized the responses to interview questions in terms of common and variant responses. The researcher also coded the interview data to identify patterns and themes that crossed questions for all participants. Themes were also identified within a sub-group of creative arts therapists.

3.9 Operational Definitions

3.9.1 Community Level Disaster

For the purposes of this study, community level disasters will include natural disasters, which are uncontrolled by humans, and have a direct and devastating impact on a given community, as in the case of earthquakes, hurricanes, and tsunamis. Community level disasters will also include human vindicated trauma, created by humans to harm humans, which occurs within a discrete amount of time and causes community level

devastation, such as the 9/11 terrorist attacks or a school shooting. War trauma and disease do not meet the criteria for the definition of community level disaster and thus will be excluded from the study.

3.9.2 Posttraumatic Stress Disorder (PTSD)

As a result of these extreme traumas, children may develop PTSD, which is defined in the studies using the *DSM IV-TR* criterion. According to the American Psychiatric Association (*DSM-IV-TR*), PTSD can occur after a person is exposed to an extremely traumatic event, in which the person experiences intense fear, helplessness, or loss (2000). After the traumatic incident, individuals with PTSD may re-experience the event through recurrent and intrusive thoughts, memories, images, perceptions, flashbacks, hallucinations, and dissociative episodes. In addition, PTSD involves avoidance of traumatic stimuli, overall feelings of numbness, and hyper-arousal. In children, these symptoms can manifest through frightening dreams, repetitive play which includes traumatic themes, and disorganized or agitated behavior (American Psychiatric Association, [*DSM-IV-TR*], 2000). Without proper treatment, PTSD can persist for many years, causing severe emotional and cognitive impairments in functioning (Fan et al., 2011).

3.9.3 Creativity

For the purposes of this study creativity is defined as the ability to create something new, think originally to solve problems and adapt to situations, and access a flow state, which promotes growth and enhances a person's well being (Metzl, 2009).

3.9.4 Movement and Dance

Movement and dance are bodily forms of creative expression that occur in both individual and/or group settings. They manifest through improvisation, choreographic structures and styles, and indigenous dance rituals. These movements occur on a physical level and involve rhythmic activity and can also be a form of nonverbal communication.

3.10 Possible Risks and Discomforts to Subjects

The overall risks to the participants were minimal. It is possible that the participants were reminded of a difficult child, or a challenging, frustrating, or depressing experience because of their work with this fragile population and traumatic context. There was risk of loss of anonymity because professionals within the creative art therapies, who may review this study, are knowledgeable about who is doing global work and where that work takes place; readers of any study related publication might have guessed that a particular therapist was a study participant.

3.11 Special Precautions to Minimize Risks or Hazards

To minimize discomfort and potential risk, the participants were reminded that they had the right of refusal if a question is too difficult or brings back painful memories. They were also informed of the purpose of the study and had the opportunity to review questions ahead of the interview.

Participants were not identified by name or other identifying information. Participant names and contact information were kept in a record separate from the audio recorded interviews. The information was redacted immediately following the interview

with a black marker. Audio recorded and transcribed data was stored with a participant identification code number and stored without identifying information.

A safeguard against the remaining risk of loss of anonymity was that data was aggregated. The risk associated with a possible loss of anonymity was minimal as questions were not of a personal nature.

CHAPTER 4: RESULTS

The findings of this study provided information about individuals' experiences using movement and dance in the aftermath of community level disasters. Ten individuals participated in the interviews conducted by the researcher. The interview responses were aggregated and summarized according to common and variant responses for each question. The interview was conducted in three sections including personal demographics, context of disaster work, and nature of the dance/movement support. The responses to the demographics and context of disaster work are offered in narrative summary and the section on dance/movement support is presented in both narrative and table formats. Additionally, the researcher identified emerging themes that crossed interview questions. These themes included: breath, play, sustainability, flexibility, and culture as comfort. The researcher created a sub-group of creative arts therapists and identified three additional themes; structure, hope, and attune to the child's needs.

4. 1. Personal Demographics

The first section of the interview gathered background information about the participants. This information included: age of participant, gender, race/ethnicity, occupation, credentials, contexts in which they had used movement and dance, and years of experience. The participants in this study were all female and seven of which identified as Caucasian. Two participants identified as Latin American, and one identified as Asian American. The participant pool consisted of four music therapists, one dance therapist, one dance teacher, one dancer, one doctoral student in physical therapy, and two consultants. Five of these participants were creative arts therapists and eight of these

participants had training in psychology and trauma. All of the participants had a Bachelor's degree and eight out of the ten participants had additional higher degrees of education. Many of the participants noted that they had studied dance as a child and adult and were familiar with different types of dance forms. The participant's ages ranged from 23 to 55. The mean age was 42. Years of experience with disaster work ranged from no experience to 14 years. Eight of the participants directly led sessions with children and two of the participants worked with children indirectly by managing programs that utilized movement and dance with children after community level disasters.

4.2. Context of Disaster

The following disasters were discussed in the interviews; the Sichuan earthquake in China in 2008, Hurricane Katrina in New Orleans in 2005, the Columbian floods in 2011, the earthquake in Chile in 2010, the earthquake in Haiti in 2010, the tornados in Joplin Missouri in 2010, the flood in Indonesia in 2010, the southwest fires in 2011, the shooting in Tucson Arizona in 2011, the terrorist attacks of 9/11, and the tsunami in Japan in 2011. The time spent at the disaster site ranged considerably from 5 days to 2 years. Some participants provided support services through organizations such as Mercy Corp, the Red Cross, Indigenous Pitch, Louisiana Spirit, Kidsmart, and Cultura en los Alverges (culture in the shelters, under the culture ministry of Columbia), while other participants provided personal services unrelated to a larger organization. All participants worked with children and youth between ages 2 to 22 and the sessions varied in length between 15 minutes and 2 hours. The number of children within a session greatly depended upon the location of the disaster site. For example, in China sessions included

anywhere from 30-70 children and in Haiti the groups reached 100 children. In other locations such as Chile and Joplin Missouri, the average number of children in a session was about 15. The proportion of movement that was utilized within a session ranged from 1/3 to the entire length of the session. Many participants utilized other creative modalities along with movement, which included poetry, puppets, performance art, songs and instruments, storytelling, spoken word, drawings, and masks.

4.3 Nature of Dance and Movement Support: Table Format

Table 1

Aggregation of Open Ended Questions during Interview Section 3

Question	Response
Q. 3a. How did you begin?	<p><u>Common Responses:</u> Name games (2)</p> <p><u>Variation Responses:</u> “See where the need is”</p>
Q. 3b. Did you give to attention creating safety and trust with the youth?	<p><u>Common Responses:</u> Provide an Introduction (2) “We would introduce ourselves. We were music therapists there to spend time when them, show them activities and musical instruments. We talked to them as equals.” Using a safe and familiar neighborhood location (3), “These kids look at this place as a place of safety because its in their neighborhood.” Psychoeducation for parents and community (2)</p>

Question	Response
<p>Q. 3c. Describe a typical session or a particularly meaningful session</p>	<p><u>Variant Responses</u> Music as a container Eye contact- “I want to see their face, I want to make eye contact and that builds trust” Listen and ask questions Relaxation techniques Reassure confidentiality Create individual roles</p>
	<p><u>Common Responses</u> Gathering in a circle (3) “I made it into a circle. There are no angles. There are no cliques. There are no sides. Everybody is one.” Creating a performance (3) “The other members would come and watch. It was a very powerful experience because it gave them another powerful connection to their home and sense of pride.” Accessing rhythmic structures (2) Connecting music and movement (3)</p>
<p>Q. 3d. Did you use any movement rituals within the sessions? Can you give an example?</p>	<p><u>Variant Responses</u> Staying hidden and low to the ground Taking on new perspectives Dramatic play “Give the kids a great deal of freedom”</p> <p><u>Common Responses:</u> Rituals emerge from the group characteristics (3) “They were negotiated with the children. I didn’t impose on them.” Breathing to begin and end sessions (3) “I would start every session by calming their breathing. Then we would end on the same note.” Stretching (2) Warm ups (2) Energize with movement (2)</p>

Question	Response
<p>Q. 3e. What were some common issues or symptoms that the children presented with?</p>	<p><u>Variant Responses:</u> Be present Help children feel grounded</p> <p><u>Common Responses:</u> Fear (3) Sense of abandonment (3) Anxiety (3) Physical fights (2) Withdrawn (2) Regression (2) “Manifests through clinging, bed-wetting, whining and crying.” Hyper arousal (2) Distraction (2)</p>
<p>Q 3f. How did you perceive that the movement and dance supported the participants?</p>	<p><u>Variant Responses:</u> Need to regain cultural identity Lack of personal space Role play with themes of disaster Affect dysregulation Numb Body aching</p> <p><u>Common Responses:</u> “Let them have a minute to be kids again” (2) Physical need to animate and get blood flowing (2) Allow the children to speak through movement (2) “Kids will talk through their actions, not their words.” Allowed for creative expression (2)</p> <p><u>Variant Responses:</u> Created healthier movement vocabulary. “They were more animated. I saw more core support. They went from skinning to rising.” Gave safe place to be with self and other Movement made the children present “Kids need play”</p>

Question	Response
Q 3g. Did you intentionally support coping skills? How?	<p><u>Common Responses:</u> Using breath and relaxation (4) Be present and listen to their stories (2) Psychoeducation (2) Rebuilding community supports (3)</p> <p><u>Variant Responses:</u> Symbolism Help people get back into their bodies Emphasize pride in culture Ask questions to help identify resources</p>
Q 3h. What were your goals?	<p><u>Common Responses:</u> Allow for expression (4) Decrease posttraumatic stress symptoms (3) Get children off the streets (2) Increase resiliency (2) Create a safe space (2) Increase affect regulation (2) Recognize strengths (2) Rebuild community (2)</p> <p><u>Variant Responses:</u> Give children the opportunity to play and Learn new movement Bodily release “To let people know that movement all types of art could be healing” Foster independence Provide hope Help children process their experience</p>
Q 3i. What role did culture play in the way in which you worked with movement and dance?	<p><u>Common Responses:</u> Culture plays a significant role (6) Bring in cultural elements into sessions (6) “I don’t go in with a lot of prescribed stuff. I source culture.” Respect the culture (2) “We have to be very sensitive to the needs and beliefs of the town.” Listen and learn (3)</p>

Question	Response
<p>Q 3j. What were your biggest challenges?</p>	<p><u>Variant Responses:</u> Need to understand the culture “Trauma is more universal than we thought” Need to work with community to find what is culturally appropriate Do not impose your own culture Create new joint culture with children and leader of group “It was pretty easy to relate to the people I worked with. A lot of the same tragedies had happened where I lived.”</p> <p><u>Common Responses:</u> The governmental policies (2) “The government is very non trusting of international NGOs so it was difficult to find project sites.” Build credibility (2) “The biggest challenge was to convince people that we could help.” Children were not challenging (2) Language barrier/translating (2) Applying for funding (2)</p>
<p>Q 3k. Did your work change over time? How? Is there anything you would change in how you would work in the future?</p>	<p><u>Variant Responses:</u> “Working in chaotic and frequently changing environments” Having limited time Challenging behaviors in children Staffing Finding equipment Transportation Finding work after returning home</p> <p><u>Common Responses:</u> Building the community (2) “We do have to change our world view and try to connect and build more of a community sense. I think those are the things I would change.”</p>

Question	Response
<p>Q 31. Do you have advice for other youth workers who are interested in using dance and movement in the aftermath of community disasters?</p>	<p><u>Variant Responses:</u> “If I could do it again, I would have activities geared towards having a kind of result so they could keep it for themselves” Research the healing arts “I wish I had stayed in touch” “I wish I would have gotten on board sooner” Making sure others follow-up on your work Foster individuality Created new model “I realized they needed time to be kids”</p> <p><u>Common Responses:</u> Listen (2) Attune to needs of client (2) Keep it simple (2) “My work has become a lot more stupid simple. I learned the value of slowing down and simplifying.” Understand yourself before helping others (2) “be good with yourself first. If you aren’t able to move and connect with your body and meet somebody else in the fame of movement, don’t try it with anybody else.”</p> <p><u>Variant Responses:</u> “Taking them into their communities on to their street was huge.” Be a presence Create sustainability Go with an open mind Follow your instincts Use caution when introducing movement Create a goal towards independence Use support of community Document your experience and research Understand the goal within cultural context</p>

Question	Response
Q 3m. Is there anything else you want to share?	<p><u>Common Responses:</u> This is great and important work (2) Grateful for experience (2) “Being on that hurricane team was one of the best professional experiences of my life.” Self-care and support from team is necessary (2) “Debriefing is important for everyone because the work is stressful and exhausting”. “When working with the physical using the body and movement you yourself need to do that to cleanse. We did African dance for 2 hours a night.”</p> <p><u>Variant Responses:</u> “Its good to learn from similar groups that are working with different populations” Having a great team is crucial Wish to spend more times on site Find out what the needs are first Important to provide support for parents too Training is important Need to think about connection between movement and music</p>

4.4 Nature of Dance and Movement Support: Narrative Summary

The open-ended questions described above inspired a wide variety of responses but also showed some significant shared responses within the questions. At least one shared response was found in each question and many questions had multiple shared responses. Some notable shared responses came from questions 3i, 3h, and 3e, which addressed the cultural aspect, symptoms presented, and therapists’ goals. Six participants identified that culture played a significant role and six also brought in cultural elements into their sessions. In terms of symptoms, a variety were identified, the most popular of

which included fear, anxiety, and abandonment. Participants also had common goals such as allowing for expression and decreasing PTSD. In addition to these questions, there were a number of shared responses for question 3c, which asked participants to describe a typical or meaningful session. Participants mentioned leading the session in a circle and some participants included performance aspects- “The other members would come and watch. It was a very powerful experience because it gave them another powerful connection to their home and sense of pride.” Other participants utilized rhythmic structures and connected music with movement within the sessions. In order to create safety and trust (question 3b), the participants used a familiar location, provided psychoeducation for the parents and community and provided an introduction. One participant described her method of introduction. “We would introduce ourselves. We were music therapists there to spend time when them, show them activities and musical instruments. We talked to them as equals.” Question 3f asked participants how they perceived that the movement and dance supported the youth. Participants noted that the movement allowed for communication through creative expression and also gave the children a chance to energize and “let them be kids again.”

When the participants discussed their biggest challenges in question 3j, they mentioned the difficulties with the system and culture as opposed to challenges with the children. Participants struggled with the language barrier, applying for funding, governmental policies, and building credibility. In question 3k the participants were asked what they would change about their experience and some participants mentioned focusing on rebuilding the community. Within the variant responses there seemed to be an overarching theme of investment in the children and their work such as wishes to get

on board sooner stay in touch and ensure follow-ups. When asked in question 3l, about their advice for other youth workers, the shared responses including listening, attuning to the client, knowing oneself first and keeping it simple. Lastly, the participants were asked in question 3m whether they wished to share any other information and participants commented on the pleasure they received from doing this work. Some commented that they were grateful for their experience and others agreed that the work is great and important. A few participants emphasized the importance of self-care and team support in response to this question.

4.5 Additional Questions Outside of Interview Guide

The responsive nature of the interviews stimulated additional questions outside of the prescribed interview guide. These questions surrounded the themes of change within the children, self-care for the therapist, differences between man-made and natural disasters, and community responses to the relief work. Common responses will be discussed based on the aforementioned themes.

Many participants noted that after introducing movement with the children, they “started to become kids again,” and saw them come alive. One participant remarked that she saw more core support and more rising instead of sinking. Another saw the children in their program “look like normal children, who did not seem to have that shadow across their face.”

When asked about self-care and how to manage one’s own reaction to trauma, many participants emphasized the importance of a having a team and community of support. The participants used many different techniques to process their experiences including dance, playing music, singing, journaling, creating art and talking. “We would

sit together, have some wine, listen and play music ourselves, sing in a fun way, and share feelings about what had happened.” Many discussed the importance of having a space to engage in these self-care activities either individually or with supportive others. Many youth workers had the opportunity to engage in self-care individually, or had group sessions with their team and were able to express their thoughts and feelings. “Every night we would have a space to talk about what happened in the day so having that community, your own community support, no matter what that means was good.” The participants commented that this work was heavy and mentally and physically exhausting, so having a space to interpret and work through personal reactions was crucial.

The participants, who had worked in disaster sites with both human and natural sources, were asked about the differences between natural and human vindicated disasters. They agreed that there is not a large difference because these traumatic events overwhelm the system, and “the reactions in the body and mind manifest themselves the same way no matter the source.” Another participant remarked that “fear comes up no matter whether it is a natural disaster or human.” However there are a few differences that the participants pointed out. One individual noted that in human vindicated disasters there is someone to blame, which made the trauma more understandable. Children after natural disasters reported suicidal ideation whereas children from 9/11 never showed these symptoms. Another participant commented that in man-made disasters “there is tremendous erosion of the basic human bond of safety and trust and that makes that work really challenging.”

Overall, the participants remarked that the community response to their relief work was positive and that they felt supported by the community. Some expressed concerns about building credibility and had difficulty convincing parents to let their children come to sessions. However, once the community saw the impact they had made, they accepted them.

4.6 Emerging Themes from the Interview Process

Before examining themes that crossed questions, it is important to address the nonverbal aspects of the interview, which include the pacing, expression, and tone of voice. The participants sounded excited to describe their experiences and their pace increased as they continued to remember more details. At many points they sounded empathic about their work and their tone suggested confidence and pride. The ease with which they spoke and their willingness to share their experience so fully was indicative of their commitment to their work and their enjoyment in the interview process. They were excited to share their knowledge and seemed to appreciate the space to recount their experience with an active engaged listener. The following themes emerged across the interviews and across the interview questions: breath, play, sustainability, flexibility, and culture as comfort.

4.6.1 Breath

Breath was an emerging theme through out the interviews that crossed questions. Almost every participant mentioned breath at some point in her interview. It was discussed as a technique for relaxation, a means of grounding, a way to access one's body and provide body awareness, and a way to connect and provide coping skills. One participant described her work with breath as helping "people basically get back into their

bodies.” Another participant described breath as a ritual relaxation technique- “I would start every session by calming their breathing.... then we would end on the same note.” One individual used “deep breathing, imagery, and relaxing the body using the senses with touch, hearing, smell, sight and taste.” Using breath also created a simple rhythmic structure, which created unity. Another participant noted that breath is universal because “everyone knows what breath is.” “Working with breath can be both centering, grounding and calming, it can also energize too.” Four participants specifically mentioned using breath to support coping skills. One participant mentioned teaching the children structured breathing activities and having them practice so they could learn how to relieve stress and feel safe whenever they needed. Although no question specifically addressed the use of breath, it became clear that this topic was reflected in many aspects of the participants’ experience.

4.6.2 Play

Play was another theme identified through out the interviews. Many participants emphasized the developmental necessity of play in the child’s world which “let them have a minute to be kids again and feel free.” One participant echoed this idea and stated that “they need time to be kids, they just needed that hand play.” Play seems to allow kids to return to normal because “kids play as their work.... kids will talk through their actions, not their words.” In some cultures, children lack the space for expression and “don’t have time to play. They don’t have structure.” In some sessions the children would act out their stories through dramatic play. For example, “they would create sets and they said I’ll be the house, you be the tree and I’ll be the mom and dad and we will have a baby. Lets pretend its normal life then all of a sudden the earthquake happens and then

they replay what happened during the earthquake.” Some participants pointed out the need to educate parents, community members, and children about the basic needs to play. “Its ok to paly, it’s a scary thing. There were terrible storms, but its ok to play. It’s healthy to do that, and I reassure the parents that it is ok to play.” The kind of play also varied based on the ages of the children-“With the younger kids it’s a little more playful and you are doing sillier things and that was good for them because just two years before they lost their innocence.” Play within movement sessions served a significant role in helping these children express themselves and return to normal.

4.6.3 Sustainability

Creating sustainable relief and relationships with the children and community was a constant reemerging theme. There was a desire and longing for lasting relationships as well as a responsibility to follow-up on treatment over time. Some participants wished that they could have spent more time building relationships and providing support and others wished they “had stayed in touch with them.” “I just wish that I had sent them a letter and stuff like that.” Another participant commented that providing relief one time is “not helping children. That’s taking credit for something.” This individual wanted to “watch them grow up,” and stated that she was committed to this work and these children until she dies. A different participant agreed that “a whole bunch of people go for three months and then disappear so people felt left behind and abandoned.” According to one participant it is unethical to provide relief without “knowing that follow-ups were going to happen.” Another way to create sustainability is to foster independence so that they will continue to “work through their process,” once the youth worker has left. Another option for sustainability is hiring locals to serve as caregivers and group leaders. One

participant noted how important it is for the children to “see that this is someone who lives in my community and will not leave because foreign NGOs are coming and going all the time.” Another participant remarked that its important to continue this work “for at least a year because with trauma there is the first period that you might get stressed and then become happy again but usually after eight months things come back to you again.” In order to build lasting relationships and provide continuing services it is important to think about the issue of sustainability.

4.6.4 Flexibility

Through out the interviews, many participants described the chaotic and novel work environments and emphasized the need for flexibility. One participant described managing the frequently changing number of children in the session. “Children who didn’t attend one session could easily come to the next session or even go to a session on the next day because we were flexible given the circumstances.” Another participant experienced a similar situation-“we said 10 kids and they sent 23 so if was crazy to manage. All the time we kept calm and quiet about what happened.” One individual “responded to things at odd hours of the day and night in the neighborhood,” which made her more available and flexible to the circumstances. Another participant emphasized having patience when transportation and finding funding was difficult. These participants managed these challenging situations adapting to their surrounding and maintaining a flexible attitude.

4.6.5 Be Present/Be A Witness

The notion of being present and serving as a witness for children was an emerging theme that crossed questions. Participants mentioned the importance of sitting “alongside

a child.” It is important to “be with them and be a presence. If they don’t feel like dancing, we will sit with them.” In one situation the presence of a music therapist’s car was enough for the community to “know that someone was thinking about them and worrying about them.” The car was a sign of her presence, which in itself provided relief. Other participants emphasized the importance of letting the children tell their stories in whatever way they needed. The relief workers job was to serve as a witness and listen. “You know I found out I listen. I probably say less then a lot of people. I listen.” In addition to being present in the helping role, the youth workers helped the children focus and remain present in the sessions through rhythmic structured activities. “I incorporated structure in the activity to keep the kids focus in the present.” Another participant stated, “I will draw on movements where I think the kids are getting better contact with being present.” The idea of being present in the moment is important in both roles. The participants utilized these activities to help children be present, which in turn helped them realize the presence of the leader. In addition, the helpers’ presence allowed them to act as a witness in the sessions.

4.6.6 Culture as Comfort

The last emerging theme was the idea of integrating culture to create comfort and safety for the children and community. As seen in the specific responses to question 3i, about cultural impact, six participants agreed that culture played a vital role and six participants admitted to using cultural elements within their sessions. The importance of culture continued to emerge through out many questions. Many participants held sessions in the neighborhood and on the children’s streets to create comfort and familiarity. “Taking them into their communities on to their street was huge.” Another participant

had sessions at the schools, which is “already a location that they are supposed to be and they are all together and it’s a private remote location, and space for them that helped.”

One participant noted that a common theme arose during the sessions regarding the need to regain cultural identity. This participant used cultural songs and movements to help create community and cultural connection. Another participant created comfort by using cultural instruments in her session such as the washboard, zydeco and guiro.

Integrating cultural rituals also helped to create comfort and familiarity. One participant described her process of creating cultural rituals-“ I was trying to resource her. Find basically what was keeping her going and discovered that she cherished the African sun so we came up with a movement sequence that was the rising and falling of the sun.” The participants also mentioned the importance of respecting culture and not imposing their own ideas onto the children. One participant noted, “You really have to get a sense of what the kids need. There are some cultures where touching each other isn’t comfortable...you really have to study about the people you are going to serve...go with an open mind and open heart and very open communication. Just go there and listen and have a humble attitude.” Through out the interviews, participants utilized culture in a variety of ways to build trust and create comfort.

4.7 Emerging Themes from Creative Arts Therapists

After analyzing overall themes from all participants, the researcher identified additional themes from the five creative arts therapists. Within these interviews, the following themes emerged: structure, hope, and attune to child’s needs.

4.7.1 Structure

Participants mentioned the importance of structure, which provided safety and acted as a container for the session. One participant used structure to “keep the kids focused in the present.” Many creative arts therapist specifically mentioned the importance of structure in relation to music and movement. One individual stated, “I do a lot of structure activities to mobilize and energize, to calm down and to stabilize.” Another participant explained that the children are able to “find a structure within the music to create movement.” In this example, the music itself creates the structure. Structure was also utilized with rhythmic activities such as chants and grounding exercises. One participant wished that she had used more structure. “I would try and have more concrete activities for them instead of improvisation. I felt they needed time to make a song together.” Creative arts therapists also used spatial structures such as a circle to create group cohesion. In addition, they mentioned creating a clear beginning and end to the sessions often times through movement and music rituals to create familiar structures.

4.7.2 Hope

The creative arts therapists aimed at instilling hope in the midst of terrible tragedy. For one participant it was important to “help them feel like they had something inside themselves that was going to make it possible for them to go on in whatever they were doing and that they had somewhere else to go. It was about giving them hope.” Another creative arts therapist was “really trying to get them to find a ray of hope and connect” to their community and culture to find meaning. One participant mentioned using psychological first aid, which offers, “a sense of hope provides safety and security

and provides for connectedness.” Another creative arts therapist emphasized the importance of regaining cultural identity. “After the disaster happens they have this urgent need to feel connected to the rest of their community.” The connection children feel to something larger than themselves gives them hope.

4.7.3 Attune to Child’s Needs

Every creative arts therapist acknowledged the importance of meeting the client where they were and attuning to their needs. One participant remarked, “Your goal is to let them have that moment. They have to get through it in order to let them get where they are going. Let them work through their process.” Another participant encouraged other future youth workers to develop good observation skills, “because children can fall on a continuum.” “I messed up quite a few times by having kids move too fast. One kid was dissociative because they were not able to play at that level or to engage at that level.” It is important to understand the child’s developmental level in order to provide effective therapeutic interventions. One participant noticed that there was a great deal of variation in the session “because it is really about what the need is for the client at that time.” Another creative arts therapist described one of her sessions as a “community itself with their own rituals and routines.” This allowed them “to have more safety to create an environment with trust.” By acknowledging the specific rituals and customs of that group, this therapist created a unique session based on those children’s needs. Another creative art therapist echoed this idea and encouraged youth workers to “go with an open mind and open heart.” This participant believed that “you really have to get a sense of what the kids need. There are some cultures where touching each other is not comfortable and some groups like to be together so you really have to study the people you are going

to serve.” Attuning to the needs of the children allowed these creative arts therapists to build safety and trust while respecting culture and providing the appropriate therapeutic intervention at that time.

CHAPTER 5: DISCUSSION

The purpose of this study was to investigate how movement and dance are being utilized with children in the aftermath of community level disasters. This chapter will discuss the results in the order presented above. Initially the shared responses within questions will be examined, followed by a discussion of the additional questions provoked within the interview process. Then overarching themes from all participants will be explored followed by a discussion of emergent themes from the creative arts therapists. The responses and identified themes will be discussed in relation to the literature. Clinical applications based on this research will also be discussed and this section will include a proposed set of guidelines to help potential youth workers effectively lead sessions in the aftermath of community level disasters. The researcher will also discuss the limitations of the study and implications for future research.

5.1 Evaluation of Shared Responses to Interview Questions

The participants in this study had a number of shared responses to the interview questions, which can be explored in relation to the literature. When asked about goals, the participants agreed that it was important to increase expression and decrease PTSD symptoms. Participants wanted the children to be able to express themselves through creative means. Waakataar et al. (2004) describe how using symbolism and nonverbal communication encouraged the foreign speaking and traumatized youth to express their experiences. The participants noted that expression through movement allowed children to share their experience in a safe and indirect way. In addition to the participants, many researchers, who evaluated the effects of disasters on children, identified PTSD as a

possible symptom (Lonigan, et al., 1994; Weems, et al., 2007; Hensley & Varela, 2008). It is fitting that the participants identified this as an important goal, because it seemed to be a prevalent factor in the studied cases of disaster.

It is also important to point out the similarities and differences of child symptoms discussed in the both the literature and interviews. The most common participant symptom responses included fear, anxiety, and abandonment. Raphael (1986) asserts that disasters involve feelings of helplessness, abandonment, and disbelief. Some researchers pointed out that children who had higher levels of anxiety were more likely to develop PTSD symptoms (Lonigan et al., 1994; Weems et al., 2007; Hensley & Varela, 2008). A meta-analysis of four Randomized Controlled Trials (RCTs) for children exposed to mass trauma also identified anxiety as a major symptom (Tol et al., 2011). It is interesting to note that participants rarely described the children in terms of their somatic symptoms and bodily reaction. This may be because all of the participants, with the exception of the dance/movement therapist, were not body-oriented therapists and had little to no formal training in therapeutic movement practices.

Participants had a surprising number of shared responses to the question regarding a meaningful session. It was expected that this question would have the most varied responses because sessions are unique depending on the population and context. However, although the specific techniques varied considerably, there were common themes within the responses, which related to creating a safe holding environment for the children. One participant used a musical storytelling structure, while one described an improvisation through instruments. Another introduced emotional body statues and others described specific cooperative movement games. Through these variations, many

participants mentioned gathering in a circle, creating a performance, accessing music and movement, and utilizing rhythmic structures. These themes were echoed in the literature when describing techniques for children post disaster. Harris (2007) mentions the importance of performance in order to help the adolescent orphans from Sierra Leone explore their roles of victim and perpetrator. Gray (2008) points out the use of circles in both DMT and Vodou practices, which created a safe container for healing and group expression. After the Sichuan Earthquake in China, therapists utilized drum circles, which led to group support through shared rhythm (Shih, 2011).

5.2 Additional Questions Outside of the Interview Guide

The interviews inspired additional questions outside of the original interview guide, which provided more information about the participants' experiences. The topics of self-care, the differences between natural and human vindicated trauma, and community responses will be discussed in relation to the literature.

Both participants and researchers have identified the importance of self-care when working with traumatized children. The literature specifically discusses the potential for vicarious trauma when dealing with survivors from traumatic experience. The study conducted by Holmes et al. (2007) shows that the effects of community disaster can be so profound that children outside of the disaster location can experience PTSD symptoms merely from viewing these horrific events. Similarly, therapists working with children who experienced these traumatic events can have serious traumatic symptoms. The participants in the study above have described their work as heavy and emotionally challenging and have discussed their feelings of exhaustion.

When asked about how to manage their own reactions to trauma, participants emphasized the importance of self-care and having a network of support. “Every night we would have a space to talk about what happened in the day so having that community, your own community support, no matter what that means was good.” According to McCann & Pearlman (1990), therapists should find personal and professional networks of support to help normalize their responses and provide coping strategies. Participants also discussed how to manage internal reactions when asked to give advice to other youth workers. They stressed understanding the self before helping others- “be good with yourself first. If you aren’t able to move and connect with your body and meet somebody else in the frame of movement, don’t try it with anybody else.” McCann & Pearlman (1990) also discuss the importance of knowing ones own schema and psychological needs, to process traumatic experience more affectively. Loewy (2002) uses musical experientials for survivors and caregivers to help prevent vicarious traumatization. One participant in this study described how music was part of her self-care routine- “We would sit together, have some wine, listen and play music ourselves, sing in a fun way, and share feelings about what had happened.” In both the literature and the participant responses, understanding the self, having networks of support, and utilizing creative outlets were important aspects of self-care.

The few participants who had worked with both natural disasters and human vindicated trauma were asked about the similarities and differences. Participants agreed that both situations could cause traumatic responses and overwhelm the system however the participants pointed out a few differences. The participants pointed out that in disasters created by humans, there is someone to blame for these atrocities. Herman

(1992) describes how both the victim and the victim's support network can blame the perpetrator for their traumatic experience. One participant reported hearing suicidal ideation in children after natural disasters but not after a human vindicated trauma such as the terrorist attacks of 9/11. According to Benight & Bandura, (2003), individuals who experienced trauma from a human source were more likely to overcome posttraumatic symptoms when they had a higher level of self-efficacy and perceived control over their lives, which led to better coping strategies. Having someone to blame acts as a therapeutic step in providing hope and helping children regain control.

The community response was another important aspect of the interview, discussed separately from the prescribed interview guide. Participants experienced some difficulties at first with building credibility and navigating challenging governmental policies and language barriers but agreed that overall, the community response to their work was positive. Herman (1992) emphasizes the importance of community support in determining how an individual recovers from traumatic experience. According to Herman (1992), communities need to recognize and respond to individual trauma in order to restore a sense of justice. It seems that the presence of an engaged and supportive community, played a large role in the success of the therapist to promote healing and growth.

5.3 Emerging Themes for all Participants

The emergent themes of breath, play, sustainability, flexibility, being present/being a witness, and culture as comfort, will be discussed as they pertain to the literature and what they mean in the context of disaster work with children.

5.3.1 Breath

Almost every participant in the study mentioned breath at one point during the interview. It was discussed as a coping strategy, stress reliever, a way to connect to the body and relax, a means for achieving safety and trust, and a way to connect on a universal level. The literature discusses breath in relation to bodily symptoms of PTSD, which can include rapid breathing, cold sweats, increased heart rate, and heart palpitations (Rothschild, 2000). Focusing on calming the children's breathing might be an important way to relieve PTSD responses. Breathing can also help with body awareness, which could trigger positive memories and sensations. Weems et al. (2007) discuss the importance of reducing anxiety since predisaster trait anxiety predicts PTS and anxiety related symptoms. Since breath can be used to calm the body and relieve stress, it could be beneficial in alleviating symptoms of anxiety. Breath was also used with children in Israel and incorporated into an instructional song about what to do in times of crisis. The children felt their heart race and then within the song were instructed to take deep breaths and feel their bodies calm down (HaLevi, 2008). The literature and the participant responses suggest the importance of using breath with children exposed to disaster.

5.3.2 Play

Participants discussed play as an important element of the sessions, which allowed the children to "be kids again and feel free." Participants also mentioned how play is natural and allows them to return to normal. In the literature, art therapist Riley endorses using sensory modalities, which involve drawing music and play in order to help build resilience. LeMessurier & Loman (2008) discuss how children use play to

master their experiences. By attuning to this need on a body level, the therapist can build empathy and help foster healing. The Sesame approach also involves play in addition to movement, drama, metaphor and story enactment, which is used to help child victims of sex trade and child labor (Senroy & Senroy, 2007). It is important to give children the space to play to express their feelings, and joining in this process can help create empathy. Movement and dance are avenues that allow for and encourage play throughout the sessions.

5.3.3 Sustainability

Although sustainability was an emerging theme, it is important to keep in mind that just being with the children and present to their experience was also a significant theme. This suggests that engaging in disaster work with children for any amount of time can be beneficial, but ideally the treatment and support should be sustainable. Part of sustainability is consistency overtime. Perry (2006) believes it imperative to provide interventions that are safe, and predictable in order to establish healthy relationships. If children lack a sense of safety and trust in others and a familiar routine, they may produce unmanageable arousal responses, which can have a profound impact on how the children think and act. There is no direct literature on the differences in children's responses between sustainable treatment and a single visit, but in any case it is important to provide some familiarity and routine activities to build safety and trust.

5.3.4 Flexibility

The ability to manage chaotic environments through a flexible attitude was another emergent theme that crossed questions. Participants dealt with a variety of challenging situations including finding funding, leading sessions with an inconsistent

number of children, and answering calls in the middle of the night. Metzl (2009) conducted a study after hurricane Katrina to explore the relationship between creativity and resiliency and found flexibility to be an important factor. He conducted in depth interviews with survivors of the hurricane and found that flexibility and originality, which are sub-categories of creativity, were central themes for all ethnicities. This suggests that flexibility can be an important factor in helping build resiliency (Metzl, 2009). Gray (2001) discusses the flexible and fluid nature of dance/movement therapy, which can incorporate cultural and social practices into the session. It is also important for caregivers to model flexibility and adaptability in order to show their ability to cope and encourage their children to do the same (Hobfoll, Horsey, & Lamaoreux, 2009). Being flexible to the challenging situations, the needs of the children, and the cultural environment are all important in helping children recover from these tragedies.

5.3.5 Be Present/Be a Witness

The literature does not explicitly address the theme of being present and serving as a witness. This may be because this notion is inherent in all therapeutic work and might be seen as obvious and therefore unimportant to explore. It is telling that this theme emerged in this study despite the lack of discussion in the literature. It seems useful to delve deeply into this concept of witnessing when thinking about appropriate therapeutic interventions. Techniques that allow for the child to be seen and heard seem crucial in developing safety, trust, and further self-expression.

5.3.6 Culture as Comfort

Participants acknowledged the importance of integrating rituals and cultural customs into the sessions to create comfort and safety and show openness and respect.

They also explained how using movement and dance was a natural way to incorporate these rituals. Harris (2007) believes that rituals within cultures can help enforce community belonging and sustain social cohesion even in times of war and disaster, so incorporating some of these rituals within a therapeutic space might be significant. Volkan (1999) also mentions the importance of ritual in strengthening group identity and protecting a culture from transgenerational grief. Gray (2001) allowed the Haitian children who had experienced disaster to teach her dances from their culture and she would respond by teaching some West African traditions that she had learned. This exchange allowed for cultural openness and understanding and created a comfortable, safe and mutual environment for these children.

The study conducted by Fu, Leoustakos, & Underwood (2009) demonstrates the importance of cultural awareness in creating interventions. They examined resilience and the presence of PTSD symptoms in child and adolescent survivors of the earthquake in 2008 in Sichuan, China and found that an increase in self-awareness was associated with an increase in PTSD symptoms. In China, the concept of self is associated with community and interdependence so increasing self-awareness was creating distance from familiar cultural practices which was counterproductive to their treatment.

Sustainability is an inherent value within the theme of culture as comfort. By re-encouraging community and cultural practices through ritual, future disaster volunteers can create sustainable treatment without being physically present. As seen in the literature and through the results of this study, community cultural rituals create routine, familiarity, comfort, and belonging. Rituals involve meaningful repetition, which help create normalcy and sustainability over time. The overlapping themes of sustainability

and culture as comfort suggest a need for developing cultural rituals and understanding, which can be achieved with the help of future disaster workers who utilize movement and dance.

All of these examples show the importance of utilizing cultural customs, rituals, and beliefs in order to promote health and sustainability in children and their communities after disaster.

It is interesting to note that most participants focused on the culture of the children at the disaster site, instead of describing their own culture in relation to the foreign one. Cultural competency involves understanding one's own culture within a relationship. Participants did point out the importance of knowing oneself but did not focus on this cross-cultural relationship.

5.4 Discussion of Emergent Themes from Creative Arts Therapists

The following themes emerged from the creative arts therapists' responses: structure, hope, and attuning to the child's needs. These will be discussed as they relate to the literature and what they suggest about creative arts therapy in relation to disaster.

5.4.1 Structure

The creative arts therapists emphasized the importance of structure in providing a safe container for children. Some participants used rhythmic activities such as stomping, clapping, or music making to create structure. Perry (2006) notes that using movement and rhythmic activity can help create safety and calm overactive brain regions. Once children have a familiar structure in place, they feel safe and comfortable. Hobfoll, Horsey, & Lamaoreux, (2009) discuss how parents should encourage their children to

maintain a normal routine in order to decrease posttraumatic symptoms. Creating structure gives children a familiar routine, which normalizes their reactions and provides a safe holding environment. Creative arts therapists were especially concerned with structure, perhaps because creative approaches can easily lead to an improvisational, and sometimes chaotic free flowing style. The structure can help organize abstract and creative thoughts, feelings, movements, and other self-expressions so that sessions are safe, meaningful and comfortable.

5.4.2 Hope

The participants mentioned hope as an essential part of the healing process. Herman (1992) discusses the importance of connecting to something greater after a traumatic experience by reaching out to the community and pushing beyond personal tragedy. Some researchers discuss hope in the context of posttraumatic growth. According to Cryder et al. (2006), children could experience posttraumatic growth if they had positive expectations and beliefs about their future. Other researchers used a treatment intervention called psychological first aid, which decreased PTSD symptoms in victims of Katrina by focusing on safety, calm, efficacy, connectedness, and hope. This also taught children relaxation techniques using art and imagery, and helped them connect to their community (Cain et. al., 2010). The creative arts might be especially useful in creating hope because it allows for self-expression in a variety of ways and can help children create powerful connections to their community through cultural rituals, abstract representations, and shared group experiences.

5.4.3 Attune to the Child's Needs

All of the creative arts therapists emphasized attuning to the child's needs and meeting the children where they are. In music therapy, this concept is known as the ISO principal. Since four out of the five creative arts therapists were music therapists, it is not surprising that this principle emerged as an overarching theme. This idea is echoed by Perry (2006) who uses interventions that are suited to the child's neurodevelopmental level which include attuning to their physical, behavioral, cognitive, emotional and social needs and level of functioning. This concept also relates to the previous theme of acting as a witness and being present. When therapists attune to children's needs they are taking on an active role of being present and also witnessing the state of the child. These concepts are crucial in building safety and trust with the children.

5.5 Summary of Themes and Shared Responses

Within the themes and shared responses explored above, it seemed that creating safety and comfort and building trust were essential components discussed in both the literature and the interviews. The participants achieved this through a variety of techniques, which included utilizing a circle formation, creating routine, structure and familiarity, utilizing breath, integrating cultural values and rituals, allowing for creative expression and play and attuning to the needs of the child. In addition, participants and researchers were concerned with providing coping strategies and giving children hope for the future.

In order to help children cope and provide sustainability, it is important to connect them with their community and develop community rituals. By creating rituals

that involve everyone, the relief workers can help build healing communities, which will thrive after they leave. Perhaps it is not necessary to continue contact or stay longer to create sustainability. Instead therapists should allow their work to be informed by and owned by those in the community to create healing rituals.

Participants also mentioned the importance of having their own coping strategies, which included have a flexible attitude, a supportive team, time for self-care, and ideally a means for sustainable treatment which were themes addressed in the literature. In order to help the children express their experiences in a safe and comfortable way, therapists need to be aware of their own reactions and effectively manage the challenges within their environment.

5.6 Clinical Applications

This section will initially discuss the clinical application of these results as they pertain to dance/movement therapy and then the researcher will propose a set of guidelines based on the themes and shared responses discussed above. The study participants identified that utilizing dance and movement was important in a variety of ways. It allowed the children to play, express their thoughts and emotions nonverbally, helped them relax and energize, and allowed them to return to normal and be kids again. Based on these results, it seems that dance and movement can provide vital support for these children in the aftermath of community level disaster.

Dance/movement therapy, which combines dance and movement in a therapeutic way, could be especially helpful for these children. Inherent in DMT is the notion of non-verbal self-expression, which was an important goal for many participants in this study.

Some other shared responses included the use of a circle to create safety and trust which is another technique used in dance/movement therapy sessions. Attuning to the client was an overall theme from the creative arts therapists, which is another central concept in DMT. In addition, dance/movement therapy encourages play and body awareness, and can help relieve stress and energize the children.

The participants also identified how movement and dance allowed for cultural integration and comfort. The participants were able to use cultural instruments, dance styles and cultural themes to create comfort and safety within the sessions. It seems that cultural understanding and sharing of rituals can be readily achieved through non-verbal means such as dance and movement, because they offer a universal language, which connects individuals on a human body level.

Based on the results of the study, it seems that movement and dance and dance/movement therapy can provide helpful and supportive techniques for healing children after disasters.

5.6.1 Guidelines

The following guidelines were created based on the emerging themes that crossed questions while also taking into account the significant shared responses to individual questions.

1. Make sure to have the support of a capable and understanding team
2. Know yourself and your own reaction before helping the children
3. Create a time and space for personal and group self-care
4. Utilize breath and relaxation techniques when possible to create safety, coping strategies, cohesion, and stress relief

5. Conduct groups in a circle to promote group belonging
6. Give the children the space and opportunity to play and express their needs
7. Attune to the child's needs through careful observation to provide appropriate therapeutic interventions
8. Hold sessions in a familiar neighborhood location to create comfort
9. Ensure when possible that the children will continue to receive care when you are gone
10. Use clear rhythmic structures to provide further support and safety
11. Be open and respect cultural customs
12. Reflect and utilize cultural aspects within a session to create a deeper understanding and connection
13. Have a flexible attitude in order to deal with challenging and chaotic environments
14. Be an active presence and do not be afraid to serve as the witness
15. Encourage the parents and community members to join when possible and create community rituals to help strengthen cultural identity and create sustainability
16. Try and connect the children to something outside themselves to give them hope

5.7 Limitations of the Study

This study only explored the experiences from 10 individuals and so it is difficult to generalize these results on a broader scale. The participants in this study were all female, so it is possible that these results have a gender bias. The participants were also highly educated and mostly professionals, which suggest that the participants were likely

at a privileged or middle class status. The results might have been affected based on the small sample size and homogeneity of this population.

Another limitation of the study regards the number of interview questions. Because so many questions were asked, the participants may not have had as much time to delve deeply into their experiences and what they considered important. Fewer questions or longer interviews may have allowed for this exploration. It would have been valuable to ask more questions specifically about culture in order to understand the unique cultural interaction and relationship between the trauma survivor and the relief worker. In addition, it would have been useful to obtain information outside the interview process such as their lingering thoughts and comments, relevant pamphlets from their disaster sites, and pictures or videos of their experiences.

The recruitment procedure acted as another limitation. Many individuals agreed to participate initially, but after further inquiry, it was clear that they were ineligible for a variety of reasons. Some had only worked with adults, others worked with children specifically after war trauma, and others were experiencing post traumatic symptoms. It was also difficult to find participants solely through the recruitment e-mail because the e-mail addresses found could have been outdated or the potential participants might have accidentally deleted or overlooked the recruitment e-mail. A recruitment flyer might have been useful in order to speed up the recruitment process and widen the scope of potential participants.

Because of the difficulties recruiting participants, the researcher did not have the opportunity to be as selective in maximizing diversity of disciplines. Regretfully, the researcher was only able to interview one dance movement therapist. Because the

literature supports body-based approaches in healing trauma, it would have been ideal to interview more participants with expertise in this domain to discover the way movement and dance is utilized within body-focused work. The participants did not use movement language to describe their experiences and thus body-based concepts such as somatic experience and body level regulation were not thoroughly explored.

5.8 Implications for Future Research

Many of the participants noted the lack of documentation about interventions with children after community level disasters. Conducting interviews with other individuals who had utilized dance and movement in the aftermath of disaster would provide richer information and deepen the research. The relationship between the children and parents or their community could also be explored in the future to further investigate the systems at work.

Future researchers could travel to disaster locations and conduct sessions with children, utilizing the guidelines described above and document the results. This study is an important first step in understanding how movement and dance can be utilized with children after disaster but there is still much more to be explored.

Based on the theme of sustainability, it is important for future therapists and other youth workers to think about how to provide sustainable treatment if possible and then document these methods. It would be interesting to look closely at how children are affected from sustainable treatment over the course of a few years as opposed to a single visit.

This study looked at emergent themes from creative arts therapists but it would also be interesting to compare specific techniques between the different modalities.

Future researchers could interview a range of creative arts therapists and investigate the differences between music therapy, art therapy, dance/movement therapy, and drama therapy as it is utilized with children in the aftermath of disaster.

CHAPTER 6: SUMMARY AND CONCLUSIONS

The overall purpose of this study was to examine how movement and dance are utilized to support children in the aftermath of community disasters. The researcher employed a descriptive qualitative design, which involved interviewing 10 individuals who had utilized movement and dance in their work with children after disaster. They were asked to share demographic information, the context of their disaster work, and the nature of the movement/dance support that they provided. Interviews were 50 minutes in length and audio-recorded and transcribed by the researcher.

The researcher aggregated and summarized common and variant responses to questions within the prescribed interview guide as well as questions that emerged throughout the process. In addition, the researcher identified themes that crossed questions for all participants and for the subgroup of creative arts therapists.

Participants shared common responses about the challenges they faced, goals for the children, the importance of culture, and creating safety. Emerging themes from all participants included breath, play, sustainability, flexibility, be present/be a witness, and culture as comfort. Three themes emerged from the creative arts therapist sub group, which included structure, hope, and attune to the child's needs. The participants seemed concerned with providing safety and building trust and used a variety of techniques including holding the session in a familiar location, incorporating cultural rituals, utilizing breath, and creating routine and structure. The participants also described the importance of managing one's own reactions to the challenging situation by having a flexible and respectful attitude, a supportive team and strategies for self care.

Based on the themes and shared responses within the interviews, it seems that dance and movement and dance/movement therapy can provide a number of benefits to children exposed to community level trauma. Movement and dance allows children to express themselves on their own developmental level. It involves an attunement to the needs of the child and also promotes play, which helps children return to a child-like state. These techniques also provide a safe holding environment through use of circular formations, rhythmic structures, breath, and integration of cultural beliefs, rituals, and practices.

Community level disasters can have a profound effect on children and can cause severe posttraumatic symptoms. Movement and dance can be utilized to support children in these times of tragedy. Future researchers, therapists, teachers, dancers, or other youth workers involved in supporting children after disaster can follow the proposed guidelines and hopefully make a difference in these children's lives.

References

- Altinay, D. (2003). A psychodramatic approach to earthquake trauma. In G. Jacob (Ed.), *Psychodrama in the 21st century: Clinical and educational applications* (pp. 167-173). NY, NY: Springer Publishing Company.
- Ambra, L. N. (1995). Approaches used in dance/movement therapy with adult women incest survivors. *American Journal of Dance Therapy, 17*(1), 15-24.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (Revised 4th ed.). Arlington, VA: Author.
- Benight, C. C., & Bandura, A. (2003). Social cognitive theory of posttraumatic recovery: the role perceived self-efficacy. *Behavior Research and Therapy, 42*(10), 1129-1148.
- Berger, R., & Gelkopf, M. (2009). School-based intervention for the treatment of tsunami-related distress in children: A quasi-randomized controlled trial. *Psychotherapy and Psychosomatics, 78*, 364-371. doi: 10.1159/000235976
- BuildaBridge. (2007-2010). Retrieved from <http://www.buildabridge.org/>
- Cain, S.D., Plummer, C.A., Fisher, R.M., & Bankston, T.Q. (2010). Weathering the storm: Persistent effects and psychological first aid with children displaced by hurricane Katrina. *Journal of Child & Adolescent Trauma, 3*, 30-343.
- Carey, L. (Ed.). (2006). *Expressive and creative arts therapy for trauma survivors*. London: Kingsley.
- Cryder, C. H., Kilmer, R. P., Tedeschi, R. G., & Calhoun, L. G. (2006). An exploratory study of posttraumatic growth in children following a natural disaster. *American Journal of Orthopsychiatry, 76*(1), 65-69. doi: 10.1037/0002-9432.76.1.65
- Elskim A., & Braun, K.L. (2009). Over-time changes in PTSD and depression among children surviving the 1999 Istanbul earthquake. *European Child & Adolescent Psychiatry, 18*(6), xs384-391.
- Fan, F., Zhang, Y., Yang, Y., Mo, L., & Lieu, X. (2011) Symptoms of posttraumatic stress disorder, depression, and anxiety among adolescents following the 2008 Wenchuan earthquake in China. *Journal of Traumatic Stress, 24*(1), 44-53.
- Figley, C. R. (2002). Compassion fatigue: Psychotherapist's chronic lack of self care. *Journal of Clinical Psychology, 58*(11), 1433-1441.

- Ford, D. J. (2009) Neurobiological and developmental research: Clinical Implications. In C.A. Courtois, & D.J. Ford (Eds.), *Treating complex traumatic stress disorders: An evidence-based guide* (pp. 31-58). NY & London: The Guildford Press.
- Fu, C., Leoutsakos, J., & Underwood, C. (In Review) A psychometric assessment of the Connor-Davidson Resilience Scale (CD-RISC) in child and adolescent survivors of the 2008 Sichuan earthquake.
- Fu, C., Leoutsakos, J., & Underwood, C. (2009) Evaluating the healing power of art and play: The effects of a psychosocial intervention on post-traumatic stress disorder in child and adolescent survivors of the 2008 Sichuan, China earthquake.
- Gonzalez-Dolginko, B. (2002). In the shadows of terror: A community neighboring the World Trade Center disaster uses art therapy to process trauma. *Art Therapy, 19*(3), 120-122.
- Goodill, S. W. (1987). Dance/movement therapy with abused children. *The Arts in Psychotherapy, 14*(1), 59-68.
- Gray, A.E.L. (2008). "Dancing in our blood: Dance Movement Therapy with Street Children and Victims of Organized Violence in Haiti." In Jackson, N., & T. Shapiro-Lim, *Dance, Human Rights and Social Justice: Dignity in Motion*. 2008: Scarecrow Press.
- Gray, A.E.L. (2001). The body remembers: Dance/movement therapy with an adult survivor of torture. *American Journal of Dance Therapy, 23*(1), 29-43.
- Grotberg, E.H. (1997, July). *International resilience project*. Paper presented at the 55th annual convention, International Council of Psychologists. Graz Austria. Retrieved from <http://resilnet.uiuc.edu/library/grotb98a.html>
- Harris, D. A., (2007). Pathways to embodied empathy and reconciliation after atrocity: Former boy soldiers in a dance/movement therapy group in Sierra Leone. *Intervention: International Journal of Mental Health, Psychosocial Work & Counseling in Areas of Armed Conflict, 5*(3), 203-231. doi:10.1097/WTF.0b013e3282f211c8
- Harris, D. A. (2009). The paradox of expressing speechless terror: Ritual liminality in the creative arts therapies' treatment of posttraumatic distress. *The Arts in Psychotherapy, 36*(2), 94-104. doi: <http://dx.doi.org/10.1016/j.aip.2009.01.006>
- Hensley, L., & Varella, E. R. (2008). PTSD symptoms and somatic complaints following hurricane Katrina: The roles of trait anxiety and anxiety sensitivity. *Journal of Clinical Child & Adolescent Psychology, 37*(3), 542-552. doi: 10.1080/15374410802148186

- Herman, J. L. (1992) *Trauma and recovery: The aftermath of violence-from domestic abuse to political terror*. U.S: Basic Books.
- Heyman, J. C., Brennan, M., & Colarossi, L. (2010). Event-exposure stress, coping, and psychological distress among New York students at six months after 9/11. *Anxiety, Stress & Coping*, 23(2), 153-163.
- Hobfoll, S. E., Horsey, K. J., & Lamoureux, B. E. (2009). Resiliency and resource loss in times of terrorism and disaster: lessons learned for children and families and those left untaught. In D. Brom, R. Pat-Horenczyk, & J. D. Ford. (Eds.), *Treating traumatized children: Risk, resilience and recovery* (pp. 150-163). NY, NY: Routledge.
- Holmes, E. A., Creswell, C., O'Connor, T. G. (2007). Posttraumatic stress symptoms in London school children following September 11, 2001: An exploratory investigation of per-traumatic reactions and intrusive imagery. *Journal of Behavior Therapy and Experimental Psychiatry*, 38, 474-490. doi:10.1016/j.jbtep.2007.10.003
- Johnson, D. R. (1987). The role of the creative arts therapies the diagnosis and treatment of psychological trauma. *The Arts in Psychotherapy*, 14, 7-13.
- Karanci, N. A., & Acartuk. (2005). Post-traumatic growth among Marmara earthquake survivors involved in disaster preparedness as volunteers. *Traumatology*, 11(4), 307-323. doi: 10.1177/153476560501100409
- Keeton, M. (2009, March 3). How trauma affects the brain. *Karuna Counseling's Newsletter Articles*. Retrieved from <http://karunacounseling.wordpress.com>
- Kipper, D. A., Green, D.J., & Prorak (2010). The relationship among spontaneity, impulsivity, and creativity. *Journal of Creativity in Mental Health*, 5, 39-53. doi:10.1080/15401381003640866
- Krantz, A., & Pennebaker, J.W., (2007) Expressive dance, writing, trauma, and health: When words have a body. In Serlin, (Ed) *Whole Person Healthcare: The Arts and Health*, 3, 202-229. doi: 10.1007/s10465-008-9060-0
- Lacroix, L., Rousseau, C., Gauthier, M., Singh, A., Giguère, N., & Lemzoudi, Y. (2007). Immigrant and refugee preschoolers' sand play representations of the tsunami. *The Arts in Psychotherapy*, 34(2), 99-113. doi: 10.1016/j.aip.2006.09.006
- Leseho, J., & Maxwell, R. (2010). Coming alive: creative movement as a personal coping strategy on the path to healing and growth. *British Journal of Guidance & Counseling*, 38(1), 17-30. doi: 10.1080/03069880903411301

- Leste, A. & Rust, J. (1990). Effects of dance on anxiety. *American Journal of Dance Therapy, 12*(1), 19-25.
- Levine, P. (1997). Waking the tiger: Healing trauma. Berkley, CA: North Atlantic Books.
- Levine, P. (2002). Trauma, rhythm, contact, and flow. In J. V. Lowey & A. F. Hara, (Eds), *Caring for the caregiver: The use of music and music therapy in grief and trauma*. (pp.148-153). Silver Spring, MD: The American Music Therapy Association, Inc.
- Loewy, J. V. (2002). Caring for the caregiver: Training and development. In J. V. Loewy & A. F. Hara, (Eds), *Caring for the caregiver: The use of music and music therapy in grief and trauma*. (pp. 1-8). Silver Spring, MD: The American Music Therapy Association, Inc.
- Loewy, J. V. (2002). Trauma and posttraumatic stress: Definition and Theory. In J. V. Lowey & A. F. Hara, (Eds), *Caring for the caregiver: The use of music and music therapy in grief and trauma*. (pp. 23-31). Silver Spring, MD: The American Music Therapy Association, Inc.
- Lonigan, C.J., Shannon, M.P., Taylor, C.M., Finch, A.J., & Sallee, F.R. (1994). Children exposed to disaster: II. Risk factors for the development of post-traumatic symptomatology. *Journal of American Child Adolescent Psychiatry, 33*(1), 94-105.
- Malchiodi, C. A., Steele, W., & Kuban, C. (2008). Creative interventions with traumatized children. In C. Malchiodi (Ed.), *Creative Interventions with Traumatized Children* (pp, 285-301) New York, NY, US: Guilford Press; US.
- McCann, L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress, 3*(1), 131-149.
- Meekums (1999). A creative model for recovery from child sexual abuse trauma. *The Arts in Psychotherapy, 26*(4), 247-259.
- Metzl, E.S. (2009). The role of creative thinking in resilience after hurricane Katrina. *Psychology of Aesthetics, Creativity, and the Arts, 3*(2), 112-123.
- Mills, L. J., & Daniluk, J. C. (2002). Her body speaks: The experience of dance therapy for women survivors of child sexual abuse. *Journal of Counseling & Development, 80*(1), 77-85.
- Ogden, P., Pain, C., Fisher, & Janina. (2006). A sensorimotor approach to the treatment of Trauma and Dissociation *Trauma to the Body: A Sensorimotor Approach to Psychotherapy*.

- Orr, P. P. (2007). Art therapy with children after a disaster: A content analysis, *The Arts in Psychotherapy*, 34, 350-361.
- Perry, B. D. (2006). Applying principles of neurodevelopment to clinical work with maltreated and traumatized children: The neurosequential model of therapeutics, reprinted from working with traumatized youth. In Boyd, N. (Ed.), *Traumatized youth in child welfare* (pp. 27-52). NY, NY: Guilford Press.
- Perry, B. D., Pollard, B. A., Blackley, T.L., Baker, W. L., Vigilante, D. (1995). Childhood trauma, the neurobiology of adaptation and “Use-dependent” development of the brain: how “states” becomes “traits.” *Infant Mental Health Journal*, 14(4) 271-291.
- Price, C. (2005). Body-oriented therapy in recovery from child sexual abuse: an efficacy study. *Alternative Therapies in Health and Medicine*, 11(5), 46-57.
- Pylvanaianen, P. (2003). Body image: A tripartite model for use in dance/movement therapy, *American Journal of Dance Therapy*, 25(1), 39-55.
- Raphael, B. (1986). When Disaster Strikes. NY, NY: Basic Books.
- Rothschild, B. (2000). *The body remembers: the psychophysiology of trauma and trauma treatments*. NY, NY: Norton.
- Senroy, S., & Senroy, P. (2007). Rediscover, reclaim and rejoice: The sesame approach of drama and movement therapy with exploited girls in India, 268-281.
- Shih, J. H. T. (2011). Stabilization music therapy model and process: 512 China Sichuan earthquake crisis interventions, part 2 of 2. *Music and Medicine*, 3(2), 89-94.
- St Thomas, B., & Johnson, P. (2007). *Empowering children through art and expression: Culturally sensitive ways of healing trauma and grief*. Philadelphia, PA: Jessica Kingsley Publishers.
- Thom, L. (2010). From simple line to expressive movement: The use of creative movement to enhance socio-emotional development in the preschool curriculum. *American Journal of Dance Therapy*, 32, 100–112. doi: 10.1007/s10465-010-9090-2.
- Tol, .A. W., Barubui, C., Galappatti, A., Silove, D., Betancourt, T. S., Souza, R., Golaz, A., & Ommeren, M. V. Mental health and psychosocial support in humanitarian settings: linking practice and research

- Trends in natural disasters. (2005). In *UNEP/GRID-Arendal Maps and Graphics Library*. Retrieved 17:27, June 6, 2011 from http://www.grida.no/graphicslib/detail/trends-in-natural-disasters_a899
- Trippany, R. L., Kress, V. E. W., & Wilcoxon, S. A. (2004). Preventing vicarious trauma: What counselors should know when working with trauma survivors. *Journal of Counseling & Development*, 82(1), 31-37.
doi:10.1002/j.15566678.2004.tb00283.x
- Truppi, A. M. (2001). The effects of dance/movement therapy on sexually abused adolescent girls in residential treatment. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 62(4-B), 2081.
- Ursano, J. R., & Norwood, A.E. (2003) Trauma and Disaster Responses and Management. Washington, DC: American Psychiatric Publishing.
- Valentine, G. (2007). Dance/movement therapy with women survivors of sexual abuse. In S.L. Brooke (Ed.), *The use of the creative therapies with sexual abuse survivors* (pp. 181-194). Springfield, ILL: Charles C. Thomas Publishers.
- Van der Kolk, B. A. (1987). Psychological trauma. Washington, D.C: American Psychiatric Press.
- Van der Kolk, B. A. (1994). The body keeps score: memory and the evolving psychobiology of posttraumatic stress. *Trauma Information Pages*. Boston, MA.
- Volkan, V. (1999). Psychoanalysis and diplomacy, Part II: Large-group rituals. *Journal of Applied Psychoanalytic Studies*, 1, 223-247.
- Volkan, V. (2000). Traumatized societies and psychological care: Expanding the concept of preventative medicine. *Mind and Human Interaction*, 11, 177-194
- Waaktaar, T., Christie, H. J., Borger, A. I. H., & Torgersen, S. (2004). How can young people's resilience be enhanced? Experiences from a clinical intervention project. *Clinical Child Psychology and Psychiatry*, 9(2), 167-183.
doi:10.1177/1359104504041917
- Weems, C. F., Pina, A. A., Costa, N. M., Watts, S. E., Taylor L.K., & Cannon, M.F. (2007). Predisaster trait anxiety and negative affect predict posttraumatic stress in youths after hurricane Katrina. *Journal of Consulting and Clinical Psychology*, 75(1), 154-159.

Appendix A
E-mail Recruitment Message

Dear (potential participant),

My name is Dahlia Silberg. I am a graduate student studying Dance/Movement Therapy at Drexel University. I am conducting a study for my thesis requirement, which is entitled: The Utilization of Movement and Dance to Support Children in the Aftermath of Community Disaster.

I am planning to interview arts-based therapists, crisis workers, teachers, and other youth workers who have utilized movement and dance in work with children in the aftermath of community level trauma. Ellen Schelly Hill, Director of Dance/Movement Therapy at Drexel, will be listed as the principal investigator of this study. The study will recruit fifteen participants.

I have contacted you to request your participation in the study. I was informed of your related experience through professional or personal networking or your professional presentation/publication history. This descriptive study will describe the nature of dance and movement work that has been used to support children in the aftermath of community level disaster.

May I contact you by phone to discuss this study further, answer questions, review participant rights, and determine your interest and eligibility for participation? If you are eligible and willing to participate, I will proceed with the interview at that time or arrange another phone contact for interview purposes. The interview will be 50 minutes long.

Please provide me with a phone number or Skype address via return email message. Let me know if there are best times to reach you. I can be available most evenings, lunchtimes, Thursday mornings, and often on the weekend. I will confirm a time and date by email in response to your communication and will attach an Interview Guide.

Thank you for your consideration. I hope I can look forward to speaking with you.

Sincerely,
Dahlia Silberg
MA Candidate, Dance/Movement Therapy Program
Drexel University
Dancedisasterstudy@gmail.com

Appendix B Phone Recruitment Script

Dear (potential participant),

Hi, my name is Dahlia Silberg, graduate student in the Dance/Movement Therapy program at Drexel University. I am calling in reference to the email message that I sent to you about my thesis study. I am conducting a descriptive study in which I plan to interview individuals who have used dance and movement in their work with children in the aftermath of community level disasters. I would like to review the study participation criteria with you and answer questions you may have to determine whether you are eligible and interested in participating in the study. If so, I will schedule a time to interview you at a later date or directly following this conversation.

Participants in this study must meet the following criteria:

- Individual must be between the ages of 22-75.
- Individual must self identify as having worked with youth in the aftermath of at least one community level disaster.

For the purposes of this study, community level disasters will include natural disasters, which manifest through external nonhuman sources, and have a direct and devastating impact on a given community, as in the case of earthquakes, hurricanes, and tsunamis. Community level disasters will also include human vindicated trauma, manifest through external human causes, that occur within a discrete amount of time and cause community level devastation, such as the 9/11 terrorist attacks, a school shooting, or a bombing.

- Individual must have used movement and dance as part of their work with these youth
- Individual must be able to speak and comprehend English

In addition

- Individuals are ineligible for this study who themselves are experiencing post traumatic disturbances, after personal exposure to community level disasters, that cause significant distress or social/occupational impairment.

Interviews will be 50 minutes in length and will consist of questions regarding your demographic information, your background the interview and will destroy the recording once I've completed data analysis. Study data will be aggregated and you will not be directly identified. However, given the small number of people involved work experience, the context of your work and the ways you utilized movement and dance and the perceived benefits to the children. I will ask you not to share specific information about your clients. I will audiotape in work of this kind, readers may guess that you are a

study participant. You may refuse to answer any questions and may terminate your participation in this study at any time.

Do you have any questions?

Do you meet the participation criteria?

Are you willing and interested in participating in the study?

If you are available now I can proceed with the interview. If not, let's schedule another time for a phone interview.

- Date_____
- Time_____

Thank you for your interest in participating in this study.

Appendix C
Organizational E-mail Recruitment Script

Dear (potential organization),

My name is Dahlia Silberg. I am a graduate student studying Dance/Movement Therapy at Drexel University. I am conducting a study for my thesis requirement, which is entitled: The Utilization of Movement and Dance to Support Children in the Aftermath of Community Disaster.

Ellen Schelly Hill, Director of Dance/Movement Therapy at Drexel, will be listed as the primary investigator of this study.

I am planning to interview arts-based therapists, crisis workers, teachers, and other youth workers who have utilized movement and dance in work with children in the aftermath of community level trauma. I am aware, through personal and professional networking and a web-based search, that your organization is involved in related work. The study will recruit fifteen participants.

Are you able to provide me with a name and email contact information for someone within your organization, who is involved in this work, and who might be interested in participating in this study? I will contact them to describe the study further and inquire about their interest in study participation.

I look forward to hearing from you. Thank you for your consideration.

Sincerely,

Dahlia Silberg
MA Candidate, Dance/Movement Therapy Program
Drexel University
Dancedisasterstudy@gmail.com

Appendix D

Interview Guide

I am going to inquire about demographic information and your work background, the context of your work, the nature of your use of dance and movement in your work, and perceived benefits to the children with whom you worked. I ask you not to describe individual children with whom you worked. You may describe your own actions and experiences and provide general information about the perceived benefits to the children with whom you worked.

1. Personal Demographic Questions

- a. Age
- b. Male/Female
- c. Race/Ethnicity
- d. Occupational Identification
Do you have clinical training? What is the nature of your clinical training?
- e. Credentials
- f. In what other contexts have you worked with dance/movement?
- g. Years of experience

2. Context of Disaster Relief work

- a. Location/Disaster/Year
- b. How long were you on site?
- c. Organizational context of work
- d. Ages of youth participants
- e. Structure of your youth support work.
 - i. How often did you meet?

- ii. How many children were in your sessions?
 - iii. What proportion of your time involved dance and movement?
 - iv. What other support services did you provide or what other modalities did you use?
 - f. How did you come to this work?
3. Nature of Dance/Movement Support
- a. How did you begin?
 - b. Did you give attention to creating safety and trust with the youth? How?
 - c. Describe a typical session or a particularly meaningful session
 - i. How much structure did you provide?
 - ii. Describe some specific ways in which you used movement and dance during the sessions
 - d. Did you use movement rituals within the sessions? Can you give an example?
 - e. What were some common issues or symptoms that the children presented?
 - f. How did you perceive that the movement and dance supported the participants?
 - g. Did you intentionally support coping skills? How?
 - h. What were your goals?
 - i. What role did culture play in the way in which you worked with movement and dance?
 - j. What were your biggest challenges?

- k. Did your work change over time? How? Is there anything you would change in how you would work in the future?
- l. Do you have advice for other youth workers who are interested in using dance and movement in the aftermath of community disasters?
- m. Is there anything else you would like to share?