Music Therapy in Mass Trauma: the Effect on the Therapist

A Literature Based Study

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Abstract

Music Therapy in Mass Trauma, the Effect on the Therapist
A Literature Based Study
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Music therapy and other experiential therapies such as the creative arts therapies hold an essential place in trauma work as they can provide an unobtrusive, positive format for debriefing responding personnel. By providing diffusion and creating an atmosphere which is positive, supportive and based on care and concern for the team members, music therapy provides a safe place for necessary expression. In recent years, music therapists have utilized their skills and training to provide services to survivors of mass trauma. Some examples of situations where music therapy has been utilized are the terrorist attacks in New York City, war torn Bosnia and Sierra-Leone, Africa, the school shootings in Columbine, Colorado and recently in the Gulf Coast region of the United States such as Mississippi and Louisiana following a deadly and destructive series of hurricanes. The design of this research is a literature based study. The matrix method, developed by Judith Garrard (1999) was used to compile and code the data in order to thoroughly study the data and systematically and carefully build the theory. The articles and book chapters were then analyzed with the qualitative method of grounded theory. A qualitative, systematic literature based study using grounded theory methodology serves to provide an overarching statement on the state of the field, locating all the work on a given topic, utilizing appropriate standards for inclusion or exclusion and then evaluating, comparing

and coding and synthesizing. Through the articles and book chapters, the methods used to prevent, treat or alleviate symptoms of vicarious traumatization and secondary post-traumatic stress disorders were collected, coded, analyzed and themes were extrapolated from the data to form a theoretical model. Many common themes emerged as the preparation and training methods for mental health practitioners across all disciplines were examined. Those themes included receiving training prior to the disaster response, being well informed about trauma and trauma work, setting up and participating in supervision or debriefing during the work with other advanced, knowledgeable professionals, purposely designing scheduled breaks from the environment and the work and preparing for rejection when survivors choose not to use the available therapeutic services. Other themes related to preparation specific to music therapy emerged such as music therapists identifying the importance of music making for themselves during or directly after providing care to traumatized people, the value of collaborating with peers and participating in peer debriefing after providing services, the value of analyzing the music therapist's internal responses during the music making, the importance of the timing of the music therapy interventions, the importance of presenting music on a sophisticated level and maintaining focus on major goals such as relief of tension, expression of anxiety and building resilience and hope.

Dedication

This thesis is dedicated to the memory of my grandmother
Dorothy S. Mercer, RN

(Hahnemann School of Nursing, class of 1934)

Without your guidance and commitment to my education
this thesis would never have been possible.

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Chapter 1: Introduction

The arts have a history of helping in traumatic times. Judith Rubin writes that making creative activities available to people who have suffered trauma is a form of "secondary prevention." This is particularly helpful for those who are at increased risk for psychological problems. She states, "Like medicating at the first sign of an infection, offering arts to people who are in the throes of responding to overwhelming events may well prevent more serious and prolonged emotional damage." (Rubin, 2006) In recent years, music therapists have utilized their skills and training to provide services to survivors of mass trauma. Some examples of situations where music therapy has been utilized are the terrorist attacks in New York City, war torn Bosnia and Sierra-Leone, Africa, the school shootings in Columbine, Colorado and most recently, in the Gulf Coast region of the United States such as Mississippi and Louisiana following a deadly and destructive series of hurricanes. Currently, the standard clinical preparation for music therapy students does not include crisis response or trauma work, leaving the majority of working professionals in the field with little or no preparation for this type of trauma work. (AMTA Clinical Training Guidelines, 2007) Most professional music therapists who have been involved in mass trauma responses have had no prior education or training regarding implementing music therapy in the immediate aftermath of crisis. They have followed previous approaches by therapists working in similar situations or have

followed an instinct to help and then relied on their skills and experience to shape a music therapy response.

The literature is limited and the preparation for music therapists working with mass trauma is pursued by individuals interested in the work and typically outside of the modality of music therapy. The current standard for clinical training of music therapists also happens in clinical situations where all or most of the variables are under the therapist's control. When approaching trauma work, few or none of the variables are under the control of the therapist. As more music therapists are educated, credentialed and enter the field, the likelihood of them involving themselves in a mass trauma relief effort increases. As that response rate increases, so will the possible negative effects of providing music therapy for survivors of mass trauma. Vicarious traumatization, secondary post-traumatic stress disorders and reactionary depressions have all been identified as occupational hazards when working with victims of mass trauma. (McCann & Pearlman, 1990)

The inspiration for this study was in direct response to the researcher's experience in co-leading a music therapy relief effort for displaced survivors of two hurricanes in the fall of 2005. Without the aid of a resource containing information, other music therapists compelled to use music in a similar response have to independently search through the limited literature. Resources from outside of the field of music therapy were integrated to expand on the information examined. The research objective seeks to address four questions. What common themes emerge when examining the methods employed by music therapists in responding to mass trauma? What is their experience of providing

music therapy in a crisis response and what effects have they experienced as a result of this work? Lastly, what elements of these methods and experiences can be included in music therapy education, including educating therapists in self care techniques?

The design of this research is a literature based study. The matrix method, developed by Judith Garrard (1999) was used to compile and code the data in order to thoroughly study the data. The articles and book chapters were then analyzed with the qualitative method of grounded theory. Grounded theory, as defined by Glaser and Strauss (1967), is a general approach of comparative analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area. Its purpose is to "discover theory from data" (Glaser and Strauss, 1967, p.1). Because this study seeks to form a theoretical model for preparing music therapists to negotiate the complexities of trauma work in a post-disaster setting, this researcher chose a methodology which resonates both with people who experience the phenomenon and the educators who have a professional interest in it through an inductively-deductively integrated theory. This study reviewed literature from multiple, related disciplines on PTSD treatment, music therapy with traumatized individuals, secondary traumatic stress and models for educating therapists about trauma work as well as personal communications with music therapists who had personal experience using music therapy with traumatized people. Those personal communications took place during the development of a combined creative arts therapy response for displaced survivors from the Gulf Coast and during the course of this research study. Through the articles and book

chapters, the methods used to prevent, treat or alleviate symptoms of vicarious traumatization and secondary post-traumatic stress disorders were collected, coded, analyzed and themes were extrapolated from the data to form a theoretical model. Many common themes emerged as the preparation and training methods for mental health practitioners across all disciplines were examined. Those themes included receiving training prior to the disaster response, being well informed about trauma and trauma work, setting up and participating in supervision or debriefing during the work with other advanced, knowledgeable professionals, purposely designing scheduled breaks from the environment and the work and preparing for rejection when survivors choose not to use the available therapeutic services. Other themes related to preparation specific to music therapy emerged such as music therapists identifying the importance of music making for themselves during or directly after providing care to traumatized people, the value of collaborating with peers and participating in peer debriefing after providing services, the value of analyzing the music therapist's internal responses during the music making, the importance of the timing of the music therapy interventions, the importance of presenting music on a sophisticated level and maintaining focus on major goals such as relief of tension, expression of anxiety and building resilience and hope.

Chapter 2: Literature Review

2.1 The Early History of Traumatology

The study of trauma began with the work of Jean-Marie Charcot in Paris in the late nineteenth century. Sigmund Freud was an early observer of Charcot's work with people experiencing hysteria. Charcot theorized that their symptoms of amnesia, paralysis, convulsions and sensory-motor impairments were not the result of degeneracy, but the result of psychological trauma. Freud went on to focus on the emotional lives of his patients and the hidden factors which made them predisposed to hysteria. Along with Joseph Breuer, Freud created a method of psychoanalysis that became known as "the talking cure." After some time, Breuer and Freud derived from their experiences that the symptoms of hysteria were the results of failed attempts to repress painful memories of past events, often of a sexual nature. They wrote, "Patients suffer mainly from reminiscences." (Breuer and Freud, 1893-1895, p.7) In 1889, Pierre Janet postulated that intense emotional reactions make events traumatic by interfering with the integration of the experience into existing memory schemes. (van der Kolk, 1994, p. 311) He noted that victims were unable to put the trauma behind them and had difficulty learning from their experience. Their energy was funneled toward keeping their emotions under control rather than paying attention to current situations. He also wrote that victims became fixated on the past, in some cases by being obsessed with the trauma, but more often by behaving and feeling as if they were traumatized over and over again without being able to locate the origins of these feelings. (van der Kolk and van der Hart,

1989,) This description is very close to the current day definition of Posttraumatic Stress Disorder (PTSD.)

2.2 The Effects of Trauma

The physical, neurological and psychological effects of trauma are well known, the subject of ongoing study, and well documented by Vasterling and Brewin, van der Kolk, Figley, McCann and Pearlman, Pearlman and Saakvitne, Zimering et al, Perry and others. (Vasterling and Brewin, 2005; van der Kolk, 1996, 2002, 2005; Figley, 1995, 2002, 2005, McCann and Pearlman, 1990, Pearlman and Saakvitne, 1995 and Perry, 2005) The word trauma comes from the Greek, meaning "wound." Webb writes that in its current usage, ". . . trauma refers to emotional, psychological, and physical injuries that cause pain and suffering." Situations which may prove to be traumatic include experiences of physical or sexual abuse, the witnessing of familial or community violence, and the experience of war or terrorism. Traumatic or crisis events may include the extensive destruction of property and the mutilating deaths of those at the scene. (Webb, 2006) MacFarlane and Yehuda write about the substantial variance in the nature of trauma and the strategies used to cope with it among different types of traumatic events. They use the example of a motor vehicle accident, citing the trauma's brief duration and likely reaction of immediate fear with little chance of anticipatory anxiety. They then go on to contrast this example to victims of repeated sexual abuse pointing out that those people may have some opportunity to anticipate and develop strategies to cope with the trauma. MacFarlane and Yehuda go on to state that, ". . . the issue of resilience at the time of the trauma is

more of a concern with prolonged or recurrent traumas in which victims are required to contain their fear and arousal." (MacFarlane and Yehuda, 1996, p.175) They also suggest that when accident victims sustain significant injuries, the experience of the rescue and acute treatment are as important predictors of the posttraumatic outcome as the trauma itself. (MacFarlane and Yehuda, 1996)

The unavoidable exposure to trauma is summed up in brief by van der Kolk and McFarlane who wrote, "Experiencing trauma is an essential part of being human: History is written in blood." (van der Kolk and McFarlane, 1996, p. 123) Not all people who are exposed to traumatic events develop traumatic symptoms, and those who do may recover spontaneously after a period of time. (Brady, 2001; MacFarlane and Yehuda, 1996) They may meet the DSM-IV criteria for Acute Stress Disorder together with other diagnoses or symptoms that develop following situations of mass trauma and ongoing anxiety. (Webb, 2006) MacFarlane and Yehuda (1996) point out that:

> The typical pattern for even the most catastrophic experiences is resolution of symptoms and not the development of PTSD. Only a minority of the victims go on to develop PTSD, and with the passage of time the symptoms will resolve in approximately two thirds of these. (MacFarlane and Yehuda, 1996, p. 156)

However, the one third of those victims who do not resolve their symptoms spontaneously need help to achieve an asymptomatic state. When conducting a field trial on PTSD for the DSM-IV, van der Kolk, et al. identified that dissociation, somatization and affect dysregulation were highly interrelated among participants who were exposed to traumatic experiences. (van der Kolk, et al., 1996) In a review of the research concerning epidemiology and clinical

manifestations of posttraumatic stress disorder, (PTSD), Psychiatrist Vasterling writes about the prevalence of trauma exposure and of PTSD, common co-morbid disorders, risk and protective factors for the development and maintenance of PTSD and the course of the disorder. Posttraumatic Stress Disorder (PTSD) as defined in DSM-IV-TR, is:

> a disorder that results when an individual lives through or witnesses an event in which he or she believes that there is a threat to life or physical integrity and safety and experiences fear, terror or helplessness. The symptoms are characterized by (a) reexperiencing the trauma in painful recollections, flashbacks or recurrent dreams or nightmares; (b) diminished responsiveness (emotional anesthesia or numbing), with feelings of detachment and estrangement from others; and (c) chronic physiological arousal, leading to such symptoms as exaggerated startle response, disturbed sleep, difficulty in concentrating or remembering, guilt about surviving when others did not, and avoidance of activities that call the traumatic event to mind. Subtypes are Chronic Posttraumatic Stress Disorder and Delayed Posttraumatic Stress Disorder. (APA, 2007, p. 717)

A brief meta-analytic review by Vasterling and Brewin analyzes results from several recent epidemiological studies and shows the increasing prevalence of the disorder and greater whole system involvement. (Vasterling and Brewin, 1995) Van der Kolk, a psychiatrist, who is known to many as a modern day expert in trauma, has illustrated through examination the somatic experience and subcortical imprints on memory that trauma leaves. While studying memory he concluded that the brain is incapable of precisely reproducing the imprints of prior experience. (van der Kolk, 2002) However, individuals who have been diagnosed with posttraumatic stress disorder (PTSD) provide consistent reports indicating that particular emotions, images, sensations, and muscular reactions related to the trauma became deeply imprinted on their minds. These traumatic

imprints can be re-experienced without appreciable transformation for months, years, and even decades after the actual event occurred (Janet, 1889, 1894; van der Kolk & Fisler, 1995; van der Kolk, Hopper, & Osterman, 2001; van der Kolk & van der Hart, 1991 as cited by van der Kolk, 2002). Participation in group therapy has been identified as a helpful treatment for people with posttraumatic stress. The majority of the literature reflects deep impact, in particular, of object-related trauma including spousal abuse (Rounsaville, Lifton, & Bieber, 1979), concentration camps (Daneli, 1981), rape (Resick, Jordan, Girelle, Hutter & Marhoefer-Dvorak, 1988) and war trauma (McCann & Pearlman, 1990) in (Loewy, 2002) The techniques employed in therapeutic stress interventions involve controlled exposure and memory reactivation as initiated by Foa and Kozak (1985). Loewy and Bosco, both music therapists, apply these techniques in music therapy with adults and children through the use of story song. This is a technique originating in music education and then in Orff Music Therapy with the work of Gertrud Orff (Juul, 1989) and later adapted by Loewy in the early 1980's for use in music therapy. Story song provides opportunity for music re-enactment through symbolized play and improvisation with children. (Loewy and Stewart, 2004) and adults (Bosco, 2002.)

> Through story song, groups are able to share their experiences and be held and protected in their experience by music and others while doing so. They are also encouraged to create alternate story-lines and soliloquies through song, which can strengthen their ego and coping capacities. (Loewy, personal communication, 2007)

Webb writes about loss as an omnipresent part of trauma. "Loss is always part of trauma, whether in the symbolic form of loss of sense of safety and

security, or in the form of a specific loss, such as that of a loved person, a familiar neighborhood or one's home." (Webb, 2004)

2.3 Neurodevelopmental Perspective

The effects of adverse early life experiences often have a negative impact on the developing brain. (Nemeroff, 2004, Perry, 2002, 2005, Sugden, et al., 2006) In his work with maltreated (abused) children, Bruce Perry, a neuropsychiatrist and director of the Child Trauma Academy, Houston, Texas, examines therapeutic work from a neurodevelopmental perspective. This nerodevelopmental model used with over 2,500 children in the Child Protective System and Juvenile Justice System in Texas and Kansas. A key question is raised by Perry, "If adverse experiences alter the developing brain in negative, functional effects, can therapeutic experiences change the brain in ways that allow healing, recovery and restoration of healthy function?" He continues "Much of what ends up being therapeutic is not in the context of conventional therapy, and much of what we do in conventional therapies is not therapeutic. Matching the correct therapeutic activities to the specific developmental stage and physiological needs of a maltreated or traumatized child is a key to success." He states, "The specific symptoms or physical signs a child develops following maltreatment or trauma will reflect the history of neural activation – or in the case of neglect, the history of inactivation. Neuropsychiatric symptoms and signs present in maltreated or traumatized children are related to nature, timing, pattern and duration of their developmental experiences-both adverse and protective." (Perry, 2005, p. 247) Heim and Nemeroff (1999), who are physician

researchers, documented the relationship between early-life stress, sensitization of corticotrophin-releasing factor (CRF), neuronal systems, and development of depression and anxiety. (CRF is a major mediator of the mammalian stress response and coordinates behavioral, autonomic, endocrine, and immune responses to stress. (Nemeroff, 2004) Later, Nemeroff wrote about neurocircuits affected by stress and the corticotrophin-releasing factor and states, "The association between childhood trauma and the development of mood and anxiety disorders may be mediated by changes in neurotransmitter systems that modulate the stress response." (Nemeroff, 2004, pg. 19) Sugden, Kile and Hendren further describe the neurodevelopmental model by pointing out that they trace both "healthy and pathological neurodevelopmental etiologies through the brain mechanisms to surface symptoms. In children and adolescents we see neurodevelopmental maturity leading to control of impulse, affect, anxiety and cognition with individual differences based on individual and environmental factors." (Sugden, et al. 2006)

2.4 Treatment within the Neurodevelopmental Model

The medical model is challenged by Perry who describes it as relying heavily on medication to bring about behavioral change by asserting that they do not reorganize dysfunctional neural networks. Both Perry (2005) and van der Kolk (2002, 2003) write about the importance of using nonverbal therapies such as complementary therapies for treating children, youth and adults who have

been affected by trauma exposure. Specifically regarding children who have been abused, Perry writes,

> Children with brainstem-mediated hypervigilence, impulsivity and anxiety require patterned, repetitive brainstem activities to begin to regulate and organize these brainstem systems; talking, or even therapeutic relational interactions, are not particularly effective at providing brainstem-altering experiences. Dance, drumming, music, massage -patterned, repetitive, sensory input will begin to provide the kinds of experiences that may influence brainstem neurobiology to reorganize in ways that will lead to smoother functional regulation. (Perry, 2005, p.)

Perry also states that the complementary therapies such as the creative arts modalities are being "rediscovered and appreciated for their fundamental therapeutic value. Music and movement activities that provide patterned, repetitive, rhythmic stimulation of the brainstem are very successful in helping modulate brainstem dysregulation. (Miranda, Arthur, Milhan, Mahoney and Perry, 1998; Miranda, Schick, Dobson, Morgan and Perry, 1999.) Controversially, van der Kolk also embraces therapies which ". . . use action more than verbalization such as EMDR (Eye Movement Desensitization and Reprocessing,) sensorimotor psychotherapy, somatic therapies, movement therapies, theater groups, massage and martial arts training such as aikido. (van der Kolk, 2003a)" (Crenshaw, 2006, p. 24) This is controversial only because of the criticism received from some in the scientific community who insist that there isn't enough data to prove efficacy of these non-traditional therapies. However, van der Kolk points out that "The body keeps score," and that the ". . . effects of trauma are often stored in body memories and that verbal therapies can't release the trauma victim from this condition. (van der Kolk, 1994)" (Crenshaw, 2006, p.25) Art Therapists Kalmanowitz and Lloyd echo van der Kolk writing that the

role of the creative arts therapist in the diagnosis and treatment of psychological trauma is “essential.” (Kalmanowitz and Lloyd, 2005, p.17) Asserting that the creative arts therapies might be the treatment of choice to address traumatic memory, suggesting that those memories are “. . . neither integrated conceptually with other memories nor available to be processed, worked through and continually transformed as are other aspects of our memories.” Kalmanowitz and Lloyd, 2005, p. 17)

2.5 Elements of Treatment

Australian psychologist researchers Devilly, Gist and Cotton (2006) point out that while individuals cope with trauma in varying ways and with varying degrees of success, a consistent finding in disaster research is that the vast majority of individuals recover from a traumatic experience without experiencing significant psychopathology. (Devilly, Gist & Cotton, 2006) Streeck-Fischer and van der Kolk (2000) identified the following issues as essential to address in trauma treatment:

1) Safety
2) Stabilizing impulsive aggression against self and others
3) Affect regulation
4) Promoting mastery experiences
5) Compensating for specific developmental deficits
6) Judiciously processing both traumatic memories and trauma-related expectations.

In 2003, van der Kolk added two more issues specific to traumatized children:

7) Developing an awareness of who they are and what has happened to them; repair of the sense of self
8) Learning to observe what is happening in the present time and to physically respond to current demands instead of recreating the traumatic past behaviorally, emotionally, and biologically. The latter process is referred to as desomatizing memory.

(Crenshaw, 2006)

Sensorimotor Psychotherapy (SP) is a method that integrates sensorimotor processing with cognitive and emotional processing in the treatment of trauma. (Ogden, 2003) By using the body as the primary entry point in processing trauma, SP directly treats the effects of trauma on the body, which in turn facilitates emotional and cognitive processing. SP interventions that promote somatic resources, include somatic awareness, the practice of mindfulness, contacting and tracking the body, completing actions evoked in trauma, economical movement, containment and specific movement exercises. (Ogden, 2003) One major component of SP is ". . .maintaining the patient's arousal levels within a 'window of tolerance' and expanding their integrative capacity." (Ogden, 2003, p. ii) Another is the " . . . synthesis of somatic "bottom-up' techniques with cognitive 'top-down' interventions . . ." (Ogden, 2003, p. ii) In the making of art and the moving of one's body during dance or music making, a person participating in creative arts therapy embodies the principles of SP and therefore experiences the counterbalance of healing in a somatic form.

2.6 Use of the Arts Therapies in Response to Mass Trauma and Violence

The arts have a history of helping in traumatic times. Judith Rubin writes that making creative activities available to people who have experienced trauma is a form of "secondary prevention." (Rubin, 2006) This is particularly helpful for those who are at increased risk for psychological problems. She states, "Like medicating at the first sign of an infection, offering arts to people who are in the throes of responding to overwhelming events may well prevent more serious and prolonged emotional damage." (Rubin, 2006) Throughout the articles reviewed and included in this study, a repetitious refrain is heard singing the praises of the use of creative arts therapies in trauma work. (Austin, 2001, 2002, 2004; Rubin, 2002, 2004; Crenshaw, 2006; Webb, 2006; Glass, 2006; Hansen, 2006; Irwin, 2006; Klorer, 2006; Sutton, 2002; Smyth, 2002; Stewart, 2002; Frank-Schwebel, 2002; Loewy & Frish Hara, 2002; Scheiby, 2002) The fact that trauma often involves and resides in the body is well known and has been studied by numerous clinicians across disciplines. (van der Kolk, 2001, 2002, 2007; Levine, 1997; Morse, Mitchum and Vander Steen, 1998; Rubin, 2005) The fact that it can occur before the child has language or renders a person psychically speechless, is also well known and well documented. (Austin, 2001, 2002, 2006; Crenshaw, 2006; Glass, 2006; Rubin, 2002, 2004 and Webb, 2006) This can make accessing memories of traumatic events difficult, if not impossible, to

access with verbal therapy alone. (Rubin, 2006) The success of using the arts in addressing the non-verbal aspects of trauma work is not unique to clinicians trained in the creative arts therapy modalities. When faced with the daunting task of helping severely traumatized clients, those with training in verbal therapy turn to drawing, sandplay, moving, singing or using puppets to unlock painful secrets. (Rubin, 2006) A recent example was referred to as "music therapy for tsunami survivors" although it was facilitated by clinical psychologist and stress-management expert Sharada Sreedevi. The facilitator composed songs out of the stories and images shared by participants affected by the earthquake and resulting tsunami that impacted the southeastern Asian coastal areas. After months of group therapy sessions the participants were led through singing songs based on their stories. (Tulasi, 2005) She states that "music can be a pathway to negotiate anger and aggression, to alleviate sadness and fear and to arouse, awaken and activate victims who are paralysed by depression and fear." (Tulasi, 2005) Harnessing to importance of music in the local culture, she makes the point that " . . . in the past, village life revolved around communal songs and dances. With the advent of mass media, this has largely been lost. Here on the tsunami-ravaged seashore, the survivors are reclaiming this ancient way of communicating and healing as a community." (Tulasi, 2005) There is no question that the arts play an important role in culture and community. Martin DeVries writes,

> Culture plays a key role in how individuals cope with potentially traumatizing experiences by providing the context in which social support and other positive and uplifting events can be experienced. The interactions between an individual and his or her environment/community play a significant role in determining whether

> the person is able to cope with the potentially traumatizing experiences that set the stage for the development of PTSD. Thus, PTSD reflects the sociocultural environment in which it occurs. (DeVries, 1996, p. 400)

Music therapy and other experiential therapies such as the creative arts therapies hold an essential place in trauma work. In her book introducing the therapeutic spiral model, Hudgins quotes Bessel van der Kolk in his keynote address to the 1997 American Society of Group Psychotherapy and Psychodrama stating that "body-centered, experiential methods are the "treatment of choice" for traumatized people." (van der Kolk, 1997 as cited by Hudgins, 2002, pg. 23) Judith Rubin also cites the effectiveness of using the arts. She states, "The arts are powerful tools in the processing, metabolizing, and assimilating of the toxic effects of trauma that linger, fester, and affect the developing brain. (Solomon and Siegel, 2003)" (Rubin, 2006)

2.7 Post Traumatic Stress Disorder

Posttraumatic Stress Disorder is a chronic, debilitating condition in which memories of traumatic events become uncontrollable, intrusive, and disabling. In an article on the structural and functional brain changes in people with PTSD, Nutt and Malizia give a brief, but thorough description derived from neuroimaging studies of the normative human response to trauma.

> The locus ceruleus and higher brain area, such as the thalamus, are involved in the gating of sensory input and are critical to the experience of trauma. Fear, which is a normative response to a traumatic event or other threatening situation, involves activation of the hypothalamic-pituitary-adrenal (HPA) axis. Stimulation of the hypothalamus by either the thalamic, limbic or locus ceruleus circuits activates the stress response,

> resulting in the release of corticotrophin-releasing factor and other neuroendocrine mediators. (Nutt and Malizia, 2004, p.)

The role of memories in PTSD is central. The emotional and somatic contents of memories are associated through the amygdala and moderated by serotonin and norepinephrine and sequentially affected by output from the locus ceruleus. Factoral contents of memory such as associated cues are registered in the hippocampus and cortex. Nutt and Malizia delineate the difference between nonpathological reactions to trauma and the dysregulation that occurs in the pathophysiology of PTSD. In acute stress reactions, the capacity of various stimuli to trigger fear or an alerting response decreases over time and little or no dissociation is experienced. In pathological states the dysregulation that occurs when processing sensory input and memories is believed to contribute to the pathophysiology of PTSD. (Nutt, 2000, Nutt and Malizia, 2004) They go on to identify this as an abnormal process which includes both continued dissociative experiences and inappropriate generalized vigilance.

2.8 Models of Treatment for traumatization and PTSD

There are several models of treatment for people who have been exposed to mass trauma and violence as well as those who have developed PTSD. In an article published in 2004, Australian psychologists Robertson, Humpreys and Ray discuss findings concerning a number of interventions that are commonly used in the treatment of trauma victims or patients with PTSD: critical incident stress debriefing, psychoeducation, exposure therapy, eye movement

desensitization reprocessing, stress inoculation therapy, trauma management therapy, cognitive therapy, psychodynamic psychotherapy, and hypnotherapy. (Robertson, Humpreys and Ray, 2004) Van der Kolk points out that, "Until recently, clinicians had limited knowledge of how to help people integrate such disintegrated traumatic imprints. Traditionally, before the advent of contemporary methods of treatment outcome evaluation, many clinicians, from Pierre Janet to Milton Erikson and his followers, considered hypnosis to be the treatment of choice. Unfortunately the efficacy of hypnosis for the treatment of PTSD was never systematically studied." (van der Kolk, 2005, p. 26) Robertson, et al., also discuss a number of treatment strategies that have recently been studied in PTSD, including imagery rehearsal, memory structure intervention, interpersonal psychotherapy, and dialectical behavior therapy. (Robertson, Humpreys and Ray, 2004) The most widely used and documented methods are described in brief:

2.9 Eye Movement Desensitization and Reprocessing

Eye movement desensitization and reprocessing (EMDR) was the first of the new therapies that suggested the prospect of rapidly and effectively integrating traumatic memories. EMDR has a number of advantages over hypnosis, including that it could easily be put into a treatment protocol, which makes it relatively simple to conduct outcomes research. Since it was first articulated by Francine Shapiro in the late 1980s, EMDR has received intense scientific scrutiny and has been found to be a very effective treatment for PTSD

(e.g., Chemtob, Tolin, van der Kolk, Pitman, 2000) In a randomized clinical trial study comparing the effects of EMDR, fluoxetine, and pill placebo among people between the ages of 18 and 65 with PTSD, EMDR was significantly superior to placebo treatment in reduction of PTSD symptoms and showed a percentage of loss of diagnostic status. Although there was no significant difference immediately post-treatment between the EMDR and fluoxitine groups, EMDR was superior to the medication at the six-month follow-up in complete remission of PTSD symptoms. EMDR was also superior to fluoxitine in the reduction of self-reported depressive symptoms for both samples. (van der Kolk, et al, 2004)

2.10 Psychological Debriefing:

The roots of modality specific interventions for responses to mass violence and trauma across multiple mental health fields follow the psychological debriefing models. One method widely mentioned throughout the literature across disciplines is psychological debriefing. Atle Dyregrov, a leading researcher and developer in the field of psychological debriefing refers to psychological debriefing as a

> . . . planned, structured group activity, organized to review in detail the facts, thoughts, impressions and reactions following a critical incident as well as providing information on typical reactions to critical events. It aims to prevent unnecessary aftereffects, accelerate normal recovery, stimulate group cohesion (in work groups or natural groups), normalize reactions, stimulate emotional ventilation, and promote a cognitive "grip" on the situation. (Dyregrov, 1997, p. 45)

Kinchin writes:

> This is not considered a cure for posttraumatic stress disorder or an injection against the development of the disorder. Neither does it

> suggest that all who are involved in a debriefing are suffering, or will suffer from the consequences of a trauma. It assumes that most people will cope after a traumatic incident, but that they will recover more quickly if they have a structured procedure to follow which helps them to talk about what has happened. (Kinchin, 2007, p. 56)

Historically, psychological debriefing is referred to by a number of different names as listed in the following table:

Name	**Originator**	**Date**
Critical Incident Debriefing (CID)	Mitchell	1975
Critical Incident Stress Debriefing (CISD)	Mitchell	1983
Multiple Stressor Debriefing (MSD)	Armstrong	1991
Post Office Model	Tehrani	1994
Psychological Debriefing (PD) or Process Debriefing (PD)	Parkinson Dyregov	1997 2001
Early Intervention	Psychological Society Working Party	2001
TRiM (Trauma Risk Management)	Royal Marines Model	2002
Emotional Decompression (ED)	Kinchin	2004

(Kinchin, 2007, p. 44)

According to the National Institute of Mental Health, the term debriefing has become diffuse and overused as published in 2002 in "*Mental Health and Mass Violence: Evidence-Based Early Psychological Intervention for Victims/Survivors of Mass Violence. A Workshop to Reach Consensus on Best Practices.*" The definition of debriefing in this document is:

> A generic term often used to refer to Critical Incident Stress Debriefing or similar early interventions. Historically, the term first referred to a routine, individual or group review of an event from a factual perspective for the purpose of learning what actually happened. The results were used for the historical record or planning process, to improve future results in similar situations, and to increase readiness of those being operationally

> debriefed for future action. The term has also been applied to many types of early psychological interventions, but this use of the term alone is not recommended. (Young & Norris, 2002, p.112)

There are three models currently most prominent in trauma care, all using similar techniques and language but with subtle, significant differences. Kinchin writes, " . . .there are several generally accepted models of debriefing: the Mitchell model, the Dyregov model and a three-stage revised model adapted by such debriefers as Parkinson and others (Parkinson, 1997)." (Kinchin, 2007, p. 34) He interestingly includes his own model development, Emotional Decompression, as one of the major methods despite no other citations in the literature. A brief description of those three models is presented here:

2.10.1 The Mitchell debriefing:

The CISD model (Critical Incident Stress Debriefing) was first presented officially in 1983 and was based on his earlier work with Everly. Everly writes about this model, stating, "The history of crisis intervention is replete with singular, time-limited interventions. As crisis intervention has evolved, more sophisticated multi-component crisis intervention systems have emerged. As they have appeared in the extant empirically-based literature, their results have proven promising." (Everly, Flannery and Mitchell, 1998) As originally presented, it contained six phases, and then expanded in 1984 to seven phases. Those phases were: introduction and rules, facts, thoughts, reactions, symptoms, teaching, and re-entry. Each phase included specific questions and the time

allotted for one debriefing session was a minimum of two hours. CISD was originally designed for emergency service workers and those working in emergency rooms in hospitals. There were debriefing techniques used by Mitchell and Everly prior to the 1983 model, but this is the earliest date when it appears as a clearly defined model for psychological debriefing. (Kinchin, 2007, Mitchell, 1983, Everly, Boyle and Lating, 1998 and Everly, Flannery, and Mitchell, 1998).

2.10.2 The Dyregrov debriefing:

Atle Dyregrov's work with children and families through the Center of Crisis Psychology in Bergen, Norway led to the development of this debriefing model. Dyregrov writes about the importance of the process and the differences found between the European model (PD) and the American model (CISD). He writes, " . . . process debriefings(PD) is a type of psychological debriefing based on the same structure outlined by Mitchell, with phases moving from an introduction through a fact-phase, a thought-phase, a reactions- and a symptom-phase, before a normalization and a re-entry phase are conducted." (Dyregrov, 1989).

However, later he placed more emphasis on group processes than in the original Mitchell model. This process oriented debriefing has been developed within the European context, and may reflect a different tradition for groups and structure than in the United States. (Dyregrov, 1997)

2.10.3 The three-stage revised debriefing (after Parkinson):

Army chaplain Frank Parkinson developed his own model of debriefing in three stages based on his experiences dealing with traumatized soldiers from the Gulf War. The model is often referred to as the "three-f's" and offers some variation on the two previously cited models. According to Kinchin, this is the most widely used model throughout the UK. He does note that as "best practices" evolve in the area of trauma care, this model's limitations lie in the superficiality of certain areas. Those three stages are the facts, the feelings, (including sub-categories of emotions and reactions) and the future. A final stage is included titled final statements. (Parkinson, 1997 as cited in Kinchin, 2007, p. 49)

2.11 The Debriefing Debate:

Most of the literature published regarding psychological debriefing mentions one or more of these three models. In the late 1990's a debate emerged over the effectiveness of single session debriefing. This debate spread throughout the US, Australia and the UK regarding the use of PD, CID or CISD. One article suggested discontinuing the use of CISD protocols. (Avery and Orner, 1998 as cited by Dyregrov, 1999.) As early as 1991, critics cited the use of CISD as ineffective. When discussing acute preventive interventions Raphael, et al writes, "To date, there have been no systematic, controlled trials of the effectiveness of the various models of stress debriefing." (Raphael, B., Meldrum, L. & O'Toole, B., 1991) Two of these authors then published a letter in the *British Medical*

Journal in 1995. Raphael and Meldrum were joined by McFarlane, respected experts in the field of traumatology, according to Kinchin. (Kinchin, 2007). In that letter they called for more randomized, controlled studies of the method and stated that several studies reported a negative effect of the method. In addition, they wrote that the method could ". . . aggravate the traumatic process, and that it has an ideological and symbolic more than a helping value." Several other studies cited in the letter were also referenced as proof that PD has no effect. (Dyregrov, 1998) Other authors followed with studies and letters citing that models of psychological debriefing had no effect, or in the case of Kenardy (2000), in a letter to the *British Journal of Medicine*, he wrote that psychological debriefing may do more harm than good. (Bisson, et al., 1997, Kenardy, et al., 1996, Raphael, et al., 1995, Wessely, Rose and Bisson, 1999, McFarlane, 1988). In a Cochrane review, Rose, Bisson, and Wessely contributed to the literature on early intervention by pointing out the difficulty in employing one-to-one counseling (therein referred to as "debriefings") with hospitalized medical patients. (Everly, 2002) They found no evidence that debriefing had any impact on psychological morbidity and recommended that compulsory debriefing should cease based on further evidence that poorer outcomes were sometimes associated with debriefing. (Kenardy, 2000) In a 2003 article by Slomski, she cites studies with results which suggest that symptoms of PTSD improved with non-CISD interventions and with no interventions but not with CISD. She then goes on to present the other side of the debate, citing supporters of CISD. In a report issued by the National Institutes of Health (NIH) cited studies were completed by governmental experts from the NIH and the Department of Defense (DOD). The

studies measured the effectiveness of debriefing and examined the range of services provided after the September 11, 2001 tragedy. She writes, "The panel of experts agreed that early intervention policies should be based on evidenced-based interventions, including support on the scene, psychological first aid and debriefing." (Slomski, 2003, p. 18) Likewise, supporters of PD, CISD and related models replied with studies and articles defending the value of such techniques. (Bohl, 1991; Ford, et al., 1993; Jenkins, 1996; Robinson and Mitchell, 1993; Stallard and Law, 1993; Yule and Udwin, 1991; Everly and Mitchell, 2000; and Irving 2001). Everly, Flannery and Mitchell included the negative studies previously described in a meta-analysis based on debriefing studies found in medical and psychological databases which found a significantly positive effect size (mean Cohen's $d = .54$, $p < .01$) resulting from the CISD intervention. The authors also indicate that the beneficial effect was revealed despite the wide variety of subject groups, the wide range of traumatic events, and the diversity of outcome measures. (Everly, et al., 1998)

Variables which affect the effectiveness of debriefing are articulated in articles reporting both positive and negative results. A number of very different interventions are being called debriefing and the extent and timing of those interventions vary. Everly writes, " . . . the "debriefings" as reviewed in the Cochrane documents tell us little about early interventions as commonly practiced subsequent to mass disasters, warfare and related critical incidents." (Everly, 2002) He goes on to address random controlled trials by (Bisson, et al, 1997; and Hobbs, et al, 1996, with follow-up by Mayou et al, 2000) calling their internal and external validity "suspect."

> Both randomized controlled trials failed to achieve equivalent group membership at pretest ("debriefed" groups had more severe injuries in both studies). The pretest differences may have served to influence the post-intervention outcomes. Clearly, scrutiny of the manifest psychometric increases in the "debriefed" group within the Hobbs study reveals a statistically significant change that has no practical clinical relevance. (Everly, 2002, p. 212)

He further supports his point by criticizing the total reliance on randomized controlled trials as a sole source of evidence when evaluating the efficacy of Critical Incident Stress Debriefing. Citing Seligman (1996) from the related field of psychotherapy research, Everly writes, "But efficacy studies are not necessary, sufficient, or privileged over effectiveness studies in deciding whether treatment works." He goes on to state that, "It would seem myopic to disregard from consideration non-equivalent controlled group outcome research, whether relating to the field of psychotherapy or intervention." Everly, 2002, p. 211) Australian researchers Devilly, Gist and Cotton eloquently address this debate over what qualifies research on psychological debriefing and therapeutic interventions in the workplace and after disasters as follows:

> If, as is often asserted, academic psychologists become detached from the realities of application and practice, it also seems evident that many practitioners have become progressively more estranged from the empirical underpinnings of their discipline. . . . As a consequence, many risk mistaking appreciation of responsiveness for efficacy of response, misapprehending the nonspecific impact of a concerned presence as if some specific impact of a routenized process, and confusing the illusory correlation between early activity and subsequent natural recovery with a quantitative indication of effect. These foibles become all the more difficult to discern when repetition of "accepted practice" supercedes the cautious and objective reporting of controlled research in the information venues most directly accessed by providers and consumers. (Devilly, Gist and Cotton, 2006, p. 339)

The training and background of the debriefers are also variable, as is the absence of control groups in the self-selection procedure to intervention. (Kinchin, 2007, Dyregrov, 1998, Everly and Mitchell, 2000; Everly, 2002) Incidences where the group leader possesses more training seem to result in a greater perceived value of the PD by participants. (Dyregrov, 1997) It is useful to review the ongoing debate over evaluation of research studies on this topic as they can indicate potential for similar debate in related music therapy literature.

2.12 The Difficulty of Researching the Post-disaster Environment

In a report about obtaining consent for post disaster studies, Jacobs, et al write that, "Gaining access to participants in the aftermath of trauma is difficult, and it is important that those rushing to collect data not traumatize survivors a second time. Submitting general protocols to an institutional review board (IRB) on a prospective basis may obviate hurrying proposals through after a disaster. Following the disaster, researchers can provide the IRB with the specific details for the incident to be studied. Among the questions to carefully address is whether one can adequately provide informed consent to participate in the aftermath of significant trauma." (Jacobs, et al, 2002) In a report from a meeting jointly sponsored by the New York Academy of Medicine and the National Institute of Mental Health (NIMH) a group of 37 mental health professionals, trauma researchers, public health officials, ethicists, Institutional Review Board (IRB) representatives, as well as family members and first responder representatives from the Oklahoma City and World Trade Center

disasters met to discuss ethical issues pertaining to research in the aftermath of disaster. Four areas of critical importance to development, evaluation, and conduct of research protocols post disaster were identified by the planners of the meeting:

1) decisional capacity of potential participants,

2) vulnerability of research subjects,

3) risks and benefits of research participation, and

4) informed consent. (NIMH meeting proceedings, 2002)

The attendees of this meeting published a twelve-point list in the conclusion section with recommendations and considerations for research in future disaster events. They concluded that research can be conducted with survivors when their ability to consent has been evaluated and the research does not hinder their access to legal aid, government assistance or medical or mental health treatment. (Collagen, et al, 2003) The role of timing in a post disaster intervention has been addressed by Polack, Vandebergh, & Williams who found that single intervention sessions with bereaved people in the early, acute stages of grief are found to be less effective than interventions that commence months later and for a longer duration. Polack, Vandebergh, Williams, 1975) Raphael, Wilson, Meldrum and McFarlane (1996) warn that early interventions may have negative effects and are a cause for concern pointing out that a “sense of imperative to act may undermine the propensity for reflection.” (p. 474)

2.13 Effects on the therapist

One cannot enter a therapeutic relationship without being affected in some way, whether you are the client or the therapist. The therapeutic relationship is the cornerstone of all effective treatment, according to van der Kolk (1987), Gil (1991), Carey (1999) and Webb (2004) and many others. (Rubin, 2006) She goes on to state that, "The therapist and patient are both confronted with intense emotional experiences that range from helplessness to revenge, from vicarious traumatization to vicarious thrills." (Carey, 2006, p. 17) The literature has identified vicarious traumatization, secondary post-traumatic stress disorders and reactionary (or reactive) depressions as occupational hazards when working with victims of mass trauma. (McCann & Pearlman, 1990; Talbot, et al., 1992; Figley, 1995 and 2000; Van der Kolk, et al., 1996;) These terms occur frequently in the literature and are defined here:

Reactive depression – a major depressive episode that is apparently precipitated by a distressing event or situation, such as a career or relationship setback. It is also called depressive reaction; exogenous depression; neurotic depression; neurotic-depressive reaction. (APA, 2007, p. 722)

Posttraumatic Stress Disorder (PTSD see chapter 2, literature review, p. 13.

Secondary Trauma – indirect exposure to trauma through a firsthand account or narrative of a traumatic event. The vivid recounting of trauma by the survivor and the clinician's subsequent cognitive or emotional representation of that event

may result in a set of symptoms and reactions that parallel PTSD (e.g., re-experiencing, avoidance, hyperarousal). Secondary traumatization is also referred to as *compassion fatigue* (Figley, 1995) and *vicarious traumatization* (Pearlman and Saakvitne, 1995). (Zimering, Muroe and Gulliver, 2003)

Vicarious Traumatization – a transformation in one's inner experience resulting from empathic engagement with clients' traumatic material. (Rosenbloom, Pratt & Pearlman, 1995)

Compassion Fatigue – a state of tension and preoccupation with the traumatized patients by re-experiencing the traumatic events, avoidance/ numbing of reminders, persistent arousal (e.g. anxiety) associated with the patient. It is a function of bearing witness to the suffering of others. (Figley, 1995, p. 2)

According to Figley, compassion fatigue differs from simple burnout in that simple burnout is described as . . . " a state of physical, emotional, and mental exhaustion caused by long term involvement in emotionally demanding situations" (Pines & Aronson, 1988 as cited by Figley, 2002, p. 143) rather than the specific exposure to the trauma and suffering of a specific client. (Figley, 2002) He also points out that compassion fatigue differs from countertransference in that it has more to do with the empathy toward a client that causes trauma than the chronic attachment associated with family of origin relationships.

> Compassion fatigue, in contrast to both simple burnout and countertransference, is associated with a sense of helplessness and

> confusion; there is greater sense of isolation from supporters. The symptoms disconnected from real causes are triggered by other experiences. Burnout may require changing jobs or careers. However, compassion fatigue is highly treatable once workers recognize it and act accordingly. (Figley, 2002, p. 1436)

In an earlier publication, Figley (1995) proposed a reconfiguration on PTSD consistent with current, scientifically based views on the disorder at the time. He pointed out that the revised DSM-IV (1994) and ICD-10 took note of, but did not discuss the implications of a person being confronted with the pain and suffering of others. He suggested that the criteria for posttraumatic stress (PTS) and PTSD retain the same set of symptoms and methods of assessment and in addition, a parallel set of symptoms and methods of assessment be developed for secondary traumatic stress (STS) and secondary traumatic stress disorder (STSD.) (Figley, 1995)

2.14 Crisis Intervention

In the literature on crisis intervention there are numerous references to the effects of work with traumatized individuals. "One study by Berah, et al., studied the effects of working with disaster victims on mental health professionals and found evidence that both their emotional and physical health were affected. A large majority felt shocked, confused, saddened and very tired. About half became very ill, had accidents and all noticed changes in their eating, smoking, or drinking habits, recognized feelings of helplessness and the need for team support. Even those with extensive training and experience in psychological trauma found they were considerably stressed." (Berah et al 1984 as cited by Talbot, Manton & Dunn, 1992, p. 50) In defining and describing

vicarious traumatization, McCann identifies numerous stressors which affect the mental health professional responding to a crisis, the effects on the caregiver and details the constructivist self-development theory developed as a result of working with therapists who have experienced the phenomenon. This is explored in both the relationship of painful and graphic material relayed to the therapists by clients as well as the therapist's cognitive schemas and beliefs, expectations and assumptions about self and others. This includes conceptualizations such as burnout and countertransference, the complex relationship among traumatic life events and the cognitive schemas about the self and world and psychological adaptation. (McCann & Pearlman, 1990) Later Pearlman and Saakvitne further defined the phenomenon of countertransference responses in therapists who were survivors of sexual abuse. The response was doubly loaded as the treating therapist must deal with the countertransference of an 1) incest survivor and a 2) fellow therapist. These writers make the point that it is essential for the client therapist to be a client in the treating therapist's office, not a colleague. (Pearlman & Saakvitne, 1994) Despite a seasoned clinician's experience and familiarity with the concept of compassion fatigue and secondary traumatization, they still may not be adequately prepared to process their own reactions to traumatic events. Social Worker Raymond Fox writes,

> Despite being intimately acquainted with the research on memory and its connection to the phenomena of trauma, "psychache," compassion fatigue, vicarious traumatization, countertransference and burnout, when actually confronting the disaster of September 11th, I faltered, to say the least. Talking with victims, rescue workers, clients – all crushed by it – I realized that none of what I knew intellectually truly prepared me for such enormous and excruciating physical and psychological pain. The overwhelming terror, the sense of loss of safety and security impacted me

> as well as those I counseled. Brought to my knees by my own feelings of inadequacy and helplessness, I pored over the professional literature for guidance. (Fox, 2003, p. 545)

Hattie Berger uses systems theory to describe the effects of trauma on counselors working with clients who have experienced it. She describes how trauma related countertransference may reveal itself, the forms it takes and how it can be utilized. By placing an emphasis on the social and organizational contexts in which trauma counseling takes place she shows how unsupportive systems create an emotional cost to those who work within them. She also highlights the benefits of a compassionate system which ". . . resources the practitioner, enabling him or her to meet the considerable demands of trauma counseling." (Berger, 2001, p. 63) She also examines secondary traumatization and compassion fatigue for their identifying characteristics and potential use for increasing the effectiveness of the counseling relationship. Within a system, Hilliard found that caregivers in a hospice facility showed marked improvements in team building scores after participating in two different types of music therapy groups. No difference was found in compassion fatigue scores after the music making. Although the sample was small (*n=17)* the results indicate positive effects of music therapy helping to build teamwork in an interdisciplinary team of hospice professionals. (Hilliard, 2006, p. 395-401)

2.15 Compassion Satisfaction

Compassion fatigue is cited often in the literature, but fewer articles identify compassion satisfaction, or the satisfaction with one's work. Charles Figley first published a book on compassion fatigue in 1995 introducing the

concept and a model for mitigating the effects of compassion fatigue for those most susceptible. He writes, “The model is based on the assumption that empathy and emotional energy are the driving force in effective working with the suffering in general, establishing and maintaining an effectively therapeutic alliance, and delivering effective services including an empathic response.” (Figley, 1995, p. 9) He goes on to caution, that being compassionate and empathic involves costs in addition to the energy required to provide these services. (Figley, 2002) Providers of Critical Incident Stress management (CISM) services were surveyed while attending a workshop on Prevention of Compassion fatigue. In the study, more than half (58%) of the respondents reported experiencing psychological reactions after providing CISM services, including an array of behavioral, emotional, cognitive and physical symptoms of psychological stress. 40% of the respondents were found to have moderate, high or extremely high risk for compassion fatigue. At the same time, 89% of the respondents were found to have a good, high or extremely high potential for compassion satisfaction and 87% were found to be at extremely low risk for burnout. The authors surmise that, “The results appear to indicate that, while the CISM practitioners recognize the stress associated with their work (as reflected in their reported symptoms), the work provides significant rewards (as measured by compassion satisfaction) that outweigh the stress and mitigate the burnout. Likewise, while 40% tested positive for compassion fatigue (or secondary traumatic stress) as a result of their empathy with CISM recipients, the rewards of the work again appear to mitigate the negative effects of the work.” (Wee & Myers, 2003, p. 37) Compassion satisfaction is presented as a possible

protective factor against compassion fatigue and burnout. A study was conducted of 13 healthcare workers providing care to people traumatized by bombings in Omagh, Ireland on August 15, 1998. The study used mixed methodology in a longitudinal study which found that caregivers with a high compassion satisfaction score were less likely to have high corresponding compassion fatigue and burnout scores. The study also elicited strategies which were found to be beneficial in helping to alleviate the negative effects of working with trauma and implications for practice, management and education. (Collins & Long, 2003)

2.16 Self Care

Berceli and Napoli proposed a model for self care for social work professionals through a mindfulness-based trauma prevention program. The article explores the personal and professional challenges that mass trauma presents to social workers and provides a rationale for, and a description of, the program designed to guide social workers and other health care professionals in learning effective self-directed techniques to maintain equanimity in the face of danger and human suffering. Components include mindfulness of breathing, body scan, and trauma releasing exercises directed at reducing the incidence of secondary trauma and posttraumatic stress disorder. (Berceli & Napoli, 2006) Music Therapist Laurie Oppenheim (1987) focused on risk factors on occupational stress and burnout among music therapists using the Maslach

Burnout Inventory (MBI). Of 500 randomly selected registered music therapists (RMT) 250 replied and 239 surveys were usable in the analysis. Oppenheim identified "preventive measures that can retard or prevent burnout." [among music therapists] These included professional counseling; in-service training in health, nutrition, and stress management; daily exercise, hobbies, plenty of sleep, continued learning, maintaining unscheduled leisure hours; termination of unhealthy relationships, goal setting; and creation of a support system with one's peers. (Oppenheim, 1987)

2.17 The Use of Music after Mass Trauma

The effects of using music with persons experiencing mass trauma was studied by music therapist Baker whose study compared the effects of live, taped and no music on agitation and orientation levels of people experiencing post-traumatic amnesia. While the sample was small, (N=22), results indicate that music significantly reduced agitation ($p < .0001$) and enhanced orientation ($p < .001$). While the results indicated no significant differences between live and taped music, the trend suggested that music selections were more easily encoded in memory and then retrieved on request than that of pictures. The results suggest that music therapy programs have an important role to play in the management of people with post-traumatic amnesia. (Baker, 2001)

2.18 Music Therapy in the Post-Disaster Environment

Music therapists have responded again and again to the violence and destruction that create human suffering, and some have written about the effects. (Loewy, Turry, Frisch Hara, Bosco, Katz, Scheiby, Rubin-Bosco, Feiner, Levine and Geller in Loewy and Frisch-Hara, 2002; Stewart, 2002; Sutton, 2003; Loewy and Stewart, 2004; Ng, 2005,)

Music therapy has been used in promoting peace and non-violent conflict resolution through a non-profit organization founded by Edith Boxhill called Music Therapists for Peace. Current President Joseph Moreno states "No one has dictated that music therapy applications should be limited to the clinic, and I believe our profession should serve as a political force in support of world peace." (Moreno, 2003) As Moreno observed, "Music therapists are becoming increasingly involved in volunteer work in war-torn and developing countries and the growing need for this was brought out at the last World Congress of Music Therapy in Oxford." (Moreno, 2003, para. 3 as cited by Ng, 2005.) As more music therapists enter the professional world, now estimated at 15,000 and growing (Moreno, 2003) the likelihood that more of them will be compelled to respond to traumatic events increases. While it is unlikely that music therapists are among the first responders to critical incidents, they are often able to provide care to those who are and are therefore exposed to the same traumatic material.

Music therapy can provide an unobtrusive, positive format for debriefing responding personnel. By providing diffusion and creating an atmosphere which

is positive, supportive and based on care and concern for the team members, music therapy provides a safe place for necessary expression. In an article interviewing Andrea Frisch Hara and seven other music therapists who have worked directly with survivors of trauma, Ng briefly describes a myriad of traumatic situations and includes descriptions of the work accomplished at various sites by music therapists, including those who have traveled to foreign countries. Some are developing nations that have had large numbers of civilian war casualties such as Sierra Leone Africa and Bosnia-Herzegovina. She writes,

> Music therapists have found their way into postwar societies in need of healing and rebuilding, e.g. Bosnia-Herzegovina (Sunflower Project, n.d.). Here, the Pavarotti Music Centre (PMC), the humanitarian organization, "Sunce," and the Sunflower Project have been providing music therapy services for clients with trauma issues and special needs (Lang & Mcinerney, 2002; Watts, 2004). Music therapists have also worked in the Gaza Strip (Yawney, 1993), in South Africa (Pavlicevic, 1994, 2002), in Sierra Leone (McKay, Burman, Gonsalves, & Worthen, 2004), as well as treatment centers for torture victims in London (Dixon, 2002) and in Berlin (Zharinova-Sanderson, 2004). (Ng, 2005)

2.19 Caring for the Caregiver

In 2001 following terrorist attacks on the World Trade Center in New York City, the American Music Therapy Association supported the efforts of music therapists by funding the New York City Music Therapy Relief Project. An edited book titled Caring for the Caregiver was published by Loewy and Frisch Hara, (2002). This project was coordinated by Andrea Frisch Hara and involved thirty-three music therapists providing services to survivors, caregivers and family members of deceased victims, primary and secondary emergency responders and

residents in the immediate area. The caregiver training (note that the word "therapy" was not used in the brochures and descriptive materials shared with recruited participants) included cross over themes for professional and personal caregivers, acknowledging the dual experience of those affected personally and professionally by the terrorist attacks. The format of the Caring for the Caregiver program was a series of 90 minute sessions, the first 45 minutes included a music experiential led by a core music therapist and the second 45 minutes included an invited speaker who specialized in trauma, grief or related topics. From a group of eight core music therapists, one was designated as the lead therapist and two gatekeepers were assigned to personally accompany participants into an antechamber near the session room in order to help any trainee overwhelmed by the process into a safe area.

In a chapter titled *Models of Caring for the Caregiver*, Stewart writes: "One needs only to walk down the self-help aisle of a local bookstore to recognize that information and advice on how to care for oneself on a personal level abounds. However, upon reviewing the literature in the fields of psychology, social work and music therapy, this same abundance does not seem to exist for the professional caregiver. In the area of professional caregiving, a void seems to exist, particularly in the field of music therapy, where available literature that focuses on self-care and coping is next to non-existent." (Stewart, 2002) In crisis response, the music therapist is in a position of offering services, having no control over any parts of the situation and must be prepared to accept the rejection of their services by either the victims or the organizing service providers. The immediacy of the need for relief and the level of familiarity of the

organizing authorities with the specific training and capabilities of the music therapist vary greatly and this affects the decision to include or exclude the music therapist in the response. Caregiver rejection (Nolan, 2005) also contributes to the difficulty of working in a response effort. The offering of services during crisis can often be interpreted as intrusive by victims. (Talbot, Manton & Dunn, 1992; Ng, 2005; Loewy& Stewart, 2004.) Whether the therapist has direct experience with crisis response or not, Talbot, Manton & Dunn state that "Even those with extensive training and experience in psychological trauma found they were considerably stressed." (Berah et al 1984 as cited by Talbot, Manton & Dunn, 1992) While not disagreeing that the phenomenon occurs, there is dissention over the use of terms such as secondary traumatization. Zimering cites a need for additional research on the topic, calling it an understudied and controversial clinical phenomenon. She identifies the controversy over defining the phenomenon as a disorder versus a reaction. Detractors claim that labeling clinicians with secondary PTSD is pathologizing. Research findings quoted in the article illustrate the point that many clinicians will have transitory reactions to survivor narratives, yet as in primary and secondary trauma exposure, a small percentage of individuals develop the full psychiatric disorder. (Zimering, 2003) While the terminology is debated, the need for preventive training and education is widely called for across disciplines. (Davis, 1983; Linton, 1995; Figley, 1995; Dyregrov and Mitchell, 1992; Cunningham, 2003; and Berman, 2005.)

Joanne Loewy together with nine music therapists in New York City developed a model of self-care for music therapists engaged in mass trauma work during the New York City Music Therapy Relief Project. The Caring for the

Caregiver model, coordinated by music therapist Kristen Stewart, is a program approach to using music therapy to unite caregivers with personal as well as professional associations with the traumatic events of 9/11/01. It included EMS personnel, police officers, teachers and survivors, relatives of deceased victims, music therapists, psychologists, physicians and residents of lower Manhattan. The model provides an opportunity to recognize the simultaneous experiences of trauma from a variety of care giving perspectives. (Loewy & Stewart, 2004) Preparation for mental health responses to people affected by mass trauma is not without precedent in other related fields, but " . . . other models have not typically combined personal with professional grievers who would undergo group process amongst one another." (Loewy, 2007, personal communication)

2.20 Use of Music Therapy in Mass Trauma Responses

While the literature is scant regarding other applications of music therapy in response to mass trauma and violence, there is significant history of it over the last fifteen years. Some examples include the use of music therapy with adolescents at Columbine HS in Colorado (1999) and Santee HS (2000.) (Borczon, 2007, personal communication) Music therapists provided environmental music therapy to displaced survivors of Gulf Coast hurricanes in 2005 as well as the staff and volunteers of the temporary shelter in which they resided. (Nolan, Brooks, unpublished verbal presentation, 2005.) Later, other music therapists traveled to the gulf coast to work with returning residents. (Borczon, personal communication, 2007) The literature also includes a response

designed but not implemented in the case of a nightclub fire in Rhode Island. In this article the unsuccessful attempt to provide music therapy is explored and a request for developing a protocol is articulated. (Whitehead-Pleaux, 2005)

2.21 Preparation for Responding to Mass Trauma

Literature from the field of social work also identifies the rising trend of traumatized clients treated in a variety of settings and that proportionately, interest in the effect of this work on clinicians is growing. In an effort to provide empirical support for educating social workers about vicarious traumatization, social worker Maddy Cunningham created a study exploring the possibility that clinicians may experience reactions associated with traumatic stress resulting from indirect exposure to their client's trauma. (Cunningham, 2003) Art therapist Hayley Berman in South Africa wrote about introducing the creative arts therapies to trauma workers on a national level through an organization called Dedel'ingoma. In addition to art therapy, the core team consists of a drama therapist, music therapist, clinical psychologist and a massage therapist. Author Hayley Berman writes, "If caregivers are held and contained, they are essentially able to hold and contain those they work with and live with. Thus, this work engages both on a reparative and healing level, as well as a preventive one in addressing future generations of history making through the process of art therapy in South Africa." (Berman, 2005) According to Figley(1995) secondary posttraumatic stress is the natural consequent behaviors and emotions resulting

from knowledge about a traumatizing event experienced by a significant other or from helping or wanting to help a traumatized person.

Zimering, et al, write that "If trauma is contagious (Herman, 1992) and the effects of treating trauma survivors may parallel those of primary trauma, a clinician's work may be adversely affected. They go on to identify key components of secondary trauma prevention as found in the practice systems by Herman (1992) and Zimering et al. (2003.) Pearlman and Saakvitne's 1995 article was one source that eloquently defined the concept of secondary traumatization. Zimering, et al., cite four domains which are important to the prevention of secondary traumatization in mental health providers.

> 1) Professional strategies , such as balancing caseloads and accessible supervision;
> 2) Organizational strategies, such as sufficient release time and safe physical space;
> 3) Personal strategies, such as respecting one's own limits and maintaining time for self-care activities and
> 4) General coping strategies, such as self-nurturing and seeking connection."
> (Pearlman and Saakvitne, 1995)

They point out that thus far, no studies have evaluated the effectiveness of these prevention strategies. The aftereffects of working with traumatized individuals have been anecdotally reported (Geller, 2002; Levine, 2002; Scheiby, 2002, Rubin-Bosco, 2002) Ng quotes Frish-Hara as she writes a reflection on her position as the field director of the New York City Music Therapy Relief Project, "Personally I came to know my relationship to loss and trauma at the core level. There were times when ground zero was an internal phenomenon rather than a concrete place in lower Manhattan." (Ng, 2005)

2.22 Supervision

Music therapists working for the Pavarotti Music Center in Mostar, Bosnia-Herzegovina directly after the war in that country used experienced music therapists for supervision based in Belfast, Ireland and London, UK. Supervision as a strategy for preventing and/or treating secondary trauma is discussed in *Music, Music Therapy and Trauma*, (Sutton, 2002) Supervision, as defined in this chapter, is a term used to

> . . . indicate a space into which a supervisee brings in their thoughts and feelings about particular aspects of their clinical work. The space allows supervisor and supervisee to think together about the client, or about other issues relating to their role as a clinician. The working together that music therapists undertake as supervisees and supervisors is seen as an essential part of taking care of oneself to be able to function healthily in the work. (Sutton, 2002, p. 211)

Diane Austin also discusses ongoing clinical supervision as vital to the success of the client/therapist relationship when working within a music psychotherapy framework. She writes about the Jungian archetype of the "wounded healer" and Jung's suggestion that the analyst is as much in the analysis as is the client. She echoes his assertion that the analyst's personality is one of the main factors in the cure. (Austin, 2003) Sedgwick (1994) expanded on Jung's idea by stating that the therapist's "getting it right himself" (p.7) can have a significant transformative effect on a client. (Austin, 2003, pg. 106)

2.23 Education and Training

The call for further education and training also appears in the field of psychiatry. In an issue dedicated to disaster psychiatry, Anastasia Holmes writes,

> Just as a disaster is a complex emergency, responding to a disaster involves navigating a complex hierarchy and arrangement of agencies, provision of basic resources, federal laws, and standards of care. A psychiatrist's ability to help fellow citizens in time of need is affected by one's ability to navigate these systems. Without a knowledge base in how the emergency management system operates, the responsibilities of the public health system, and the role of voluntary agencies in disaster response, psychiatrists may find themselves turned away from a disaster site, ignored by other medical professionals, and generally frustrated. Planning, training, and activism on the psychiatrist's part will enable the professional skills of the psychiatrist to help people through what may be the most traumatic experience of their lives. (Holmes, 2004, p. 92)

She also goes on to write about the committees established by both the American Psychological Association and the American Psychiatric Association, which have written statements of understanding with the American Red Cross so that members of those professional associations may volunteer under the Red Cross at a disaster site. Part of the focus of the Task Force on Psychiatric Dimensions of Disaster, formed in 1990 and established as a committee in 1993 is on "advocating for patients; supporting education, training and career development in the area of disaster psychiatry; and enhancing the scientific basis of psychiatric care for the victims of disaster." (Holmes, 2004, p.96)

The limited number of studies would seem to indicate that the phenomenon of secondary traumatic effects is a rare occurrence, but Mitchell and Bray (1990) suggest that following a critical incident, 3-10% of emergency personnel will have no adverse effects; 80-85% will have acute or delayed effects;

and there will be a small group of 3-10% out of which 3-4% (of the original total) will go on to develop chronic severe PTSD. The sources of these estimates are not quoted." (Raphael, et al., 1991) Those statistics would indicate that eight out of every ten people that respond to a critical incident would experience some adverse effects as a result of their involvement.

In academic settings or training such as internships and residencies, the approach to teaching future clinicians about trauma work requires an awareness of the "soul weariness that comes with caring." (McCammon, 1999 in Stamm, 1999) She advocates for preparing students to hear or listen to provoking examples, encouraging them to consider their own trauma histories as a survivor, witness or responder. Vrana and Lautenbach (1994) found that 84% of undergraduate students enrolled in introductory psychology courses reported experiencing at least one event intense enough to meet criteria for PTSD. One third of students reported four or more separate traumatic events and nine percent reported seven or more events. Studies by Stamm (1993 and 1995) found that college students (N=1,012) completing a survey on stressful events reported 24.5% had experienced the death of a loved one, 4.3% were sexual assault victims, 9.4% knew a sexual assault victim, 15.2% had experienced accidents or disasters and 46.5% reported general problems with living such as unemployment, job-related stress and relocations. In another survey conducted by Follette, Polusney and Millbeck (1994) 30% of mental health therapists and 20% of law enforcement professionals surveyed reported childhood abuse histories. Zuk and Whetmore (1993) wrote that teaching students about trauma increased student's knowledge and capacity for empathy and that they don't

simply discover the “traumatic experience of the Other”, they “confront and formulate narratives of their own experience.” (Zuk & Whetmore, 1993, pg.21) McCammon advises anyone in a teaching role to expect that a substantial number of students (trainees) would have a history of trauma. She published ten points for dealing with traumatic material in class. (McCammon in Stamm, ed., 1999) They include establishing an accepting, but not confessional tone for the class, informing students about the topics to be covered and if audio-visual materials will be used and considering the emotional level and understanding that students in an aroused emotional state cannot take in intellectual points. Also be informed about counseling and support resources and how to refer students to them, talk privately with disclosing students or write a response to journal entries and help them obtain crisis counseling if needed. If a disclosure is made during the class, acknowledge the student’s comments and relate it to the current lesson, model an empathetic response and guide the discussion to a constructive direction, refer interested students to additional reading or self-help literature, include discussions on treatment for both survivors and perpetrators (including ideas about causes) and prevention. Counter the depressing and alarming data with hopeful evidence of recovery. Use an educational adaptation of the CISD model for classroom use and lastly, prepare yourself for potential vicarious traumatization and the impact on assumptions, schemas and engage in restorative activities. McCann and Pearlman(1990) wrote about the positive effects of working with people who have been traumatized and therapist/educators can apply those principles as well. By teaching about trauma, coping and resiliency they can promote

> . . . a heightened sensitivity and enhanced empathy for the suffering of victims, resulting in a deeper sense of connection to others . . . a deep sense of hopefulness about the capacity of human beings to endure, overcome and even transform their traumatic experiences; and a more realistic view of the world, through the integration of the dark sides of humanity with healing images. (McCann and Pearlman, 1990, p. 147)

Chapter 3: Methodology

3.1 Design

The design of this research is a literature based study. The matrix method, developed by Judith Garrard (1999) was used to compile and code the data in order to thoroughly study the data and systematically and carefully build the theory. The articles and book chapters were then analyzed with the qualitative method of grounded theory. According to Strauss and Corbin,

> Qualitative methods can be used to uncover and understand what lies behind any phenomenon about which little is yet known. It can be used to gain novel and fresh slants on things about which quite a bit is already known. Also, qualitative methods can give the intricate details of phenomena that are quite difficult to convey with quantitative methods. (Strauss and Corbin, 1990)

A qualitative, systematic literature based study using grounded theory methodology serves to provide an overarching statement on the state of the field, locating all the work on a given topic, utilizing appropriate standards for inclusion or exclusion and then evaluating, comparing and coding and synthesizing. Grounded theory, as defined by Glaser and Strauss (1967), is a general approach of comparative analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area. Its purpose is to "discover theory from data" (Glaser and Strauss, 1967, p.1). Because this study seeks to form a theoretical model for preparing music therapists to negotiate the complexities of trauma work in a post-disaster setting, this researcher chose a methodology which resonates both with people who experience the phenomenon and the educators who have a

professional interest in it through an inductively-deductively integrated theory. (Strauss & Corbin, 1990, Brown, et al., 2002) Analyzing data inductively is essential to grounded theory and to qualitative research. (Austin, 2003) Theory developed this way "emerges from the bottom up (rather than from the top down), from many disparate pieces of collected evidence that are interconnected." (Bogdan & Biklen, 1992, pg. 31-32) It is interesting to note that the idea of formulating theory from the bottom up vs. a top down approach emerges as a parallel theory in somatic traumatic stress reactions. Music Therapist Dorit Amir points out that, historically, few music therapists have used pure grounded theory (Amir, 2005) but rather modify it or integrate it with other qualitative approaches. She eloquently makes this point about the advantage of using this method to derive theory from within the context of the data collected, "When done well, it can supply the basis and develop the sensitivity and harmony that are needed in order to create a rich, well-constructed theory that is close to the reality being described." (Amir, 2005) Since grounded theory is considered to be theory-building research, the results can be seen as "building blocks to generalizations" (Aigen, 1995, p. 336) meaning that other music therapists who become familiar with the categories can use them to describe their own work and researchers can use these already existing categories to investigate their own areas of interest. (Amir, 2005)

3.2 Subjects

There were no human subjects used in this research or for this study.

3.3 Procedure

Literature was acquired through Drexel University supported databases including MEDLINE(OVID), ERIC, PsychINFO, CINAHL, Digital Dissertations, Social Sciences Citation Index, PILOTS, and HazLit. Also included were articles from peer-reviewed journals from the fields of psychology, psychiatry, social work, art therapy, dance/movement therapy, nursing and music therapy. In addition, edited and single author books published on the subjects of mental health professionals and mass trauma including war, mass casualty, natural disasters and terrorist attacks, vicarious trauma, PTSD and related subjects were included. Interviews were conducted with a small number of music therapists who have direct experience participating in this type of mass trauma work and have established themselves as experts on the topic through publishing books and/or articles on their work. The literary sources and other resources, training and education they drew upon to guide their response (if any) was the focus of the interview. The sources were then abstracted and key concepts were revealed (Garrard, 1999) using the matrix method. 39 pieces of literature including articles, book chapters and personal communications were included in the study. Criteria for inclusion in the study: Articles published in peer reviewed journals or edited books within the last fifteen years (none before 1992) focused on one or

more aspects of the study such as compassion fatigue, mass trauma responses, and caregiver effects after responding to mass trauma/violence and education/training. Items excluded from the literary data were articles or chapters more than fifteen years old and unrelated to any of the previously cited aspects of the study. (Compassion fatigue, mass trauma responses, and caregiver effects after responding to mass trauma/violence and education/training.)

3.4 Operational Definition of Terms

Compassion fatigue – the burnout and stress-related symptoms experiences by caregivers and other helping professionals in reaction to working with traumatized people over an extended period of time. (Figley as cited by APA, 2007)

Compathy - the physical manifestation of caregiver distress that occurs in the presence of a patient in physical pain or distress. According to the similarity of a caregiver's response to the original symptoms, there can be four different types compathetic response: identical, initiated, transferred, and converted. (Morse, Mitcham & van der Steen, 1998)

Empathy - *n.* understanding a person from his or her frame of reference rather than one's own, so that one vicariously experiences the person's feelings, perceptions and thoughts. (APA, 2007)

Posttraumatic disorders – emotional or other disturbances whose symptoms appear after a patient has endured a traumatic experience. Common

posttraumatic disorders include posttraumatic stress disorder, acute stress disorder, the dissociative disorders, and some types of phobias and anxiety disorders. (APA, 2007)

Posttraumatic Stress Disorder (PTSD) in DSM-IV-TR, a disorder that results when an individual live through or witnesses an event in which he or she believes that there is a threat to life or physical integrity and safety and experiences fear, terror or helplessness. The symptoms are characterized by (a) re-experiencing the trauma in painful recollections, flashbacks or recurrent dreams or nightmares; (b) diminished responsiveness (emotional anesthesia or numbing), with feelings of detachment and estrangement from others; and (c) chronic physiological arousal, leading to such symptoms as exaggerated startle response, disturbed sleep, difficulty in concentrating or remembering, guilt about surviving when others did not, and avoidance of activities that call the traumatic event to mind. Subtypes are Chronic Posttraumatic Stress Disorder and Delayed Posttraumatic Stress Disorder. (APA, 2007)

Reactive depression – a major depressive episode that is apparently precipitated by a distressing event or situation, such as a career or relationship setback. Also called depressive reaction; exogenous depression; neurotic depression; neurotic-depressive reaction. (APA, 2007)

Situational psychosis – a severe but temporary reaction to a traumatic event or situation (such as imprisonment) involving such symptoms as delusions and hallucinations. Also called reactive psychosis; traumatic psychosis. (APA, 2007)

Trauma *n*. 1. an event in which a person witnesses or experiences a threat to his or her own life or physical safety or that of others and experiences fear, terror, or helplessness. The event may also cause dissociation, confusion and loss of a sense of safety. Traumatic events challenge and individual's view of the world as a just, safe and predictable place. Traumas that are caused by human behavior (e.g. rape, assault, toxic accidents) commonly have more psychological impact than those caused by nature, (i.e., earthquakes.) 2. A physical injury. Such traumas include head injuries, such as blows to the head; brain injuries, such as hemorrhages and cerebrovascular accidents; and injuries to other parts of the body, such as burns or amputations. (APA, 2007)

Vicarious Traumatization (VT) the impact on a therapist of repeated emotionally intimate contact with trauma survivors. More than countertransference, VT affects the therapist across clients and situations. It results in a change in the therapist's own world view and sense of justness and safety of the world. Therapist isolation and over involvement in trauma work can increase the risk of vicarious traumatization. (APA, 2007)

Chapter 4: Results

4.1 Themes Derived from Results

Since this was a literature based study, the results are theoretical and will require validation through an empirical human-subject study. Through systematically reviewing the selected articles and book chapters as well as personal communications, thematic data emerged and theoretical model was formed. Many common themes emerged as the preparation and training methods for mental health practitioners across all disciplines were examined. Those themes included receiving training prior to the disaster response, being well informed about trauma and trauma work, setting up and participating in supervision or debriefing during the work with other advanced, knowledgeable professionals, purposely designing scheduled breaks from the environment and the work and preparing for rejection when survivors choose not to use the available therapeutic services. Other themes related to preparation specific to music therapy emerged such as music therapists identifying the importance of music making for themselves during or directly after providing care to traumatized people, the importance of the timing of the music therapy interventions, the importance of presenting music on a sophisticated level and maintaining focus on major goals such as relief of tension, expression of anxiety and finding resilience and hope. These themes are displayed in the following table:

Modality	Theme	Citing author(s)
All	Receiving training prior to the disaster response	Austin, Canfield, Collins & Long, Crenshaw, Cunningham, Figley, Fox, Fowler, Hesse, Hudgins, Loewy & Stewart, Loewy & Frisch Hara, Pearlman & Saakvitne, Radley & Figley, Webb, Zimering, et al.
All	Being well informed about trauma and trauma work	Berman, Carey, Crenshaw, Cunningham, Figley, Fox, Fowler, Hesse, Hudgins, Loewy & Stewart, Loewy & Frisch Hara, Pearlman & Saakvitne, Radley & Figley, van der Kolk, Webb, Zimering, et al.
Psychology, Psychiatry, Nursing, Social work, Art therapy, Music therapy, Psychodrama	Setting up and participating in supervision or debriefing during the work with other advanced, knowledgeable professionals	Austin, Berger, Cunningham, Hudgins, Loewy & Frisch Hara, Pearlman & Saakvitne, Sway, Sutton, Figley, Fox, Fowler, van der Kolk and Webb
Psychology, Psychiatry, Nursing, Social Work, Psychodrama,	Purposely designing scheduled breaks from the environment and the work	Berger, Cunningham, Hudgins, Pearlman & Saakvitne, Figley and Zimering, et al.
music therapy	music making for themselves during or directly after providing care to traumatized people	Austin, Loewy & Frisch Hara, Loewy & Strewart, Borling, Borczon, Frisch Hara

music therapy	timing of the music therapy interventions	Stewart, Borling, Frisch Hara
music therapy	presenting music on a sophisticated level	Borczon
music therapy	maintaining focus on major goals such as relief of tension, expression of anxiety and building resilience and hope.	Austin, Loewy and Stewart, Loewy & Frisch Hara, Hilliard, Borczon, and Borling

The articles and book chapters were coded and divided into six tables:

1.	PTSD Treatment Research
2.	Secondary Traumatic Stress Research
3.	Models of Music Therapy Interventions with the Traumatized
4.	Expressive and Creative Arts Methods with Survivors of Trauma, other than Music Therapy
5.	Community Resiliency and Music Therapy Methods
6.	Disaster Mental Health Training and Education

4.2 Treatment for PTSD

From the articles published on PTSD treatment, it appears that the current treatments receiving the most attention in the literature are rooted in cognitive-behavioral therapy. (Solomon, Garrity and Muff, 1992, Foa and Meadows, 1997, Solomon and Johnson, 2002, Litz, Gray, Bryant and Adler, 2002) These include several controlled outcome studies absent in the literature on other approaches. Prolonged exposure procedures and stress inoculation training have been shown to be effective as well. (Foa and Meadows, 1997; van Etten and Taylor, 1998) Van der Kolk, et al compared short-term efficacy and long-term benefits of pharmacologic to psychotherapeutic interventions (EMDR) for PTSD, and found that EMDR was more successful than pharmacotherapy (fluoxitine) in achieving sustained reductions in PTDS and depression symptoms. This benefit was however, only applicable to adult-onset trauma survivors. Six months after completing treatment, 75.0% of adult-onset vs. 33.3% of child-onset trauma subjects receiving EMDR achieved asymptomatic end-state functioning compared with none of the fluoxitine group. For the majority of child-onset patients, neither treatment produced complete symptom remission. (van der Kolk, et al, 2007) There are also studies published on survivors of mass trauma who do not carry a diagnosis of PTSD, but rather document symptoms of acute stress disorder. Ford, Adams and Dailey studied residents living in the geographically proximate population to New York City 5-15 months after the events of September 11, 2001 and found that one in three respondents reported 9/11 – related psychological problems. This was the first study to use a

continuous time-sampling methodology to capture the indices of the psychological impact and access to healthcare services and informal sources of help during the post-disaster ‘recovery’ period with a potentially affected yet understudied population. (Ford, Adams and Dailey, 2006)

Table 1. PTSD Treatment Research

Author, Title, Journal	Year	Purpose	Methodological Design	Results
Solomon, SD, Gerrity, ET, Muff, AM. *Efficacy of treatments for posttraumatic stress disorder: An empirical review*. JAMA, 268:633-8	1992	To determine the efficacy of treatments for PTSD based on an empirical review of the literature.	Empirical Review	Behavioral techniques involving direct therapeutic exposure are useful in reducing PTSD symptoms. Cognitive therapy, psychodynamic therapy and hypnosis may also be promising interventions.
Foa, EB, Meadows, EA, *Psychosocial treatments for posttraumatic stress disorder: A critical review*. Annual Review of Psychology, 48: 449 - 80	1997	A critical review of the literature covering the current approaches to psychosocial treatments of posttraumatic stress disorder.	Critical Literature Review	Overall, cognitive-behavioral treatments enjoy the greatest number of controlled outcome studies, and have been the most rigorously tested. These studies converge to demonstrate that both prolonged exposure procedures and stress inoculation training are effective in reducing symptoms of PTSD. CBT has shown promising initial findings, but it awaits the results of more rigorously controlled studies before its efficacy can be determined. The vast majority of the studies examining EMDR are inundated with methodological flaws, and the results are mixed. The efficacy of this treatment cannot yet be estimated. Contrary to clinical intuition, there is no evidence indicating the superiority of programs that combine different cognitive behavioral techniques.
Van Etten, ML, Taylor,	1998	To further investigate	Analysis of 61 treatment	Overall, the meta-analysis found that

S. *Comparative Efficacy of treatments for PTSD: A meta-analysis*; Journal of Clinical Psychology and Psychotherapy, 5, 144-54		the comparative efficacy of PTSD treatments, using a broader range of treatments than those examined by Otto et al. (1996). This study intended to circumvent the methodological concerns inherent in the latter study. Meta-analysis was used to empirically evaluate the relative efficacy of treatments for PTSD. (1) to identify which classes of treatment are more effective than wait-list controls and placebo; (2) to determine whether some classes of treatment are more effective than others; and (3) to determine whether treatment gains are maintained at follow-up.	trials that included pharmacotherapy and modalities such as behavioral therapy, (particularly exposure therapy), eye movement desensitization and reprocessing (EMDR), relaxation training, hypnotherapy, and dynamic psychotherapy.	exposure therapy was more efficacious than any other type of treatment for PTSD when measured by clinician rated measures. Specifically, the effect size for all types of psychotherapy interventions was 1.17 compared with 0.69 for medication. The mean dropout rate in medications trials was 32% compared with 14% in psychotherapy trials. A second meta-analysis of psychotherapeutic treatments found that treatment benefits for target symptoms of PTSD and for general psychological symptoms (intrusion, avoidance, hyperarousal, anxiety, and depression) were significant, with effect sizes ranging from 0.2 to 0.49
Solomon, SD and Johnson, DM. *Psychosocial treatment*	2002	The major psychosocial approaches to the treatment of PTSD the	Literature Review	Psychosocial treatment studies suggest that several forms of therapy are useful in reducing the symptoms of PTSD once it

of post-traumatic stress disorder: A practice friendly review of outcome research. Journal of Clinical Psychology, 58:947-59		existing empirical evidence for each approach are reviewed. Cognitive–behavioral and insight-oriented approaches are emphasized, as they are the more developed and researched approaches for the treatment of PTSD. Other approaches, including pharmacotherapy, group therapy, and crisis intervention, also are reviewed briefly.		has been diagnosed. The limited number of systematic studies so far indicates that no one approach likely is to be successful in reducing all of the symptoms of PTSD. To date, strongest research support is found for the treatments that combine cognitive and behavioral techniques. Studies of hypnosis, psychodynamic, anxiety management, and group therapies have suggested that these approaches also may hold promise.
Litz, B., Gray B., Bryant, R., Adler, A. *Early Intervention for Trauma: Current States and Future Directions.* Journal of Clinical Psychology in Scientific Practice, Vol. 9: 112-134	2002	Identifies the core issues in early intervention that need to be addressed in resolving the debate over PD. It critiques the available evidence for PD and the early provision of cognitive behavioral therapy (CBT)	Critical Literature Review of 6 randomized, controlled trials.	Single session PD, when applied to individuals with moderate to severe exposure to PTE who are not pre-screened for risk factors or suitability for active intervention, is not useful in reducing PTSD symptoms to a greater extent than would occur with the passage of time. Also states that it is premature to conclude that PD hinders recovery from trauma. Sufficient evidence suggests that the indiscriminant use of PD with individuals is inappropriate, but the authors also suggest that much more evidence is needed to examine all aspects of the intervention and its application.

van der Kolk, B.; Spinazzola, J.; Blaustein, M.; Hopper, J.; Hopper, E.; Korn, D.; and Simpson, W. *A Randomized Clinical Trial of Eye Movement Desensitization and Reprocessing (EMDR), Fluoxetine, and Pill Placebo in the Treatment of posttraumatic Stress Disorder: Treatment Effects and Long-Term Maintenance.* Journal of Clinical Psychiatry 68:1, January, 2007	2007	To study the short-term efficacy and long-term benefits of pharmacologic vs. psychotherapeutic interventions for PTSD. This study compared the efficacy of a selective serotonin reuptake inhibitor (SSRI), fluoxitine, with a psychotherapeutic treatment, eye movement desensitization and reprocessing (EMDR), and pill placebo and measured maintenance of treatment gains at 6-month follow-up.	*(n=88)* PTSD subjects were randomly assigned to EMDR, fluoxitine, or pill placebo. They received 8 weeks of treatment and were assessed by blind raters posttreatment and at 6-month follow-up. The primary outcome measure was the Clinician Administered PTSD scale, DSM-IV version and the secondary measure was the Beck Depression Inventory – II.	The psychotherapy intervention was more successful than pharmacotherapy in achieving sustained reductions in PTSD and depression symptoms, but this benefit accrued primarily for adult onset trauma survivors. At 6-month follow-up, 75.0% of adult-onset vs. 33.3% of child-onset trauma subjects receiving EMDR achieved asymptomatic end-state functioning compared with none of the fluoxitine group. For most childhood-onset trauma patients, neither treatment produced complete symptom remission.

4.3 Secondary Traumatic Stress

Table two refers to the included articles and chapters written on Secondary Traumatic Stress (STS) including compassion fatigue, burnout, secondary traumatization and compathy (or physical empathy.) Three major themes emerged as important points. The first was addressing vulnerability to developing symptoms of STS. (Boscarino, Figley & Adams, 2004; Canfield, 2005; Collins & Long, 2003; Cunningham, 2004; Frank & Karioth, 2006; Fowler, 2006; Fox, 2003; Good, 1996; Hilliard, 2006; Jacobson, 2006; Pearlman & Saakvitne, 1995; Thomas& Wilson, 2004; Wee & Myers, 2003; and Zimering, et al., 2003) Cunningham makes the point that awareness of personal history is a strategy for dealing with vicarious traumatization and that mass traumas often trigger therapist's memories of personal trauma. (Cunningham, 2004) Symptoms of STS can be diverse as the symptoms of Acute Stress Disorder (ASD) and PTSD and can be behavioral (Collins & Long, 2003; Figley, 2002; Pearlman & Saakvitne, 1995), physical (Morse, Mitcham & van der Steen, 1998) or mental (Figley, 2002; Fox, 2003 and Zimering, Munroe & Gulliver, 2003). Several authors have identified key factors such as a prior diagnosis of PTSD (Good, 1996; Jenkins & Baird, 2002; Pearlman & Saakvitne, 1995; and Wee & Myers, 2003) as placing therapists at greater risk for developing symptoms of STS. Good (1996) found that working with clients with dissociative disorders also placed therapists at greater risk for developing STS as did Austin (2003) and Cunningham (2004). Female gender was also identified by some authors as correlating to higher risk for developing STS. (Boscarino, Figley & Adams, 2004;

Collins & Long, 2003; Good, 1996 and Ford, Adams & Daily, 2006) Compassion satisfaction is addressed by Jacobson (2006),Wee & Myers, (2003) and others as counteracting the effects of compassion fatigue through deriving personal, spiritual and professional satisfaction through one's work. (Collins & Long, 2003; Jacobson, 2006; Radley & Figley, 2007; Wee & Myers. 2003)

The second theme is about preventive measures which can take the form of personal, professional or organizational strategies for coping. Pearlman and Saakvitne write,

> A critical step for survivor therapists is to engage in their own personal psychotherapy. Personal psychotherapy, ongoing supervision, and consultation all support the therapist and acknowledge the enormous complexity of the work and of the human psyche. We are the tools of our trade; we use ourselves, our perceptions, affect, intelligence, insight and intuition to understand, connect with, and help our clients. (Pearlman & Saakvitne, 1995, p. 185)

Personal coping strategies range from personal psychotherapy (Austin, 2002, 2003; Canfield, 2005; Figley, 2002; Fowler, 2006; Fox, 2003; Pearlman & Saakvitne, 1996; Webb, 2004) to spirituality or accessing inner resources (Cunningham, 2004), resourcing (Austin, 2002, 2003) and factors associated with health and well-being such as exercise, getting adequate sleep and nutrition. (Figley, 2002; Fox, 2003; Fowler, 2006 and Radley & Figley, 2007) According to Figley (2002):

> The psychotherapist needs ways to desensitize from distressing memories; memories that invoke traumatic symptoms are the hallmark for compassion fatigue. Most often, the psychotherapist needs the services of another to be effectively treated. We cannot afford not to attend to the mistakes, misjudgments, and blatant clinical errors of psychotherapists who suffer from compassion fatigue. (Figley, 2002, p. 1440)

Art therapist Kalmanowitz describes the process of resourcing for art therapists working with survivors of war trauma in an open studio format. She writes,

> "Although a sense of inadequacy and wonder remains each time we enter a new situation, we draw from our own art-making processes over many years and from the knowledge we have gained from the individuals who have used the studio. We realize we cannot fill the bottomless pit of need we are often faced with, but we can, it seems begin a process of psychological replenishment." (Kalmanowitz, 1999, pg. 123, bottom paragraph)

Resourcing as a coping mechanism for dealing with the depleting effects of working with survivors of trauma is present in several articles. (Austin, 2003; Hudgins, 2002; MT JB, personal communication, 2007, MT RB, personal communication, 2007 ; Sutton, 2002) Resourcing is a term introduced by Peter Levine in methods of trauma work called, "somatic experiencing." (Levine, 1997) This refers to helping clients connect to inner and outer sources of support and strength. This is especially important if the trauma work triggers a traumatic re-enactment within the therapist or if the therapist has a history of surviving past trauma.

4.4 Clinical Supervision

Professional strategies such as acquiring supervision, participating in peer supervision or group therapy and debriefing were discussed by many of the authors as a strategy to prevent or treat STS. (Austin, 2002, 2003; Canfield, 2005; Collins & Long, 2003; Cunningham, 2005; Fowler, 2006; Fox, 2003; Hesse, 2002; Pearlman & Saakvitne, 1995, Radley & Figley, 2006; and Zimering,

Munroe & Gulliver, 2003) These authors repeatedly mention supervision and related actions as a method of self care. (Pearlman & Saakvitne, 1995; Morse, Mitchum & van der Steen, 1998; Figley, 2002; Jenkins & Baird, 2002; Hesse, 2002; Loewy & Frisch Hara, 2002; Austin, 2003; Collins & Long, 2003; Fox, 2003; Wee & Myers, 2003; Zimering, Munroe & Gulliver, 2003; Boscarino, Figley & Adams, 2004; Cunningham, 2004; Webb, 2004; Crenshaw, 2006; Hilliard, 2006; Jacobson, 2006; Radley & Figley, 2007)

Supervision is defined by Sutton (2002) to

> . . . indicate a space into which a supervisee brings in their thoughts and feelings about particular aspects of their clinical work. The space allows supervisor and supervisee to think together about the client, or about other issues relating to their role as a clinician. The working together that music therapists undertake as supervisees and supervisors is seen as an essential part of taking care of oneself to be able to function healthily in the work. (Sutton, 2002, p. 211)

The American Psychological Association defines the term thusly:

> In psychotherapy and counseling, clinical guidance and direction (i.e., critical evaluation) that is provided by a qualified and experienced therapist or counselor -the supervisor- to a trainee. (APA, 2007, p. 910)

Social Worker Maddy Cunningham writes about supervision and support saying, “If we therapists are to provide a safe therapeutic context for our clients to heal, we must also create a safe place for ourselves to deal with the impact of that work on us.” (Cunningham, 2004, p. 334) She goes on to define ongoing supervision with an experienced and knowledgeable professional in the area of vicarious traumatization as “essential.” Play Therapist Nancy Boyd Webb (2004) also cautions mental health practictioners who may also be affected by traumatic

events in their community to consider self care as the “foundation of care for others” (Webb, 2004, p. 354) and to seek supervision from supervisors or consultants who are knowledgeable about vicarious traumatization and who can assist them in dealing with their personal reactions. (Webb, 2004)

Preventive strategies on the organizational level are mentioned by several authors Cunningham(2004), Jacobson (2006), Fowler (2006) and Hilliard (2006). Administrators who recognize the value of self-care for therapists in their employ contribute to organizational coping strategies such as balanced workloads, adequate time outside of interpersonal counseling sessions and advanced training through continuing education. Cunningham (2004) points out that administrators can also help by not “pathologizing” therapists’ reactions, but rather making a commitment to their professional development in training and supervision. (Cunningham, 2004) The social support of peer support groups is also recommended. Nearly every author who asserted an opinion about the positive value of obtaining ongoing supervision also recommended advanced training. (Austin, 2002, 2003; Collins & Long, 2003; Cunningham, 2005; Fowler, 2006; Fox, 2003; Hesse, 2002; Pearlman & Saakvitne, 1995, Radley & Figley, 2006; Turry, 2002; and Zimering, Munroe & Gulliver, 2003) Radley & Figley (2007) introduce a model of compassion satisfaction and positivity to be included in the clinical education of social workers (Radley & Figley, 2007) and Zimering, Munroe & Gulliver (2003) and Webb (2004) echo that call within their respective fields.

Table 2. Secondary Traumatic Stress Research

Author, Title, Journal	Year	Purpose	Methodological Design	Results
Pearlman, L.A. and Saakvitne, K.W. *Treating Therapists with Vicarious Traumatization and Secondary Traumatic Stress Disorders.* In C.R. Figley (ed.) Compassion Fatigue: Secondary Traumatic Stress Disorders from Treating the Traumatized.	1995	Focuses on vicarious traumatization, secondary traumatic stress disorder (STSD) and other stress disorders that arise among therapists. Identifies personal, professional and organizational interventions which can ameliorate the impact of vicarious traumatization. Emphasizes the *cumulative* aspect of traumatic exposure in the development of STSD.	Literature Review and presentation of model	Skilled therapists are in demand to treat survivors of abuse, however, those therapists are at risk of deeply and profoundly changed by their work and potentially of being permanently harmed. Therapists can protect themselves by actively addressing their vulnerability to vicarious traumatization, and taking preventive and ameliorative measures in personal, professional and organizational realms on a daily basis.
Good, D.A., *Secondary traumatic stress in art therapists and related mental health professionals.* Proquest Dissertations and Theses 1996, section 0142, part 0519 97 pages publication number AAT 9635262	1996	The study examines the relationship between symptoms of ST in art therapists, as well as other mental health professionals. To broaden STS research art therapists were studied because they use art materials in the therapeutic session to help clients process materials in	Experiemental design. Participants *(n= 257)* completed a survey of demographics, professional and personal information, the CF self test for psychotherapists, and the PK scale from the MMPI-2 which measures PTSD symptoms.	No significant correlation was found between STS in therapists and whether they work with traumatized clients. Analysis did indicate that participants who had experienced PTSD in their past had greater STS symptoms, suggesting that they were more susceptible to STS symptoms than those who had not experienced PTSD. There was a significantly higher incidence of STS in therapists who work with dissociative

		the therapeutic session to help clients process emotions and memories through the depiction of graphic images. Not only is the therapist dealing with verbal images of the client's trauma, but the art therapist is often witness to the traumatic event through the visual art image.		clients. There is a significant correlation between STS and gender, although the participants were predominantly female, which negatively effects generalizability. Increased years of experience also correlated with fewer symptoms of STS. Conclusions: Therapist's with past PTSD may be more susceptible to STS when working with clients; it may be more stressful for therapists to work with clients who dissociate than with other clients; and ways of preventing stress symptoms from occurring may be increased with experience. The results of the research suggest that further investigation into the effects of STS on the therapist is warranted.
Morse, J., Mitcham, C. and van der Steen, W. *Compathy or Physical Empathy: Implications for the Caregiver* Relationship. Journal of Medical Humanities, Vol. 19, No.1.	1998	Makes the case for the importance of a previously overlooked phenomenon, physical empathy or "compathy."	Literature-based, Phenomenological study.	Introduces the paradigm of experiencing physical empathy discovered by finding experiential descriptions of the phenomena which did not fit the standard conception of empathy. There can be four different types of compathetic response: identical, initiated, transferred, and converted.
Charles R. Figley *Compassion Fatigue: Psychotherapists' Chronic Lack of Self-*	2002	Discusses the concept of compassion fatigue and contrasts it with simple burnout and	Presentation of multi-factor model	Differentiates between the symptoms of burnout, compassion fatigue and countertransference. The psychotherapist needs ways to desensitize from distressing

Care JCLP/In Session: Psychotherapy in Practice, Vol. 58 (11) , 1433-1441 (2002)		countertransference. Includes a multi-factor model of compassion fatigue that emphasizes the cost of caring, empathy and emotional investment in helping the suffering.		memories; memories that invoke traumatic stress symptoms and are the hallmark for compassion fatigue. Most often, the psychotherapist needs the services of another to be effectively treated. "We cannot afford not to attend to the mistakes, misjudgments, and blatant clinical errors of psychotherapists who suffer from compassion fatigue."
Jenkins, SR., and Baird, S. *Secondary Traumatic Stress and Vicarious Trauma: A Validational Study*	2002	"Examines the associations among measures of these trauma-related constructs in a sample of sexual assault and domestic violence counselors, comparing these measures with each other and with measures of burnout and general distress to evaluate the concurrent and discriminate validity of the two trauma-related measures."	Validational Study seeking to confirm/dispute construct validity. Measures used: *Demographics/history, Compassion Fatigue Self-Test for Psychotherapists (CFST), TSI Belief Scale, revision L (TSI-BSL), Maslach Burnout Inventory (MBI), Symptom Checklist – 90 revised (SCL-90-R), TSI Life Events Checklist* The CFST and TSI-BSL summary and subscale scores were correlated with summary and subscale scores for the MBI, GSI and each other to examine their concurrent and	Results showed evidence of good concurrent validity for the CFST and TSI-BSL (considering their conceptual differences,) and appropriate associations with general psychological distress for the CFST, TSI-BSL, and MBI, but inadequate evidence for concurrent validity between measures for burnout (CFST-BO and MBI). The theoretical link between counselor's empathic sensitivity, effectiveness in the role and trauma vulnerability should be tested.

			discriminate validity.	
Hesse, A. *Secondary Trauma: How working with trauma survivors affects therapists.* Clinical Social Work Journal, Vol. 30, No. 3	2002	Introduces recommendations for presenting secondary traumatization in education and presents coping skills to prevent it during training and professional work.	Phenomenological study. Case vignettes	Calls for personal, professional and organizational plans for prevents and treating STS. Makes the case for further research in the field.
Collins, S, Long, A., *Working with the psychological effects of trauma: consequences for mental health-care workers- a literature review.* Journal of Psychiatric and Mental Health Nursing. Vol. 10, 417-424	2003	Explores how interacting with seriously traumatized people has the potential to affect health-care workers.	A literature review	Healthcare workers who work with trauma victims are subject to significant stress and are vulnerable to secondary traumatic stress. STS theory forecasts that professionals affected by STS are at higher risk of making poor professional judgments than those professionals who are not affected. Conversely, secondary traumatic stress theory predicts that personal, professional, and organizational may provide protective factors to medicate against some of the risks relating to the development of secondary traumatic stress.
Fox, R. *Traumaphobia: Confronting Personal and Professional Anxiety.* Psychoanalytic Social Work, Vol. 10 (1) c. 2003 Haworth	2003	Personal and professional account of dislocation after the events of 9/11/01 at the WTC in NYC.	Phenomenological account of personal and professional dislocation resulting from the WTC disaster on 9/11/01. Includes a literature review of memory and its connection to the	Guideposts for Self-Awareness and Self-Care: 1) Recognize our human vulnerability and through that model expectation and confidence in the future for people around us. Staying in the present moment allows us to discover new options

Press			phenomena of trauma, "psyhcache," compassion fatigue, vicarious traumatization, countertransference and burnout.	for coping and provides potential lasting relief from anguish and prevents the etching effects of memory arising from our own overwhelming shock and disbelief. 2) Take time to inventory our unique attributes and qualities. Recognize the resonance we possess as caregivers and the need to take care of our bodies. 3) Accept that we may not be able to sooth those who are directly affected, suspend self-criticism. Writing in a journal can help find catharsis but also face doubts squarely and realistically. Self-talk can heighten inner attention and increase self-acceptance. 4) Remind yourself and others that we all have resources and knowledge at our command and that no matter how distressing our emotions are, they will not last forever. Our own arousal at the time of disaster, either primary or secondary, leads to feeling victimized, to our sense that the world is contaminated, to our being suspicious and uncertain. 5) Avoid the tendency to isolate or disengage, not only from clients,

				but from peers and yourself as well. Foster close associations with colleagues so as to be affirmed, glean support, and create avenues to share experience.
Wee, David Myers, Diane *Compassion Satisfaction, Compassion Fatigue and Critical Incident Stress Management.* International Journal of Emergency Mental Health, Vol. 5, No. 1, pp 33-37.	2003	Measuring the potential for compassion satisfaction, compassion fatigue and burnout at an international conference of providers of CISM services.	Questionnaire, self-report and Compassion Satisfactions and Fatigue Test (CSF) adapted from Figley	59% of sample reported symptoms of psychological stress associated with their CISM work. 40% experienced moderate, high, or extremely high risk for compassion fatigue. 87% reported an extremely low level of burnout. Results indicate that while CISM practitioners recognize stress associated with their work, the work provides significant rewards that outweigh the stress and mitigate the negative effects of the work. The greater the age of the CISM provider the more positively associated with increased potential for compassion satisfaction and decreased risk for burnout. Delimitations: Convenience sample, self-selected for participation.
Zimering, R., Munroe, J. and Gulliver, S.B., *Secondary Traumatization in*	2003	The authors discuss current research and implications for this "controversial and emerging field of study."	Literature Review	The review highlights the controversy over the phenomenon of secondary traumatization. Detractors claim that it is pathologizing and that it is best described as a reaction, not a disorder. Research

Mental Health Care Providers. Psychiatric Times, Vol. XX, issue 4				findings of primary and secondary PTSD related to the WTC attacks on 9/11/01 showed that in the first five to six weeks following the attacks, 20% of residents living close to the WTC met the criteria for probable PTSD. Research on secondary traumatization parallels those findings with clinicians who treated survivors. A minority of professionals met full diagnostic criteria for PTSD in the months following their exposure to survivor narratives. *Prevention:* Key components might be found within practice systems such as the four domains introduced by Pearlman & Saakvitne, (1995) *Educating:* Empirical evidence suggests that a duty to educate those entering the field to anticipate how this work will affect them and to prepare them to address those effects.
Cunningham, M. *Avoiding Vicarious Traumatization; Support, Spirituality and Self-Care, ch. 15 in Mass Trauma and Violence; Helping Children adn Families Cope. Ed. Webb, N.B.*	2004	Focuses on therapists treating children affected by large scale traumatic events, such as the 9/11/01 attacks and the Oklahoma City bombing.	Literature review	Delineates the difference between the classical definition of countertransference, indicating that rather than stemming from unresolved personal conflicts which affect the therapist's reactions, countertransference in trauma work relates to the content presented by the client. Therapists working with traumatized clients may experience reactions similar to those of their clients, including despair, rage, terror, feelings of

				being overwhelmed, nightmares and concerns for personal safety. In addition they may feel overwhelmed in their role as a witness to others' horrific pain and suffering. Professional Strategies for Coping: 1) Training in trauma work. Specialized and within a theoretical framework offering intellectual containment in the face of violence and powerlessness and helplessness. 2) Supervision and Support – A safe place for clients is created when a safe place for the therapist is also crated to deal with the impact of the work. Ongoing supervision from a professional who is experienced and knowledgeable provides support. Administrators can help by not pathologizing therapists' reactions, but rather making a commitment to their professional development in training and supervision. Social support in peer support groups is also recommended. Personal Strategies: 1) Spirituality as a source of "calm during the storm." Accessing

				inner resources to buffer the stress of trauma work. 2) Grounding – being "grounded" in our own experience, connecting to our true selves, finding meaning in our suffering and a sense of purpose. 3) Surrender – releasing attachments and expectations and transcending the need to make sense or have control over the situation. 4) Awakening the Heart – to allow ourselves to be touched by our client's stories and pain and remain open. (Welwood, 2000) It is natural to disconnect when we feel emotional pain, consistent with Carl Roger's definition of empathy, losing the as if condition of understanding another's experience and meaning as if one were the other person. 5) Mindfulness – remaining in the moment, appreciating the fullness of each moment. Meditation is a common method of engaging in mindfulness. 6) Physical and psychological self-care. Our bodies hold the stress from hearing all the details of client's experiences and the strong

				accompanying affect. Take breaks, decathect from the work, attend conferences, attend unrelated social event, etc . . . Awareness of personal history is a strategy for dealing with vicarious traumatization. Mass traumas trigger therapists' memories of personal trauma.
Boscarino, J., Figley, C. and Adams, R., *Compassion Fatigue Following the September 11 Terrorist Attacks: A Study of Secondary Trauma among New York City Social Workers.* Int'l Journal of Emergency Mental Health, Vol. 6, No. 2, pp. 57-66.	2004	Assess the potential prevalence of CF among social workers who cared for victims of the September 11 Terrorist attack in NYC, and to test the hypothesis that, controlling for demographics, trauma history and social support, social workers more involved in counseling victims of the attack were at greater risk for compassion fatigue. The null hypotheses were that social workers with controls for the same variables with a supportive work environment would be protected from CF.	Survey of social workers (n=220) living in NYC with a master's degree in Social Work or higher and who were members of the National Association of Social Workers (NASW). Survey was based on the Compassion Fatigue Scale –Revised, the ST-5 a five item Secondary Trauma scale and the JB-8, Job Burnout scale.	The majority of respondents were white women, older than 50 years of age, what appears to be representative of the demographics of social workers living in the NYC area with an MSW degree or higher. More than 50% reported being exposed to two or more traumatic events in their lifetime and 19% were currently seeing a substantial number of pts (20% or higher) who were victims of violence. 38% were moderately to extensively involved with counseling persons affected by the WTC disaster. One major finding: WTC counseling involvement was now significant (p=<.05) in the ST model without WTC recovery involvement suggesting that the latter as suppressing effects of the former. 52% of those with high recovery involvement were defined as a potential ST case, compare with 25% for those with low involvement (p=<.02).

				In the case of high counseling involvement, 35% were potential ST cases compared with 25% for those who were low on this variable (*p*=ns). Summary: Supports the concept that the risk for CF increases with exposure to traumatic material among healthcare workers. It is shortsighted to limit CF/ST to mental health providers and important variables in predicting CF include degree of exposure, personal history, social support and environmental factors. These predictor variables are also likely to have an effect on lay caregivers as well.
Webb, N. *On going Issues adn Challenges for Mental Health Professionals Working with Survivors of Mass Trauma.* In *Mass Trauma and Violence; Helping Children and Families Cope. Ed. Webb, N.B.*	2004	Book chapter examining issues and challenges for mental health practitioners understand and deal with the effects of mass trauma on our clients and ourselves.	Theoretical model	Examines issues for therapists and calls for specific training to avoid traumatizing practitioners. Webb recommends specialized training in trauma work, reviewing research in the field of traumatology and integrating both into current practice. "Although we cannot guarantee the future, we can learn to deal effectively with the challenges it may throw in our path." Webb, 2004
Thomas, R.B. & Wilson, J.P. *Issues and Controversies in the Understanding and Diagnosis of Compassion Fatigue,*	2004	Presents a model for using "Traumatoid States" to inclusively address the multi-dimensional stress response syndromes.	Critical literature review and model proposal.	Covers conceptualizations of helper stress and suggests a model for using "traumatoid states" instead of CF, STS and VT. This includes the wide range of seemingly diverse reactions to work with trauma clients and provides room for

Vicarious Traumatization, and Secondary Traumatic Stress Disorder. International Journal of Emergency Mental Health, Vol. 6, no. 2, pp. 81-92				understanding the nature of stresses of the work.
Canfield, J. *Secondary Traumatization, Burnout and Vicarious Traumatization. A review of the literature as it relates to therapists who treat trauma.* Smith College Studies in Social Work 75(2)	2005	Examines the internal process of therapists as they try to make sense out of stories they hear from clients and to integrate those stories into their own existing cognitive schemas.	Literature review	Strategies for preventing and treating STS are discussed in three areas: personal, professional and organizational. Internal processing is examined as well in terms of the therapists existing cognitive schemas, as well as shifts in the cognitive schema in relation to treating patients who have experienced trauma.
Frank, D. & Karioth, S. *Measuring Compassion Fatigue in Public Health Nurses Providing Assistance to Hurricane Victims.* Southern Online Journal of Nursing Research, 4(7) 2-13	2006	Examination of the factors that place nurses at risk for compassion fatigue	Survey of nurses who responded to the 2004 hurricanes in Florida using the Compassion Fatigue Self-test, and measuring the risk for CF in public health nurses. *(n=117)*	Majority of respondents were at low risk for CF. Factors involved were the short-term (2 weeks) deployment and most reported this event as their first time to provide assistance to disaster victims.
Hilliard, R.E., *The*	2006	To study the effects of two	Experimental design	Participants showed marked improvement

effect of music therapy sessions on compassion fatigue and team building of professional hospice caregivers. The Arts in Psychotherapy, 33(2006) 395-401		different types of music therapy (ecological and didactic) on compassion fatigue and team building in professional hospice caregivers. Null hypotheses 1) no significant difference between CF score between groups and 2) no sig. difference between pre and post test CF scores within groups. 3) No significant differences on participants team building scores between groups and 4) no significant differences between pre and post-test team building scores within groups.	*(n=17)*	in the TBQ scores I both styles of music therapy groups. Scores were higher with participants in the didactic group with the music therapist as the leader, which the author attributes to their comfort in working with a team leader in their interdisciplinary teams (physician as leader.) While team building score were higher after the MT groups, no significant changes were found in CF scores. Although the sample was small, the results indicate positive effects of music therapy helping to build teamwork in an interdisciplinary team.
Jacobson, Jodi M. *Compassion Fatigue, Compassion Satisfaction, and Burnout: Reactions Among Employee Assistance Professionals Providing Workplace Crisis Intervention and Disaster*	2006	A national research study of EAPA professionals (Employee Assistance Professionals Association) To study the EA professionals and assess their risk for compassion fatigue as the first providers of mental health support in the workplace.	Cross-sectional survey design answering the following research questions: 1) What is the level of risk for compassion fatigue and burnout among a national sample of EA	Identifies Compassion fatigue as a natural response or reaction to working with individuals or groups of people who are in crisis. Results: EA professionals who provide clinical services and/or crisis intervention services in the workplace are at low risk for burnout, moderate risk for compassion fatigue, and have a high potential for compassion satisfaction. Collectively, these professionals responded to over

Management Services. Journal of Workplace Behavioral Health, 21(3/4, 2006, pp 133-152			professionals; 2) What is the potential for compassion satisfaction among a national sample of EA professionals; 3) Which coping methods used by EA professionals are correlated with higher levels of risk for compassion fatigue and burnout, and higher potential for compassion satisfaction?	10,000 incidents, offering an average of 38 critical incident stress debriefings over the course of their EAP careers.
Fowler, K.L., *The Relations between personality characteristics, work environment, and professional well-being of music therapists.* Journal of Music Therapy, 43(3) 174-197	2006	Investigate the relations between professional well-being (as characterized by positive attitudes toward work and longevity as a practicing music therapist) and the following factors: age, level of education, income, attitudes regarding the workplace	Correlational study *(n=49)* Participants were MT's with between 1 and 36 years of work experience.	Correlations indicated that those respondents with the greatest professional longevity tended to have higher ratings on items regarding cognitive coping strategies (e.g., positive appraisal and threat minimization) and greater perception of personal achievement. These correlational results are related to psychological theories regarding occupational burnout and cognitive

		(e.g. perceived control, feeling valued, as well as the amount of perceived comfort and input into administrative policies), attitudes toward work as measured by the Maslach Burnout Inventory and measures of stress and stress management as measured by the Stress Profile.		hardiness. "Several cognitive coping strategies were identified as factors most strongly related with professional longevity, therefore future studies could examine the effect of direct training or in-services regarding cognitive coping strategies or preventive health measures and the effects on professional well-being of music therapists at various stages of their careers. Implementing a training program specific to the professional well-being of music therapists could give more direct data regarding those factors that best support professional longevity and well-being.
Radley, M. and Figley, C. *The Social Psychology of Compassion.* Journal of Clinical Social Work 35; 207-214	2007	Introduces a model for creating ‘‘compassion satisfaction’’ or feelings of fulfillment with clients, rooted in positive psychology and expanded to incorporate the social work perspective.	Literature review and anecdotal evidence from researcher's personal experience	Calls for compassion satisfaction and a positivity model to be included in clinical education of social workers.

4.5 Music Therapy Interventions with Traumatized People

Common themes that emerged among writers of accounts of music therapy with traumatized people were the methods utilized, such as self-care strategies for victims, the use of story telling and in nearly every account, the use of singing or chant. (Austin, 2002, 2003; Bosco, 2002; Crenshaw, 2006; Geller, 2002; Loewy & Stewart, 2002; Borling, 2007, Borczon, 2007; Scheiby, 2002; Sway, 2005; and Turry, 2002) Self care strategies include teaching stress relief techniques (Borczon, 2007; Loewy & Frisch Hara, 2002 and Loewy & Stewart, 2002) and identifying local sources of support (Borczon, 2007; Borling, 2007). Music Therapist Borczon states, "I ask myself, what can I leave them with?" (Borczon, personal communication, 2007) He suggests creating a tool to use musically as a stress relief strategy and cites an example of distributing CD's with relaxing music for participants at a workshop for people living in a community severely affected by a category five hurricane. Borczon has also used story telling in music therapy with people who have experienced trauma in many different venues including multiple fatality high school shootings, an earthquake, an act of terrorism and severe hurricanes. He found that the use of stories help to lead those who are affected through a process, to " . . . figure out why this happened." (Borczon, personal communication, 2007)

Table 3: Models of Music Therapy Interventions with the Traumatized

Author, Title, Journal or Book	Year	Description/Disaster	Design	Results
Loewy, J., Frisch-Hara, A. *Caring for the Caregiver: Training and Development.* Caring for the Caregiver: The Use of Music and Music Therapy in Grief and Trauma.	2002	Describes the model of Caring for the Caregiver implemented by music therapists and other trauma, grief and loss specialists in NYC after the WTC attacks. Nine workshops, groups ranged in number between 17 and 43 participants, averaging 27 participants per workshop. Trainings commenced 5 months after the attacks.(Stewart, 2002)	Series of nine "training" workshops featuring a music experiential facilitated by one lead music therapist, assisted by two gatekeepers and the rest of the core music therapy team and an invited speaker on a topic related to trauma, grief, etc . . . Addressed personal and professional loss and the cross over between both. Several techniques were used including: 1) Song Sensitation 2) Psychoeducational approach to group improvisation 3) CBT and stories/metaphors with soundtrack of live music. 4) Singing in a round 5) Somatic Experiencing	Timing: The value of "reflective timing" was found to be an unplanned benefit of the program's implementation five months after the event. Unique features: 1) United personal and professional caregivers, 2) First implementation of the model and the first model of its kind. 3) Allowed core MT's to participate and grieve as well as facilitate. Simultaneously giving and receiving care. 4) The groups were therapeutic in nature, but not therapy. Nurturing support and educational experiences for ways to deal with grief, trauma and loss. Limitations: (Frisch Hara) Difficult for the professional caregiver to use the model for personal therapeutic benefit. Pointing out 2 subgroups, the large numbers 20-50 participants and the pre-emptive nature of caregivers for defer their own processing to tend to grieving people with personal losses.

			Model, 4 stages Daring, Dread, Discharge and Delight., ending with group singing 6) Groups improvisation with winds, ending with singing a lullaby 7) Story song of Humpty Dumpty 8) Imagery through music, improvised vocalization, chanting, mandala artwork 9) Singing, humming, chanting, lullaby	Community music therapy could be applied to this model as it is *in context*, social and cultural factors of their health, illness, relationships and musics. (Ansdell, 2002 as cited by Scheiby, 2002)
Austin, D. *The Wounded Healer, The Voice of Trauma: A Wounded Healer's Perspective. In Music, Music Therapy adn Trauma, Sutton, J., Ed.*	2002	Book chapter citing case examples from vocal music psychotherapy with adults who had experienced trauma as children.	Use of vocal holding techniques to "give trauma a voice." Creates and opportunity for a safe, therapeutic regression.in which dissociated and/or unconscious feelings, memories and sensations can gradually be	"The process of recovering one's true voice involves reinhabiting the body." "The dissociative defences that initially protect the psyche from annihilation sever the connection between body, mind and spirit." P. 234 "Singing can enable the traumatized client to reconnect with her essential nature by providing her with access to, and an outlet for, intense feelings."

			accessed, experienced, understood and integrated.	Stresses the importance of advanced training for this type of in-depth music psychotherapy in addition to a master's degree or doctoral/institute work. States it is "essential for a MT working psychodynamically to have personal psychotherapy and supervision.
Austin, D. *When Words Sing and Music Speaks: A Qualitative Study of In-depth Music Psychotherapy with Adults.*	2003	Qualitative study of three subjects in music psychotherapy,	Grounded Theory and multiple case study design	"Wounded Healer" archetype. She writes about the Jungian archetype of the "wounded healer" and Jung's suggestion that the analyst is as much in the analysis as is the client. She echoes his assertion that the analyst's personality is one of the main factors in the cure. "Sedgwick (1994) expanded on Jung's idea by stating that the therapist's "getting it right himself" (p.7) can have a significant transformative effect on a client." (Austin, 2003, pg. 106) Maroda (1998) examines the tx's motivation for doing treatment and suggests that just as most clients have the desire to be transformed and healed by the therapist; many therapists also have the need to be healed by the patient. This need will of course vary from tx. to tx. (pg. 107) Sharing Countertransference: Little (1951) and Gitelson (1952) advocated for countertransference disclosure: 1) establishing tx's honesty 2) developing intimacy and trust

				3) allowing tx & client to be in an authentic relationship 4) confirming the client's sense of reality of the actual interpersonal situation and 5) clarify both the fact and nature of the client's impact on the therapist and people in general. (Gitelson, 1952; Gorkin, 1987; Natterson and Friedman, 1995; Maroda, 1998; and Pearlman & Saakvitne, 1995) Davies & Frawley (1994) : Traumatized clients who have great difficulty symbolizing and naming their experience, sharing countertransferential reactions can be extremely helpful. Many therapists come to know about aspects of their client's experience at a visceral level. Pg 121 & 122, Austin, 2003) If therpists are willing to share their countertransferential feelings and reactions, to name them, then a shared language can be created and clients can learn to identify their feelings and express them instead of self-destructively acting them out. Wounded healers are well trained for the role of compassion by virtue of their acute sensitivity and almost psychic ability to tune into other people's feeling states. (pg. 93) Studying developmental trauma, somatic experiencing and psychodrama

				enhanced the understanding of own trauma and then client's trauma. Therapist's have to be in their own psychotherapy AND supervision.
Loewy, J. & Stewart, K., *Music to Help Traumatized Children and Caregivers* in *Mass Trauma adn Violence; Helping Families adn Children Cope. Webb, N. B., Ed.*	2004	Book Chapter introducing music therapy and it's application with both children and caregivers experiencing posttraumatic stress reactions.	2 case studies illustrating 1) medical music psychotherapy on the day of 9/11/01 to support a child hospitalized for chronic illness and pain. And 2) A program approach integrating music psychotherapy and trauma training for adult caregivers.	Parallels were noted in the reactions of caregivers and reactions of traumatized individuals coping with the actual traumatic events. Enabled the "mutuality of experience among participants by inviting them to shed their traditional roles of caregiving and explore a multidimensional approach to caring for the self." (p. 212) The most helpful components of the program were identified as 1) being part of a group and experiencing a sense of belonging to a community, and 2) feeling the impact of the music.
Borling, J. Verbal account of MT interventions after an on-campus shooting at Virginia Tech.	2007	"Conscious Drumming" Drum circles were formed and facilitated for students of nearby Radford University. Radford University is located a few miles from the VTech campus and there are many ties between the 2 universities, including sharing faculty.	Series of "Conscious Drumming" workshops are being planned in conjunction with CHAT, Community Healing After Trauma, a local South West Virginia group run by a clinical psychologist and encompassing allied health professionals from across the region to provide interventions to	Timing of interventions was crucial to success. Initially, interventions were containing and providing safety – less about music making, more about presence. Precedent set shortly after 9/11/01 when an on campus drum circle was formed in response to the WTC and Pentagon attacks. Administration approached J. Borling to run drum circle for 5 year anniversary of 9/11/01 at a Homeland Security Conference held on campus.

			the community at large. Conscious Drumming uses a structured format with roots in existentialist questions; "Who am I?", "Why am I here?", and "Where am I going?" Uses a talking stick to indicate speaker – at times, uses a podium for speaking. Also affiliated with other community based organizations (CDRC Community Disaster Response Coalition) they are hosting workshops, one of which is on music, art and healing for professionals and para-professionals to use. HERE – Honoring, Experiences, Reflections, Expressions. Artistic professionals hosting similar arts based workshops for churches, schools, first responders, etc . . .	After the shooting event on 4/16/07 the Radford administration approached J.B. and MT dept. staged interventions for students providing safety and community. Facilitated a drum circle and candlelight vigil in April on the Radford campus for the entire community, faculty, students, staff, and administration. In conjunction with the Director of Student Activities and anticipating re-entry trauma when students returned to campus in the fall, another drum circle was staged to focus on the power of community and resilience as well as honoring the gravity of the tragic events. Conscious drumming was also used with music therapy students to help them handle their personal losses as well as preparing them for supporting professional service. Anticipating that the entire MT community might be called on to provide services.
Austin, D.	2007	Individual vocal	Methods included vocal	Individual work centered on survivor

Personal communication		psychotherapy with adult survivors of sexual abuse	holding techniques, and bodywork,	therapists and survivors. Specific music psychotherapy techniques were developed to nurture the "wounded healer" archetype which emerges in survivor therapists.
Borczon, R. Personal communication	2007	Multiple events: 1) 1994 earthquake in Northridge, CA. Personally and professionally affected through loss of university infrastructure, students, etc 2) Oklahoma City 1995, Alfred E. Murrah Federal Building 3) Columbine HS Shootings,1999 4) Santee HS Shootings, 2001 5) Hurricane Katrina, 2005	Methods evolved through repeated uses, but centered on 1) Stress relief – talking about where they had been, then where they are going, where they're going to be. Using chant to vocalize the words. 2) How to take care of yourself – use a handout 3) Use of stories – trying to figure out why this happened.	1) Developed a protocol for kids using rap, drumming and stories – applied in the Columbine and Santee high school shooting events. 2) Common themes emerged in all events: "why does this happen?" man-made vs. natural disaster make a difference. 3) PTSD symptoms – similar across the board, but with different triggers Preparation: additional training, reading on the holocaust/FEMA publications and other trauma literature. Early 90's, no online help. Read Beverly James, Treating Traumatized Children. Knowledge of doing something musical – increased own music making, went to talk therapy, increased journaling, called leaders in the MT field. Prepared ahead of time for taking care of self afterwards. Feeling honored to be part of something Feeling that 5 seconds of relief gives someone hope for recovery – feel good, feel expressed (heard) = find hope.

				Requirements for students/therapists with no trauma training: 1) maturity – understand the impact of the event, and understand that you are walking into an abnormal situation. 2) Prepare for rejection - understand that your intervention may not help or be welcomed. 3) Educate yourself as much as you can about the event so that you understand what is referred to in the process. 4) Present music at a sophisticated level in order to engage immediately with sound. ("sound hooks") Understand what you are going to do with this process. 5) Maintain focus on goals: a) relieve tension b) express anxiety c) find hope 6) Create tools to use musically as stress relief strategies and ask self, " what can I leave them with?" 7) Take care of yourself in the process through analyzing the gestalt and asking ,"how am I changed?"
Frisch Hara, Andrea Personal communication	2007	NYC Music Therapy Relief Project	Music Therapy groups in schools and community centers involving 33	Community based MT work – Caring for the Caregiver workshops were a portion of this multi-site, multi-level effort to use

			music therapists from the NYC area.	music and music therapists to bring relief to anyone affected by the events of 9/11/01.

4.6 Creative Arts Therapy other than Music Therapy

Crenshaw identifies the essential role of the creative arts therapist using primarily non-verbal or action vs. verbal methods. This addresses the "frozen inaction" which is associated with the physical helplessness which van der Kolk asserts is at the "core of trauma" and that the immobilizing emotions of the trauma conditions plays a role in the development of long term PTSD. Crenshaw also states that meaningful physical action is needed for recovery from PTSD and needs to be empowered to defeat the effects of withheld physical action due to the terrifying, immobilizing circumstances of the trauma events. Many of the articles and chapters mention collaboration with creative arts therapists from diverse modalities. Table 4 represents models in place in the fields of art, psychodrama, movement and expressive arts therapists.

Table 4: Expressive and Creative Arts Methods with Survivors of Trauma, Other than Music Therapy

Author, Title, Journal or Book	Year	Description/Disaster	Design	Results
Hudgins, M. Katherine, PhD, TEP Experiential Treatment for PTSD: The Therapeutic Spiral Model	2002	Psychodrama techniques for working with survivors of trauma	Book chapter	Details the therapeutic spiral model and psychodrama interventions.
Crenshaw, D. *Neuroscience and Trauma Treatment: Implications for the creative Arts Therapists in Expressive and Creative Arts Methods with Survivors of Trauma, Lois Carey, Ed.*	2006	Book chapter detailing neurobiological findings pertaining to trauma, attachment and brain development	Literature Review	Streeck-Fischer and van der Kolk (2000) reviewed neurobiological research as it pertains to trauma treatment. Identifies the essential role of the creative arts therapist using primarily non-verbal or action vs. verbal methods. "tasks" of trauma therapy include: 1)creating safety in the therapeutic relationship and therapy context. 2) Teaching self-soothing to deal with hyper-arousal such as breathing or relaxation exercises, guided imagery of soothing scenes or listening together to music that has a calming effect. 3) Stabilizing aggressive impulses – legitimate anger and rage require ways to redirect and re-channel in order to function successfully in their environment. 4) Regulating affect – affect tends to be experienced as "all or nothing" modulating affect requires degrees of expression. 5) Promoting mastery experiences – highlighting and reinforcing identified

				strengths. 6) Compensating for specific developmental deficits, remedial or corrective interventions to restore inadequate or missing skills. 7) Judiciously processing both the traumatic memories and trauma-related expectations. a) establishing a coping track (psychoeducational, coping skills, create relationship)and an invitational track (inviting the child to go as far as he/she can in processing and working through the trauma) b) Developmentally sequenced approach to trauma – see the child at different points in development. c) issues of timing – last third of the session should involve a safe transition that re-orients the child back to daily life, accentuating here-and-now sensory experiences, discussing future events .d) working within the metaphor, the safety of symbolization. “Drama, music, dance, movement, and body therapies can all work in the realm of symbol and metaphor, with no direct attention or focus as to how this directly relates to the child or adult when such direct interpretation would be too threatening for her to entertain.” e) Dealing with expectations of trauma – constant state of anticipatory anxiety, waiting for the next shattering event. Physical helplessness is at the core of trauma, and that inability to take effective action under the immobilizing emotions of the trauma conditions plays a role in the development of

				long-term PTSD. Van der Kolk refers to this as "frozen inaction" Meaningful physical action is needed for recovery from PTSD – needs to be empowered to take effective physical action that was originally blocked due to the terrifying, immobilizing circumstances of the trauma events. Facilitating hope while not trivializing the pain and depression and other feelings experienced by the survivor.
Wise, S. *A Time for Healing; Art Therapy for Children, post September 11, New York in Art Therapy and Political Violence, With Art, Without Illusion. 2005 eds. Kalmanowitz, D. and Lloyd, B. pp 142-153*	2005	Book chapter detailing "The Saturday Project" implemented in February 2002 in conjunction with the reopening of the public schools in the lower Manhattan area.	Case Study/Phenomenological /Program Evaluation	Art Therapy groups were designed using the psychodynamic model (allowing the unconscious to reveal itself through the artwork. The project sis not approach children directly to work on images about the 9/11/01 tragedy, but rather designed sessions to reinforce issues of safety for the children. The project was grant funded and offered free of charge to participants, 17 children divided into two groups, ages 4-7 and 8-12, mixed gender. A total of eleven sessions were held. Story telling in the sharing of the artwork revealed more support and openness among group members and reduced anxiety and isolation. Art therapists also noted participants showed more confidence in expressing feelings and interpreted that as a clear sign of self-empowerment. AT's processed their own countertransference in debriefings, discussion and supervision.

Sway, R., Nashashibi, R., Salah, R. and Shweiki, R. *Expressive Arts Therapy-Healing the Traumatized in Art Therapy and Political Violence, With Art, Without Illusion. 2005 eds. Kalmanowitz, D. and Lloyd, B. pp. 154-171*	2005	Book Chapter - detailing the experience of Palestinian psychologists trained in the use of expressive arts in therapy through the Palestinian Counseling Center (PCC) with men, women and children who were traumatized.	Phenomenological case study	Using psychodrama, art therapy, music therapy and dance therapy, psychologists treated residents of the West Bank and Gaza Strip, areas regularly exposed to political violence and terrorism. Past methods included debriefing, somatic experiencing (Levine, 2000), and EMDR. "In our experience, the special therapeutic techniques developed to help in the healing of trauma such as [listed above] are very helpful, but lack the ability to empower the individual. In our view, the power of the arts as a means of self-expression is that it brings out the deep-rooted pain in the self without posing a threat to it. The arts can provide a safe transitional space to allow the self to experiment until it attains integrity and control." (Sway, et al., 2005) Methods included dancing and singing to traditional folk music, guided visualization and body movement, sculpting clay, painting, psychodrama and poetry. The authors identified the therapeutic space created in expressive arts therapy as a haven for Palestinian people who live under constant trauma and fear, and can contribute to their healing process and build a healthier community of people.

4.7 Timing of Interventions

Many of the authors writing about music therapy interventions in the post disaster environment identified the role of timing the intervention as important to the success of the music therapy process. (Stewart, 2002; Borling, 2007; Borczon, 2007) Stewart writes, "The value of 'reflective timing' was found to be an unplanned benefit of the program's implementation five months after the event." (Stewart, 2002) In agreement, Music Therapist Jim Borling echoes this stating, "The timing of interventions was crucial to [their] *sic.* success." (Borling, personal communication, 2007) Music Therapist Brian Abrams writes, "Upon returning to campus this fall, Radford students and others from the community participated in a campus-wide drum circle to play, dance, chant, and focus on empowerment together." (Abrams, 2007) [The traumatic event at a nearby campus happened in April, 2007, the drum circle was implemented in September, 2007.] Historically, the role of timing in a post disaster intervention has been addressed by Polack, Vandebergh, & Williams who found that single intervention sessions with bereaved people in the early, acute stages of grief are found to be less effective than interventions that commence months later and for a longer duration. (Polack, Vandebergh, Williams, 1975) Interventions which take place after the immediate need for safety and shelter are met do not compete with those basic needs. Raphael, Wilson, Meldrum and McFarlane (1996) warn that early interventions may have negative effects and are a cause for concern pointing out that a "sense of imperative to act may undermine the propensity for

reflection." (Raphael, Wilson, Meldrum and McFarlane, 1996, p. 474) Raphael, et al. address this stating,

> In times of disaster, mental health professionals providing acute assessment and intervention may need to do so alongside emergency support and assistance in the recovery process and in the provision of other roles (Raphael, 1986; Valent, 1984). The provision of practical help may ultimately be seen as more helpful and positive than the specific psychological care offered (Singh & Raphael, 1981). (Rapael, et al. 1996, p. 466)

4.8 Resilience

Resilience was mentioned in several of the articles (Borling, personal communication, 2007; Borczon, personal communication, 2007; Pfefferbaum, Reissman, Pfefferbaum, Klomp and Gurwitch, 2007) Resilience is defined as ". . . the ability to execute efficient and effective adjustment processes to alleviate stress and restore equilibrium in the face of trauma, tragedy, and threat. (Steinberg & Ritzman, 1990 in Pfefferbaum, et al, 2007) Music therapist Jim Borling described the use of drum circles to meet the anticipated needs around re-entry trauma of students returning to a college campus in close proximity to the scene of a multiple shooting event. He states, "In conjunction with the Director of Student Activities and anticipating re-entry trauma when students returned to campus in the fall, another drum circle was staged to focus on the power of community and resilience as well as honoring the gravity of the tragic events." This is a good example of music therapy and community resilience which according to Pfefferbaum, et al is defined as being

> . . . grounded in the ability of community members to take meaningful, deliberate, collective action to remedy the effect of a problem, including

> the ability to interpret the environment, intervene and move on. More than the ability of members to cope individually, community resilience involves interactions as a collective unit. (Pfefferbaum, et al, 2007, in Doll, et al, eds., pg. 349)

Multiple disciplines including health and public health, sociology, psychology and the creative arts therapies are beginning to recognize community resilience as preparedness strategy for mass casualty events and as a mechanism to prevent adverse psychological, psychosomatic, and social consequences associated with terrorism and other disasters. (Friedman, 2005) Devilly, Gist and Cotton describe resilience as " . . . the natural human process of positive adaptation in the face of trauma, tragedy or stress." (Devilly, Gist & Cotton, 2006, p. 33) Using seven interrelated factors gleaned from a review of the literature, Pfefferbaum, et al. (2007) list the following as essential components of community resilience. These factors were endorsed by a panel of experts convened by the Centers for Disease Control and Prevention (CDC) and the Terrorism and Disaster Branch (TDB) of the National Center for Child Traumatic Stress. Table 5 pairs these factors with music therapy methods. The left column contains the factors and a brief description, the right column contains specific methods or approaches available to music therapists within the community to build community resilience through each of the seven factors.

Table 5. Community Resiliency and Music Therapy Methods

Interrelated Factors associated with community resilience:	The specific methods/approaches available to music therapists to address these:
Connectedness, Commitment, and Shared Values: Membership in the community implies connection to a place and a group of people with shared history, laws, and social mores. Belonging is strengthened when members perceive their met needs and well-being are rooted in their affiliation in the community which is characterized by mutual concern and benefit.	Community Music Therapy such as community music circles, welcoming all into a shared time of music making can facilitate a sense of belonging and shared purpose, elements which may have been lost, damaged or threatened by the traumatic event. Community Music Therapy (CMT) has no identified "patient" but rather treats the community and the group process as the focus. Stige defines CMT as an area of practice with two main notions: 1) music therapy in a community context and 2) music therapy for change in the community. (Stige, 2002)
Participation: Opportunities for involvement in activities and organizations should be sensitive to the diversity, ability, and interests of members.	Making or presenting music which reflects cultural awareness and embraces participation at all levels, meaning those who are able to actively engage as well as including observers who are not yet ready to fully participate.
Structure, Roles, and Responsibilities: Adaptation and recovery are well served when communities have strong and responsive leadership, able teamwork, clear organizational structures and well-defined roles, responsibilities, and lines of authority. This is enhanced when there is equity rather than discrimination and when standards favor social interaction.	Participating in creatively led music-based opportunities for risk-taking and team-building can facilitate the emergence of leaders who excel at problem solving and harnessing their creativity as well as providing opportunities for community members to interact on a variety of levels.
Resources: These can be concrete, including those belonging to individual members as	Building relationships through shared experiences, music therapists can bring together otherwise disparate members separated by

well as the whole. The relationships and support systems within a community along with characteristics such as cohesion constitute social resources.	religious, social or cultural or other types of differences of the community through involvement in music making.
Support and Nurturance: Supportive and nurturing communities provide opportunities for members to be heard, promote member well-being, instill hope, and empower individuals and groups.	Using music (sound) concretizes the action and results of active listening like no other medium. Through opportunities in the music making, members can empower each other and care for each other by listening and responding to each other's music.
Critical Reflection and Skill Building: Resilient communities can identify and address issues, establish structures to collect and use information and develop the means to plan, manage, and evaluate activities and programs.	Creating songs and lyrics that reflect ideas, struggles and hopes of members can lead participants through problem solving tasks.
Communication: Clear, accurate communication among members and across boundaries requires common meanings and understandings and the perception of openness and honesty. Open and productive communication can further the community's trust in leadership, increasing the likelihood of participation and compliance with directives in the face of disasters.	Clear communication can happen at many levels when a group is engaged in active music making. Music also has the ability to communicate beyond where words can reach and can transcend some language and cultural barriers. This makes the music making experience inclusive among members.

Pfefferbaum, et al. articulate an operating assumption that communities with higher levels of those seven factors will be more effective at mitigating negative emotional responses to a community disaster during and after the event. For the music therapist living in a community and preparing for a disaster response before it occurs, creating a presence in the community and establishing the use of music as a means of achieving community resiliency are prudent goals.

4.9 Education and Training

While greater awareness of the creative arts therapies and their effectiveness in treating persons who have experienced trauma continues to grow, so does the need for adequate preparation and training. Several authors identified the need for advanced training (Austin, 2002, 2003; Collins & Long, 2003; Cunningham, 2005; Fowler, 2006; Fox, 2003; Hesse, 2002; Pearlman & Saakvitne, 1995, Radley & Figley, 2006; Turry, 2002; and Zimering, Munroe & Gulliver, 2003) and a few strongly caution their readers against working using techniques introduced in their publications without advanced degrees or advanced training. (Austin, 2002, 2003; Borczon, 2007) Borczon focuses on seven "requirements" for students or therapists which could be included in training:

> 1) Maturity – understand the impact of the event, and understand that you are walking into an abnormal situation, where people are reacting normally.
>
> 2) Prepare for rejection – understand that your intervention may not help or be welcomed.
>
> 3) Educate yourself as much as you can about the event so that you know about what gets referred to in the process.

4) Present music on a sophisticated level in order to engage immediately with sound. (A “sound hook”) Understand what you are going to do with this process.

5) Maintain focus on goals:

a) relieve tension

b) express anxiety

c) find hope

6) Create tools to use musically as stress relief strategies and ask self, “What can I leave them with?”

7) Take care of you in the process through analyzing the gestalt and asking, “How am I changed.” (MT RB, personal communication, 2007)

Reviewing what have already been cited as risk factors for vulnerability to STS, (Boscarino, Figley & Adams, 2004; Canfield, 2005; Collins & Long, 2003; Cunningham, 2004; Frank & Karioth, 2006; Fowler, 2006; Fox, 2003; Good, 1996; Hilliard, 2006; Jacobson, 2006; Pearlman & Saakvitne, 1995; Thomas & Wilson, 2004; Wee & Myers, 2003; and Zimering, et al., 2003) the preparation for teaching students, interns and inexperienced professionals requires careful attention to avoid inducing secondary traumatic stress. McCammon (1999) advises anyone in a teaching role to expect that a substantial number of students (trainees) would have a history of trauma. She published ten points for dealing with traumatic material in class. (McCammon, 1999) They include establishing an accepting, but not confessional tone for the class, informing students about the topics to be covered and if audio-visual materials will be used and Considering the emotional level and understanding that students in an aroused emotional state cannot take in intellectual points. Also be informed about

counseling and support resources and how to refer students to them, talk privately with disclosing students or write a response to journal entries and help them obtain crisis counseling if needed. If disclosure is made during the class, acknowledge the student's comments and relate it to the current lesson, model an empathetic response and guide the discussion to a constructive direction, refer interested students to additional reading or self-help literature, include discussions on treatment for both survivors and perpetrators (including ideas about causes) and prevention. Counter the depressing and alarming data with hopeful evidence of recovery. Use an educational adaptation of the CISD model for classroom use and lastly, prepare yourself for potential vicarious traumatization and the impact on assumptions, schemas and engage in restorative activities. Table 6 presents the data published on research completed on this topic:

Table 6: Disaster Mental Health Education and Training

Author, Title, Journal or Book	Year	Description/Disaster	Design	Results
Reid, M.; Ruzycki, S.; Haney, M.; Brown, L.; Baggerly, J.; Mescia, N.; Hyer, K. *Disaster Mental Health Training in Florida and the Response to the 2004 Hurricanes*	2005	Florida Center for Public Health Preparedness (FCPHP) explores their disaster mental health plan set in place in 2001 and the movement toward "universal preparedness" which grew out of the Bioterrorism Trauma Intervention Specialist Training (BTIST.) In response to a tropical storm and four hurricanes in 2004 (Charley, Frances, Ivan and Jeanne) which struck Florida and cumulatively causing an estimated $60 billion in damages and 117 deaths. BTIST curriculum includes skills in assessment, triage, trauma stabilization, individual and group defusing, debriefing, stress management, compassion	Survey of BTIST participants. (N=53) Seven sections, Likert-type scales	Participants indicated that the training enhanced their ability or prepared them to implement the 13 specific skills addressed in the training either a "moderate amount" or a "great deal." "Large majorities reported increased knowledge and preparation to apply skills learned in the training"

		fatigue, grief intervention, cultural competence, critical incident stress management, and team development. BTIST modules were produced on an audio CD and two DVD's to make them available to a broader audience. Audio CD was on compassion fatigue. DVD's were on 1)CISM and Public Health Emergency Readiness and Response and 2) Understanding Cultural Competence in Disaster Response. Several hundred CD's and DVD's were distributed to DOH staff and partners.		

Chapter 5: Discussion

5.1 The Origin of Inquiry on This Topic

This researcher has personal experience coordinating the use of creative arts therapy and specifically providing music therapy for displaced people affected by hurricanes Katrina and Rita in 2005. Those experiences formed the foundation of inquiry into this topic. In September 2005 a team of creative arts therapists was assembled and designed a template for therapeutic presence in a temporary shelter providing services to displaced residents of the Gulf Coast of the United States. From the onset, careful plans were made to recruit therapists with experience and advanced training. The following statement was included under "caring for the caregiver" in a fact sheet for participating therapists.

> Prepare carefully for the work you [are] *sic.* about to take on, utilize the experienced therapists and supports in the area that are willing to provide supervision. *Caregiver network and contact numbers are below. We can dip into this supportive peer network as necessary. No question, concern or issue is judged or underscored. We can encourage one another to resource. The more we can accept, share and grow amidst this horrific trauma, the better we will serve the parts of our guests that are suffering the most. Do not expect too much from yourself and others. Make space for yourself before and after the group. Recognize the often subtle impact of secondary traumatization and make allowances to avoid this in your relief work. Finally, use the music and creative arts to ground yourself in the way that you ground others. (Loewy, personal communication, 2005)

Anecdotally it has been revealed that several of the therapists who participated made use of supervision in various ways. Over the phone, through email or directly after sessions with co-therapists, the role of peer support and supervision was prevalent throughout the duration of the relief effort. Compassion fatigue has a reciprocal term to describe the positive effects called

compassion satisfaction. I would postulate that just as Loewy used the well established term "vicarious traumatization" in her cautionary statement encouraging self care, that a reciprocal term be introduced to encompass the effects of witnessing recovery and resilience. Perhaps "vicarious resilience" or "vicarious renewal"?

From a personal communication to an interested colleague, I shared these thoughts:

> . . .it was an amazing time for creative arts therapists to come together and provide direct crisis response services. We worked with families, young children in the daycare center, school aged kids (after school and weekends), teens, adults and senior citizens. One of the best parts of the effort was creating a relaxing (or energizing at times) atmosphere by providing music just outside the building's Command Center. It was a highly trafficked area, with security guards and police all over, but it was also the lobby of the building, their "home," where residents would congregate as they waited for takeout to be delivered or just to come and interact with other people. We turned it into a Motown and anything else sing-a-long. Some staff would join us on their own instruments, or ours – we discovered several very talented guitar players over the weeks. I don't know if anyone who stopped by to sing with us realized that there was therapeutic value in what they were joining, but it sure developed a sense of community faster than anything else. And long after we ended the music, the people retained their positive associations to it and to us (the therapists.) (Wineberg, personal communication, 2005)

This summarized response to my own work served as a "field note" in retrospect. From my own experience, the simple act of joining people in their temporary home, listening to their stories and offering them a place to take in or leave the music helped to make it more like the community from which they came than a homeless shelter. The city of Philadelphia renovated an empty public middle school (ironically condemned the year before for building code violations) over a weekend with hundreds of volunteers and set up a residence and service center for evacuees. Some arrived by plane directly from New Orleans, some

arrived via public transportation or in private cars. Approximately 1,500 people moved through the shelter to obtain assistance from federal, state and city government as well as numerous volunteer agencies. 200 or more of those people stayed in the building over the course of the project, titled "Project Brotherly Love."

It was very clear at the beginning of the project that the therapists would be providing supportive community music and arts groups. A fact sheet was prepared with detailed information about this approach.

From the fact sheet:

> Thank you for volunteering your time and expertise to this effort. While many of our volunteer clinicians come to this experience with the ability to provide in-depth psychotherapeutic interventions, please understand that we are scheduled, advertised and understood to be providing SUPPORTIVE/RECREATIONAL creative arts groups. Most of the individual guests at the shelter have not sought treatment by any of the mental health professionals or pastoral counselors. By attending the group, they are *not* initiating a therapeutic contract. They *are* in need of stabilization, acquiring a sense of safety in their new environment and building a sense of community while dealing with communal living while suffering from tremendous loss on many levels.
>
> Be aware that some people will meet the criteria for having an Acute Stress Disorder, situational depression (adjustment reaction) generalized anxiety or acute exacerbations of chronic mental illnesses. Each person involved is reacting to the stressor(s) by using this/her own coping skills, and this takes many forms of expression and in-expression. (There have been cases of substance use observed. FYI, The shelter places no demands on the guests in terms of a curfew or intoxication) (Loewy & Wineberg, personal communication, 2005)

The fact sheet went on to identify the stages of disaster relief using "R's" as a mnemonic device.

Rescue: Removal from this phase of danger
Recovery: Interventions first focus on getting in touch with feelings & expression, providing a sanctuary, grounding & anti-anxiety. Later

expand that feeling of sanctuary within the arts modality, community building and decreasing isolation (especially important as people move into new housing and scatter across the city)
Relief: Locating inner resources, Accessing inner strength and outer support
Resolution: Compromises, adaptations, acceptance of endings, grief and loss
Renewal: Locating mobilizing agents, reconstruction of altered, perhaps shifted self. Transformation.

(Loewy, 2005)

These personal experiences, both in leading music groups and coordinating the broader creative arts presence in the residence created a unique learning opportunity for this researcher. Incorporating the materials created for the 2005 hurricane response as well as the following response to the results of this study form the basic structure of a theoretical model for future responses. I am again reminded of Crenshaw's summary of Streeck-Fischer and van der Kolk (2000) who identified several issues as essential to address in trauma treatment. These are the related ways that music therapists addressed those issues in the temporary shelter environment:

1) Safety – Providing familiar music in a non-threatening environmental presentation. Residents were free to engage, observe or ignore the music and therapists.
2) Stabilizing impulsive aggression against self and others – Providing motoric discharge through active music making such as drumming and guitar playing, verbal and vocal expression through singing and discussing music. Movement was also supported through dancing or clapping along.

3) Affect regulation - Meeting and matching affect and emotional expression, providing musical context for containment.
4) Promoting mastery experiences – Returning to the residence on a weekly basis and frequently repeating music previously used, either on request from residents or staff or through therapist's suggestions. Singing through verses multiple times to support singers struggling with recalling lyrics.
5) Compensating for specific developmental deficits – Supporting musical choices of children requesting songs much younger than their chronological age, phrasing supportive responses in accessible, and at times concrete, language.
6) Judiciously processing both traumatic memories and trauma-related expectations – Leaving room within the context of the music to listen to stories or associations elicited by the music making.

5.2 Grounded Theory and Application to Trauma Research

The use of grounded theory in this study proved to be an interesting parallel to the methodology or processing of traumatic events by an individual. Several authors refer to "bottom-up" processing (Austin, 2003; Glaser and Strauss, 1967; Bogdan & Biklen, 1992) when writing about the way that theory emerges, being grounded in the data. Rather than stating a hypothesis and then going about proving it, the theory is extrapolated from the collected data and the emerging trends guide the researcher to more specific questions and relevant

material. Likewise, the practice of "grounding" clients with "bottom-up" techniques directly treats the effects of trauma on the body, which in turn facilitates emotional and cognitive processing. (Austin, 2001, 2003; Ogden, 2003, Levine 1999) This practice bypasses traditional verbal psychotherapy methods which address the cognitive and emotional elements of trauma, but lacks the techniques that work directly with somatic elements.

5.3 Commentary on Themes Which Emerged from the Data

Some of the essential elements for adequately preparing to engage traumatized individuals are personal psychotherapeutic support, supervision, and advanced training before entering the work. This researcher agrees with the authors who advocate for advanced training prior to participating in a response at any level. The sudden urge to "do something" in response to a mass trauma, disaster or mass violence event may more closely resemble the "bottom-up" processing by warranting action versus "top-down" cognitive function necessary for learning. The time to get involved in advanced training is when the responder is not involved in a crisis response. The complexities of understanding the symptomology of trauma, traumatic stress and posttraumatic stress are well researched and yet still not well understood. This thesis has only begun to explore the influence of culture, community and other complex factors which impact the effects of trauma and subsequent recovery. Individual reactions are as diverse and unpredictable as the individuals themselves. Understanding this requires the music therapist responding to people who have experienced

traumatic events to use a blend of knowledge based on current and historical research as well as intuitive knowledge based on experience within their modality about relating to people through music. Relying on one pre-conceived method or theoretical approach effectively eliminates the empathically creative response.

5.4 Model for Self Care

Supervision has been important to my own longevity in the field and in times of stress it becomes even more useful. It is easy for this researcher to agree with Austin's statement that it is ". . . essential for a music therapist working psychodynamically to have their own personal psychotherapy and supervision." (Austin, 2002) The fact that she lists both psychotherapy and supervision independently highlights the importance of understanding the difference, and committing to both processes. It is also important to engage peers in supportive peer supervision, whether formal or informal. Peers who are working within the same situation have the unique perspective of already understanding the details of the situation and may have the opportunity to objectively provide feedback on observations of other's work. When co-leading sessions with other music therapists the informal time directly after ending the group proved to be an important time to process or debrief. Doing this type of informal supervision made room for healthy defenses such as humor and the diffusion of anxiety dispelled in the physical activity of packing, carrying and loading instruments. Validating clinical interpretations of behavior and sharing observations can be useful in developing important skills among co-leaders such as communication, trust and mutual appreciation. "Gallows humor" may sometimes appear in these situations and should be considered a normal reaction to the overwhelming

feeling which accompanies empathizing with a person who is suffering tremendous losses. Examples include joking about avoiding certain songs because of the potential to trigger survivors, plays on words and self-deprecating humor to deflect or decathect.

Purposely designing breaks from the work reduces the abuse of sick time in therapists who regularly work with traumatized individuals. The therapeutic consistency maintained by therapists committed to proactively addressing their own reactions creates and maintains an authentic and respectful therapeutic alliance. Conversely, unpredictable call-outs and illness can destroy the most carefully built relationship, especially among clients who already have been abandoned or experienced loss. How can a client conquer the fear that his/her material isn't so bad that it overwhelms both the client and the therapist if the therapist cannot maintain a consistent presence and therefore plays out the client's fear?

5.5 Caregiver Rejection

Caregiver rejection is a term sparsely used in the literature, but an important concept to master. When survivors of trauma choose not to use the available therapeutic services, a number of factors must be considered. Just as Maslow indicated with the hierarchy of needs, if immediate safety needs are not being met such as food and shelter, or if the individual does not feel safe in the environment, they simply cannot attend to interventions which require cognitive processing. Rejection of services is also a way to exert some control over their situation, and perhaps the only control they possess, especially if they are

displaced. Borczon also pointed out that ". . . people may not want what you have to offer." (Borczon, personal communication, 2007)

Nearly every music therapist writing about self-care in trauma work mentions making music for themselves as a strategy for maintaining health. Through the two months of coordinating the creative arts therapy response, this became even more useful as I sought to process my anxiety over managing all the details of schedules and volunteers in a constantly changing environment. I am again reminded of Loewy's encouragement on this topic: "Finally, use the music and creative arts to ground yourself in the way that you ground others." (Loewy, personal communication, 2005) It was helpful to spend time in the quiet of my music therapy studio playing the piano and singing, especially when I began to spend time with an individual residing at the shelter who wanted to write songs. Playing through what we had composed alone enabled me to take it in without being defensive against the traumatic imagery he was describing. In the quietness I was able to shed my tears and cry for the way his losses saddened me. This helped me to be more open the next time he approached me to make music. (We had no therapeutic contract and I left our session planning open for him to determine when or if we met on the days I was at the shelter.) Borczon referred to this type of self care having its place in the preparation for working with victims of trauma as well as after the work concludes.

It was interesting to note that timing played a role in the effectiveness of implementing music therapy in the NYC music therapy relief project. I surmise that implementing music therapy too soon in the "Rescue" phase only obscures the focus on crisis intervention and may serve to irritate or offend victims with

unmet safety and shelter needs. Referring again to “bottom-up” vs. “top-down” processing, the ability to process intellectual and emotional information simply isn’t accessible to people in the acute phase of traumatic stress.

Making music on a sophisticated level, as articulated by Borczon, is part of respecting those who are participating and requires the music therapist to be aware of what to do with the musical response which is generated. It was also interesting to note that nearly every music therapist writing on methods used with traumatized individuals identified singing as part of their experience leading groups or individual sessions. Choral composer Nick Page (2001) sums up the empowering nature of singing by stating, “ I believe that singing makes us amazing. Every culture on the planet sings as a means of celebration – in every phrase saying, “This is who I am!” This song creates a sense of identity; it brings us together. We are all different, but by singing this song we create harmony from our differences. Singing this song makes us powerful!” (Page, 2001, p. viii) Diane Austin also writes about the power of singing and of singing as a tool to recover one’s voice. (Austin, 2002, 2003)

The personal and professional effects of responding to mass trauma events are complex and the preparation for responding must be thorough to avoid symptoms of secondary traumatic stress.

5.6 Limitations of the Study

Research in the post-disaster environment is challenged across every discipline included in this study. In a report about obtaining consent for post disaster studies, Jacobs, et al write that, “Gaining access to participants in

the aftermath of trauma is difficult, and it is important that those rushing to collect data not traumatize survivors a second time. Submitting general protocols to an institutional review board (IRB) on a prospective basis may obviate hurrying proposals through after a disaster. Following the disaster, researchers can provide the IRB with the specific details for the incident to be studied. This is however, not the model currently practiced in scientific research with human subjects. This study also used no human subjects, so any conclusions are theoretical and have not borne the scrutiny of empirical study. It has been concluded that research can be conducted with survivors when their ability to consent has been evaluated and the research does not hinder their access to legal aid, government assistance or medical or mental health treatment. (Collagen, et al, 2003) The limited literature specific to this topic and the lack of quantitative data with randomized controls limits the potential of this study to predict outcomes with the ability to be generalized. This study also has potential bias since the researcher has personal experience with the subject matter under study.

5.7 Implications for Future Research

While there are many conference presentations and anecdotal case accounts of the use of music therapy in response to mass trauma events, the lack of published literature leaves music therapists largely uninformed about all of the related factors involved. Future research might seek to document the lived experience of providing music therapy in a post-disaster environment and the

effects of participation on the music therapist. Ares of focus might be isolating what factors lead to successful implementation and support from local crisis intervention authorities and whether establishing a familiar presence in the community before disaster strikes increases the likelihood of being included in a response. Other related areas might include exploring the differences which exist among survivors of single mass trauma or disaster events and survivors of repetitious trauma such as physical or sexual abuse, war and terrorism. Future research might also document and analyze specific methods of music therapy implementation and include a detailed analysis of the music therapist's musical and interpersonal decision making process when working through various stages of providing music therapy for people involved in mass trauma.

Chapter 6: Summary and Conclusions

In conclusion, the subject of secondary traumatic stress among music therapists responding to a mass trauma event is desperately in need of more attention from researchers. However, the lack of literature is not isolated to the field of music therapy, but common among all of the other disciplines used in this study.

The research objective is revisited: What common themes emerge when examining the methods employed by music therapists in responding to mass trauma? What is their experience of providing music therapy in a crisis response and what effects have they experienced as a result of this work? Lastly, what elements of these methods and experiences can be included in music therapy education, including training therapists in self care techniques?

The design of this research is a literature based study. The matrix method, developed by Judith Garrard (1999) was used to compile and code the data in order to thoroughly study the data. The articles and book chapters were then analyzed with the qualitative method of grounded theory. (Strauss & Corbin, 1990) This study reviewed literature from multiple, related disciplines on PTSD treatment, music therapy with traumatized individuals, secondary traumatic stress and models for educating therapists about trauma work. Through the articles and book chapters, the methods used to prevent, treat or alleviate symptoms of vicarious traumatization and secondary post-traumatic stress

disorders were collected, coded, analyzed and themes were extrapolated from the data to form a theoretical model. Many common themes emerged as the preparation and training methods for mental health practitioners across all disciplines were examined. Those themes included receiving training prior to the disaster response, being well informed about trauma and trauma work, setting up and participating in supervision or debriefing during the work with other advanced, knowledgeable professionals, purposely designing scheduled breaks from the environment and the work and preparing for rejection when survivors choose not to use the available therapeutic services. Other themes related to preparation specific to music therapy emerged such as music therapists identifying the importance of music making for themselves during or directly after providing care to traumatized people, the importance of the timing of the music therapy interventions, the importance of presenting music at a sophisticated level and maintaining focus on major goals such as relief of tension, expression of anxiety and finding resilience and hope.

The personal and professional effects of responding to mass trauma events are complex and the preparation for responding must be thorough to avoid symptoms of secondary traumatic stress. Future research might seek to document the lived experience of providing music therapy in a post-disaster environment and the effects of participation on the music therapist.

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