



Art Therapy's Unique Contribution to the Treatment of Combat-Related Post Traumatic Stress Disorder: A Research Review and Future Suggestions

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Post traumatic Stress Disorder:

Posttraumatic Stress Disorder (PTSD) is an anxiety disorder that can develop after exposure to a terrifying event or series of events, such as combat, in which grave physical harm occurred or was threatened, causing feelings of intense fear, helplessness, or horror. It is accompanied by a variety of dysphoric, cognitive and autonomic symptoms that may cause long-term disturbances of emotions, behaviors and personality (American Psychiatric Association, 1994). PTSD is characterized by three groups of symptoms: intrusive re-experiencing, avoidance of reminders and triggers, and hyper-arousal including hyper-vigilance and exaggerated startle response. It is typical for people with PTSD to repeatedly re-experience the terrifying event(s) in the form of flashback episodes, memories, nightmares, or frightening thoughts, especially when they are exposed to reminders of the trauma. Intrusive thoughts are natural reactions immediately following a traumatic event and can help people to learn from the experience and eventually come to accept it (van der Kolk & McFarlane, 2007). Anniversaries of the event can also trigger these intrusive symptoms. Avoidance symptoms involve changes in the way individuals respond to their environment, and changes in their levels of engagement with life (Cash, 2006). People with PTSD often experience emotional numbness, sleep disturbances, outbursts of anger, amnesia for parts of the event, lack of interest in pleasurable activities feelings of detachment from the self or others, and a foreshortened sense of the future resulting from the avoidance of traumatic reminders. It is common for depression, substance abuse, or other anxiety disorders to co-occur with PTSD, as well as headaches, gastrointestinal complaints, immune system problems, dizziness, or chest pain (National Institute of Mental Health, 2002).

Psychological Mechanisms of PTSD

PTSD is thought to be caused in part by the nature of traumatic memories, which are encoded in implicit as well as declarative memory systems and are likely to exist primarily as dissociated emotional, perceptual, or sensory fragments and physiological sensations with no coherent verbal, symbolic, or temporal basis (O'Kearney & Perrott, 2006; Reisberg & Hertel, 2004; Van der Kolk, 1994; Van der Kolk & Fisler, 1995). These qualities of traumatic memory make it hard to describe traumatic experiences in words or to "integrate" them as part of one's life story (Christianson, 1992; van der Kolk, Hostetler, Herron, & Fisler, 1994). The failure to process information symbolically (verbally or otherwise) after a trauma is thought to be the core of PTSD (van der Kolk & Fisler, 1995). Indeed, brain imaging research has demonstrated hypoactivity in Broca's area, which is an area of the brain involved in producing language (van der Kolk, 2002) and hyperactivity in the amygdala (fear, anger), hippocampus (memory), and occipital cortex (visual processing), among veterans with PTSD (Rauch & Shin, 1997).

Combat-Related PTSD

Before the diagnosis of PTSD was developed, similar symptoms in soldiers were labelled as soldier's heart, shell shock, war neurosis, and combat fatigue (Herman, 1997). War zones expose individuals to horrendous violence. Experiences that can lead to the development of PTSD include: being in a war zone, engaging in peacekeeping missions under distressing conditions, attacks on self, witnessing the death or wounding of civilians or fellow soldiers, and the act of inflicting death or injury onto an enemy soldier or civilian (Cash, 2006). A study by Hoge et al. (2004) investigating mental health problems associated with combat in Iraq and Afghanistan, demonstrates that the prevalence of PTSD increases consistently with the number of fire fights a soldier has been involved in. Unfortunately, a fear of stigmatization stops many soldiers from seeking treatment for their symptoms (Hoge et al.) Approximately 30% of people who have been in war zones develop PTSD.

Treatments for PTSD

The complexity of PTSD makes it difficult to treat and no single treatment has emerged as uniquely effective (Marmar & Spiegel, in press). Chronic PTSD is particularly resistant to treatment, possibly because trauma severe enough to cause PTSD leaves an indelible physiological imprint on the brain (Shalev, Bonne, & Eth, 1996). Treatments for PTSD need to reduce immediate symptoms and to address the underlying problems that perpetuate symptoms. A three-stage approach for treating complex PTSD has been outlined by Ford et al. (2005). The goals of the first stage are to reduce arousal symptoms, to develop emotional self-efficacy, to reactivate positive emotions (reduce emotional numbness), and to create emotional safety and social bonds among veterans as a foundation for further therapeutic work. During the second stage, the focus is on processing traumatic memories and emotions. Through nonverbal expression and progressive symbolic exposure, traumatic memories are recalled, expressed, and consolidated into a coherent trauma narrative (verbal or visual) that is owned and acknowledged by the person and seen as part of the person's past. The goal of the third stage is to help group members incorporate new insights and understandings into their lives. Any treatment plan includes choosing a treatment modality based on individual needs, discussing an individual's expectations, setting realistic goals, and addressing co-morbid conditions. Various types of therapies are utilized for the treatment of PTSD.

Cognitive Behavioral Therapy (CBT) including prolonged exposure therapy (which uses careful, repeated, detailed imagining of the trauma in a safe, controlled context to help the person face and gain control of the fear and distress that were overwhelming during the trauma), stress inoculation therapy (SIT), systemic desensitization and anxiety management training, has been designated as the behavioral treatment of choice in PTSD practice guidelines and is used to address conditioned fear and cognitive distortions (Friedman, 2006). It aims to achieve cognitive restructuring-to identify and alter an individual's negative interpretations about the trauma and about themselves, such as self-blame, over-generalizing, over-focusing on negatives, and incorrect beliefs about cause and effect, and to confront these maladaptive views. It then attempts to challenge them and replace them with more realistic thought patterns.

Group behavioral treatments are recommended for PTSD so people can share traumatic material within the safety, cohesion, and empathy provided by other survivors and so that they can regain the ability to form trusting relationships (National Center for PTSD, 2006). Group treatment is particularly useful for combat-related PTSD because military training and combat operations are

group experiences and traumatic experiences in the military typically are managed in the context of the group.

Psychodynamic therapy addresses several issues that often play a role in the lives of individuals with PTSD including: developmental issues, defense mechanisms, and interpersonal issues (Schottenbauer et al., 2008). Insight into early traumas can lead to an awareness of defensive functions, an improved ability to cope with stress in the present and future, and freedom from excessive feelings of guilt.

Psychopharmacological therapy aims to reduce symptoms, increase quality of life while decreasing degree of disability, improve resilience, and treat co-morbid mental health disorders (Cash; Friedman et al.). PTSD is associated with psychobiological abnormalities involving neurotransmitter, neurohormonal, and neuroendocrine systems (Friedman, Davidson, & Stein, 2009). Certain drugs are considered to be effective in treating PTSD including antidepressants such as selective serotonin reuptake inhibitors (SSRIs), serotonin norepinephrine reuptake inhibitors (SNRIs), and atypical antipsychotics (Friedman et al.).

More attention needs to be given to treatments for combat-related PTSD that are appropriate for complex PTSD, can reduce immediate symptoms, and can facilitate the organization and integration of traumatic memories in order to address the underlying situation that gives rise to the symptoms. These treatments should be relatively brief, not burdensome to patients, and effective in the long-term. Art therapy may meet all these criteria.

Art Therapy and PTSD

The American Art Therapy Association describes art therapy as follows-"Art therapy is the therapeutic use of art making, within a professional relationship, by people who experience illness, trauma or challenges in living, and by people who seek personal development. Through creating art and reflecting on the art products and processes, people can increase awareness of self and others cope with symptoms, stress and traumatic experiences; enhance cognitive abilities; and enjoy the life-affirming pleasures of making art.

It is a mental health profession that uses the creative process of art making to improve and enhance the physical, mental and emotional well-being of individuals of all ages. It is based on the belief that the creative process involved in artistic self-expression helps people to resolve conflicts and problems, develop interpersonal skills, manage behavior, reduce stress, increase self-esteem and self-awareness, and achieve insight. Art therapy integrates the fields of human development, visual art (drawing, painting, sculpture, and other art forms), and the creative process with models of counseling and psychotherapy."

While PTSD was not recognized as a diagnosis until 1980, the use of art expression in trauma intervention appeared in the late 1970s. Stember (1980), Naitove (1982), Golub (1985), and Terr (1981), among others, observed that art expression could be useful in the treatment of trauma, particularly for individuals who were unable to communicate their experiences with words alone. Clinicians initiated protocols using drawing as a method to help survivors of traumatic events express their experiences, as a means to convey details of the trauma event, and as a way to gain mastery over feelings (Pynoos & Eth, 1986a; Pynoos & Eth, 1986b). Concurrently, others proposed

that art expression helped individuals recall, re-enact, and integrate traumatic experiences and recover from emotional disorders associated with psychological trauma (Brett & Ostroff, 1985; Greenberg & van der Kolk, 1987; Johnson, 1987; Morgan & Johnson, 1995).

Based on these developments, art therapy has been applied to a wide range of types of trauma, including sexual abuse (Backos & Pagon, 1999; Pifalo, 2002; Powell & Faherty, 1990), domestic violence (Malchiodi, 1997), school violence and homicide (Chapman, Morabito, Ladakakos, Schreier, & Knudson, 2001), war and terrorism (Avrahami, 2005; Baker, 2006; Howie, Burch, Conrad, & Shambaugh, 2002), and medical trauma (Appleton, 2001), among others. As a result, contemporary practice of art therapy in the treatment of PTSD emphasizes the usefulness of art expression in the reconstruction of the trauma narrative and also in the management of stress, physical symptoms, and psychological disorders resulting from acute or chronic trauma.

In order to more fully understand art therapists' clinical approaches to PTSD, the American Art Therapy Association (AATA) Research Committee conducted a survey in 2005 of registered art therapists who treat people with PTSD. Additionally, Collie et al., (2006) conducted a review of art therapists' published and unpublished descriptions of their approaches to treating PTSD. A content analysis was conducted of the survey responses and the written descriptions to identify topics and concepts that were addressed. A detailed thematic analysis was conducted of material pertaining to two primary topic areas: therapeutic mechanisms and therapy methods.

Therapeutic Mechanisms

There was considerable agreement among the art therapists whose clinical perspectives were included in the analysis about core therapeutic mechanisms and about conceptual models that explain how art therapy can help reduce positive symptoms of PTSD, such as intrusive thoughts and hyper-arousal, and less obvious negative symptoms such as avoidance and emotional numbing. The thematic analysis revealed seven primary therapeutic mechanisms: Reconsolidation of memories, externalization, progressive exposure, reduction of arousal, reactivation of positive emotion, enhancement of emotional self-efficacy, and improved self-esteem

Therapy Methods

There was overall agreement that emotional safety, self-efficacy, and self-worth must be developed as a foundation for further therapeutic work. There were mixed views about whether sessions should be structured or unstructured and whether or not there is a role for free art making without instructions from the art therapist. A range of media and types of art activities were recommended, including collage, drawing, painting and quilting. Despite the benefits of art therapy as a treatment for PTSD and the prevalence of PTSD with war veterans, only a few small studies have explored the use of art therapy with this specific population. However, they have yielded promising results.

Art Therapy and Combat-Related PTSD: Major Research

Golub (1985) studied art work produced by ten war veterans of the Vietnam War in art therapy 15 years after their experiences of combat. Golub noticed symbolic trends representing dualities or opposites in the veterans' self-representations. The types of opposites represented symbolically were: representations of the self before and after Vietnam, as living and dead, as victim and agent, and as soldier and civilian. Golub believed that his symbolism in the artwork of

her clients helped them to successfully view their problems in a different manner and discover alternative solutions. The veterans also demonstrated a need to express emotions paired with anxiety about being overwhelmed (Golub). Golub believes these opposites may be the result of a splitting in the veterans' views of the self. She suggests that this would be particularly likely with this population because the veterans, who were late adolescents at the time of the war, would have been at a vulnerable stage in self-development. Golub suggests that through art therapy, the veterans were able to work towards self-integration and mastery of the trauma.

In another study, Morgan and Johnson (1995) studied the effect of art therapy on a specific intrusive symptom of combat-related PTSD: nightmares. Their study, which involved two Vietnam veterans, compared the effect of drawing immediately after awakening from a nightmare with a similar writing condition. Their results showed that the drawing condition resulted in a reduction in the number and intensity of nightmares in both subjects. In addition they note improvement in the ability to return to sleep and a reduction in startle response upon awakening. The veterans reported feeling more detached from their dreams after the drawing task. They were more aware that they were dreaming and began viewing scenes in their dreams from an aerial perspective. The authors attribute the success of the art condition to the distancing, reality testing, and concretizing characteristics of art making, as well as the sense of mastery achieved by the creation of the art work. The authors report that the subjects experienced frustration during the writing condition, and highlight the difficulty of expressing intense emotions through words.

In a small study designed to identify which components of a specialized inpatient PTSD program (SIPU) were most effective, Johnson and colleagues (1997) found that art therapy was the only component among 15 standard SIPU components such as group therapy, drama therapy, community service, anger management, and journaling, that produced the greatest benefits for veterans with the most severe PTSD symptoms. Single session effects of all treatment methods on 25 veterans over 16 weeks were assessed using a self-report instrument that was given to the veterans before and after each treatment. Veterans also rated the effectiveness of each treatment component at discharge. The results of this study showed that art therapy was the treatment that was the most successful with the veterans with the most severe symptoms of PTSD.

All other modalities were more successful with veterans with less severe symptoms. Johnson et al. believe that the creative arts therapies have the dual advantage of being action oriented, while also incorporating psychological content. They also found art therapy to be exceptional in that the veterans could tolerate war-zone content during art therapy and could not do so during other activities. The authors surmise that art therapy was more effective than other therapies because it provided pleasurable distraction in conjunction with exposure to difficult content and thus allowed traumatic material to be processed without the negative short-term side effects of verbal introspective interventions. Johnson et al. suggest that re-experiencing and avoidance symptoms of PTSD are addressed by the exposure-based mechanisms of the creative arts therapies, whereas hyper arousal symptoms are dealt with by relaxation and distraction-based mechanisms. Commenting on this study, Allan Schore, associate clinical professor of psychiatry and bio-behavioral sciences at UCLA's School of Medicine, says that traumatic and stressful memories are stored in the right hemisphere of the brain, which processes emotions, visual and non-conscious information. The left brain controls logical thinking and verbal skills. "Making art

activates the right brain, talking about it and constructing a coherent story about the traumatic experience activates the left hemisphere as well. Integrating the two leads to healing ", says Schore.

In a more recent pilot study on group art therapy with 15 veterans, Dobbs (2002) found that feelings of anxiety and depression decreased over 8 weeks of treatment (although not at statistically significant levels). The artwork and individual comments also indicate that the group intervention is a positive experience for most of the veterans.

A research study by Rankin and Taucher (2003) which employed the case study method to document the progress of ten war veterans as they received art therapy paired with relaxation training reflects many of the current art therapy treatments for trauma. They emphasize the usefulness of trauma-focused art therapy for promoting expression of emotional, physical, and mental states, for constructing a narrative of trauma that ties together feelings, thoughts, and behaviors, and for exploring meaning regarding these aspects of the trauma experience. They also emphasize that art therapy helps in the management of stress, physical symptoms, intrusive or avoidant symptoms, behaviors and affect, as well as ultimately promoting an integration of the trauma event into the patient's life history.

Avrahami (2006) presents her description of the treatment of two traumatized war veterans by employing visual art therapy over a period of 6 months, with weekly one hour sessions with each client. The two case studies in this paper demonstrate visual art therapy to be an integrative approach, which is most appropriate for the multidimensional treatment of post-traumatic stress disorder (PTSD). The unique contribution of visual art therapy in the treatment of PTSD is expressed in three major areas: (1) working on traumatic memories, (2) the process of symbolization-integration, and (3) containment, transference and counter-transference. Like Golub (1985), Avrahami postulates that the symbolic images spontaneously emerging in the client's artwork is the core of the healing process and has the ability to contain and ameliorate the dissociative character of the trauma. The symbolic image presents things in a manner that is tangible, concrete and with boundaries, giving clients a sense of order, a kind of completeness, and a sense that sees the parts stored away and contained as a whole, protected unit within the medium of art.

Coulter (2008) described the long-term art therapy treatment of an Australian Vietnam War veteran with PTSD. Coulter uses this case study in order to demonstrate how art therapy can facilitate the safe exploration of feelings of anger and resentment and can provide an expressive outlet for self-harming behavior. Coulter suggests that engaging in art therapy "provided a channel for internalized and repressed anger, disillusionment and alienation to be externalized and explored in therapeutic safety"

Miller (2010) used the exploratory case study method to follow the art therapy process of a group of seven war veterans with PTSD suffering from various problems including chronic pain, isolation, depression, thoughts of suicide, insomnia, anxiety, etc. Six of the participants were men and one was a woman, and their ages ranged from 28 years to 56 years. Their years of service and amount of combat experience varied. Group art therapy took place in an inpatient unit for veterans experiencing mental health issues related to their service (in Canada). Art therapy was offered twice a week and a variety of art supplies including paints, clay, markers, charcoal, and images for

collages were provided. Data collected over a period of ten weeks included images of the art works created in therapy, therapist observations, and observations by other staff members. The process of art therapy was described and data was looked at in terms of how the veterans engaged with the process, and the issues and emotions expressed in their art making. Miller said that "Through art, participants were able to express positive feelings, externalize difficult emotions and gain insight into their PTSD symptoms. Art-making fostered discussion and allowed veterans to show empathy for one another." She also stated that group dynamics played a key role in the study: "Through the process of creating and discussing art with peers, participants were able to open up and express important thoughts and emotions in an atmosphere of mutual support

All the studies discussed above used small samples, (some as small as two or three) and most of them were necessarily time-limited, which implies not only that the results of these study may be atypical and may not generalize to other similar populations, but also that long-term effects of the treatment were not assessed by them. Indeed, while short-term treatments did prove to alleviate the avoidant symptoms of PTSD, various other symptoms, such as arousal symptoms, were unaffected in the short term. This indicates, firstly, the need for longer-duration studies to explore fully the potential benefits of art therapy, and secondly, the use of larger samples for better generalizability and applicability of the results.

When seen in terms of the characteristics and exact nature of the samples chosen for these studies, most studies had North American, white male participants. Thus the results obtained in these studies are not necessarily fully applicable to combat veterans from other countries having rather different cultures, since the culture which an individual lives in affects his perception and experience of life events. This means that the experience of combat trauma may be approached and handled quite differently by war veterans belonging to different cultures. In addition, the attitude towards engaging in various forms of art, and consequently the potential therapeutic benefits derived from engaging in art therapy, may also vary greatly from culture to culture. Indeed, a study by Kulka et al. (1990) shows that African-American and Hispanic veterans experience trauma very differently from their white counterparts. Moreover, various personal and ethnic factors, such as childhood and family background; premilitary factors, such as the presence of a predisposition in the individual's personality to develop certain mental disorders; military factors, such as the actual amount and type of war-zone exposure faced by an individual; and post-military factors, such as the coping resources available to the veteran, will form a complex combination and influence his/her response to any mode of treatment. Therefore these variables must be subjected to a degree of control, while the effect (on the results) of those variables which cannot be controlled must be acknowledged and analyzed in a suitable context. The effect of cultural and ethnic differences is an important factor for consideration in not only studies employing art therapy, but those utilizing any mode of treatment.

Fourthly, sensitivity to the gender ratio of the samples used in the aforementioned studies is extremely important. As mentioned earlier, most studies used all-male samples, while those which did have female participants, had a vast majority of male participants. Just as there are cultural and ethnic differences in the development and experience of combat-related trauma, and in the efficacy of treatment using art therapy, so are there gender differences. There has been far less research on the unique nature of trauma faced by female war veterans, which is often complicated by sexual assault and harassment in addition to war zone stressors. Thus, future studies must also

reflect attempts to achieve more equitable gender representation in the samples chosen. These will not only be a move towards greater generalisability, but also towards reduction of the prevalent gender bias in psychological research.

Fifthly, the age-range of the participants chosen for a majority of the aforementioned studies was thirty to forty years of age. Research on Combat-Related PTSD shows that the age of joining the military and the age at which the trauma is experienced can majorly change the degree of vulnerability to development of mental disorders, and the time taken for the efficacy of the treatment modality to be established. The lesser the age at which the trauma is experienced, the more intense is its impact, and more the vulnerability towards developing severe PTSD. Thus the age range of the sample chosen is another factor which influenced the outcome of the above studies, and must be taken into consideration while interpreting the results.

Furthermore, a majority of these studies employed the case study method. This in-depth, longitudinal examination of a single instance or event provides valuable information about the specific case studied and about similar groups or individuals, but the completely open and uncontrolled environment in which it takes place eliminates its usefulness as an indicator of cause and effect since the variables in the study are uncontrolled. Thus case studies lend themselves only to generating hypotheses, which can be supported or refuted by the use another research method. Also, while a case study may employ both qualitative and quantitative methods to gather data, most of the aforementioned studies relied solely on qualitative data. This indicates that there is a need for outcome studies, investigations that use quantitative methods as well and give empirical evidence of art therapy's beneficial effects. In order for such studies to embody a sound research methodology there must be control groups, that is, comparable groups of patients who did not receive art therapy and whose condition, therefore, did not improve, thus demonstrating that art therapy was the curative force. Obviously, since many factors play a part in a patient's change, isolating the art therapy variable in this way is very difficult (Wadeson, 1980). The above studies can thus serve as preliminaries for a larger scale outcome study on the efficacy of art therapy with war veterans experiencing combat-related PTSD.

Given the increasing incidence of PTSD among combat veterans and the various shortcomings of standard treatments for PTSD, there is a constant need to explore promising alternative treatments. Art therapy shows promise as a treatment for combat-related PTSD that can reduce immediate symptoms, can help overcome avoidance and emotional numbing, and can facilitate the organization and integration of traumatic memories in ways that may not be possible with words alone. Moreover there is a larger body of literature supporting the use of art therapy for treating a variety of traumas and their associated symptoms. The compelling evidence gathered so far suggests that art therapy should be thoroughly integrated within the mental health and trauma response systems of any nation. Such institutional change will not happen in the absence of empirical evidence from large-scale, peer reviewed, multi-year studies that use control groups to compare the effect of art therapy to other treatments. A significant research effort is thus warranted to test the efficacy of art therapy for PTSD treatment and to improve services for veterans as well as the many other individuals who suffer from this debilitating disorder.