

Articles

Art Therapy for Combat-Related PTSD: Recommendations for Research and Practice

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Abstract

With a new generation of American combat veterans returning from Iraq, the nation has an obligation to do everything possible to improve care for posttraumatic stress disorder (PTSD). Although art therapy has been understudied in this context, it shows promise as a means of treating hard-to-treat symptoms of combat-related PTSD, such as avoidance and emotional numbing, while also addressing the underlying psychological situation that gives rise to these symptoms. In this paper, we establish a conceptual foundation for research about art therapy as a treatment for combat-related PTSD by situating art therapy within the context of other PTSD treatments, outlining a theoretical rationale for using art therapy as a treatment for PTSD, and clarifying “best practices” for using art therapy as a treatment for combat-related PTSD. We recommend group treatment in three stages and suggest that art therapists who treat combat-related PTSD receive specialized training in trauma intervention and PTSD theory.

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Posttraumatic 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. PTSD is characterized by three groups of symptoms: *intrusive re-experiencing*, *avoidance* of reminders and triggers, and *hyperarousal* including hypervigilance 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. Anniversaries of the event can also trigger these intrusive symptoms. People with PTSD often experience emotional numbness, sleep disturbances, outbursts of anger, and life problems resulting from the avoidance of traumatic reminders. There is often fluctuation between persistent re-experiencing and avoidance, leading to social isolation that can escalate to the point where it resembles agoraphobia. Feelings of intense guilt and self-loathing are also common with PTSD (National Institute of Mental Health, 2002). If the initial trauma exposure was severe and if avoidance persists, symptoms of PTSD are likely to become chronic (Breslau & Davis, 1992; Foa, Stein, & McFarlane, 2006; Marshall, Beebe, Oldham, & Zaninelli, 2001).

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). PTSD is diagnosed when symptoms last more than one month. Symptoms usually begin within three months but may not begin until years later. Some people recover within six months; others suffer much longer. The average duration of PTSD is ten years.

PTSD Among Combat Veterans

Approximately 30% of people who have been in war zones develop PTSD. The rates of PTSD for veterans of the wars in Afghanistan and Iraq are conservatively estimated to

be 11% and 18% respectively, with a higher rate for veterans of the war in Iraq because of greater combat exposure. PTSD increases in a linear manner with the number of fire-fights a soldier experiences (Hoge et al., 2004; Litz, 2005). It is assumed that PTSD has been under-reported for veterans of both these wars to avoid stigmatization (Hoge et al., 2004). Studies have found that 35% of Iraq war veterans accessed mental health services in the year after returning home. It is likely that some of these veterans have the symptoms of PTSD even if they are not diagnosed (Hoge, Auchterlonie, & Milliken, 2006). New research has revealed that 18.7% of the veterans of the U.S. war in Viet Nam developed war-related PTSD during their lifetimes and that 9.1% were still suffering from PTSD 11 to 12 years after the war (Dohrenwend et al., 2006). By way of comparison, the lifetime PTSD prevalence for American men is 5% (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995).

With a new generation of American combat veterans returning from Iraq, the nation has an obligation to do everything possible to improve care for PTSD. Despite this national obligation, a promising treatment option, art therapy, has received little attention. Art therapists have reported remarkable results from work with combat veterans, and theorists have identified psychological and neurological mechanisms that explain the unique capacities of art therapy to promote recovery from PTSD. Yet art therapy is rarely included in research studies and consequently is rarely included in discussions of possible treatments for PTSD. The purpose of this paper is to help establish a conceptual foundation for research about art therapy as a treatment for combat-related PTSD by situating art therapy within the context of other PTSD treatments, outlining a theoretical rationale for using art therapy as a treatment for PTSD, and clarifying "best practices" for using art therapy as a treatment for combat-related PTSD.

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 with no coherent verbal, symbolic, or temporal basis (O'Kearney & Perrott, 2006; Reisberg & Hertel, 2004). Furthermore, implicit and declarative memories of an event can become disconnected due to trauma. 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, Hostenler, Herron, & Fisler, 1994).

The failure to process information symbolically (verbally or otherwise) after a trauma is thought to be a core element of PTSD (van der Kolk & Fisler, 1995). Indeed, brain imaging research has demonstrated hypoactivity in Broca's area, which is involved in the motoric aspects of speech, and hyperactivity in the amygdala (fear, anger), hippocampus (memory), and occipital cortex (visual processing), among veterans with PTSD (Rauch & Shin, 1997).

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). The standard psychopharmacological treatments used for symptom reduction are anti-depressants in the selective serotonin reuptake inhibitor class, such as sertraline, paroxetine, fluoxetine, fluvoxamine, and citalopram, which have demonstrated effectiveness in both open label and double blind trials (Brady et al., 2000; Marmar et al., 1996; Marshall, Beebe, Oldham, & Zaninelli, 2001; Seedat et al., 2002). Cognitive Behavioral Therapy (CBT), including prolonged exposure therapy (PE) and stress inoculation therapy (SIT), 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). Exposure therapy 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. Although good results have been achieved with this and other forms of CBT, CBT typically requires lengthy and intensive treatment.

Behavioral treatments that focus on organizing traumatic memories and promoting emotional distance may yield better results in less time (Herman, 1992b; Pennebaker, 1993; Pennebaker, Mayne, & Francis, 1997). Traumatic memories can be organized and their emotional charge reduced through the development of a "coherent trauma narrative," which places traumatic memories in declarative memory so they can be reinterpreted and integrated into the person's life history. By their nature, traumatic memories are difficult to express in words alone. Non-verbal expression, as is used in art therapy, can facilitate both the shift to declarative memory and the creation of a coherent narrative. The narrative can be pictorial rather than verbal. Indeed, visual imagery may be necessary for the symbolic processing involved in constructing a trauma narrative (van der Kolk & Fisler, 1995).

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. Group treatments for war-zone veterans have been offered in the context of specialized inpatient PTSD programs (SIPUs) that were created in response to the high prevalence of PTSD among combat veterans of the war in Viet Nam. These programs were designed to be longer (months rather than weeks), more intensive, and more interactive than PTSD programs on general psychiatric units, to enable veterans to uncover and process their war-zone memories (Johnson,

Rosenheck, & Fontana, 1997). However, their duration and complexity make them challenging to implement and research about SIPUs has found that benefits are not long-lasting (Hammarberg & Silver, 1994; Scurfield, Kenderdine, & Pollard, 1990).

In general, the standard treatments for PTSD bring a reduction in “positive” symptoms such as hyperarousal, intrusive thoughts, nightmares, and anger. They do not appear to be as effective in reducing “negative” symptoms such as avoidance and emotional numbing that may lead to PTSD becoming chronic. Alternative treatments are considered necessary for treating the less evident aspects of PTSD (Blake, 1993).

Emotional numbing is a cardinal symptom of PTSD and an early predictor of chronic PTSD (Feeny, Zoellner, Fitzgibbons, & Foa, 2000). Emotional numbing manifests as disinterest in activities, detachment from others, and a restricted range of emotional expressiveness (American Psychiatric Association, 1994; Litz & Gray, 2002; National Institute of Mental Health, 2002). Research has shown that emotional numbing is not simply avoidance that provides protection against painful emotions (as previously thought), but an inability to feel both negative and positive emotions—as a result of emotional exhaustion due to prolonged hyperarousal (Kashdan, Elhai, & Frueh, 2006; Litz, Orsillo, Kaloupek, & Weathers, 2000; Litz et al., 1997). The inability to feel positive emotions is at least as important as the inability to feel negative emotions, because positive emotions are related to social activity (Watson, Clark, McIntyre, & Hamaker, 1992), the broadening of psychological resources, and the pursuit of reward-driven goals (Fredrickson, 2001), and therefore have considerable impact on the ability to thrive in society. Recent research suggests that treatment for emotional numbing in PTSD needs to include pleasant activities in order to rekindle responsiveness to rewards and to re-establish adaptive social functioning (Kashdan, Elhai, & Frueh, 2006).

Much of the research on treatments for PTSD has been based on single-event traumas such as car accidents and stranger rape and therefore has limited relevance for “complex PTSD” caused by the ongoing traumas that characterize combat (Herman, 1992a; van der Kolk & Courtois, 2005). This has led to the claim that psychiatrists treating people with complex PTSD tend not to focus primarily on the processing of traumatic memories as standard treatment guidelines recommend, but instead on patient safety, regulation of emotions, coping, and self-management skills (van der Kolk & Courtois, 2005). A 3-phase treatment model has been proposed for treating complex PTSD (Ford, Courtois, Steele, Van der Hart, & Nijenhuis, 2005; Herman, 1992a): (a) symptom reduction and stabilization, (b) processing of traumatic memories and emotions, and (c) life integration and rehabilitation after trauma processing.

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

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, the contemporary practice of art therapy in the treatment of trauma, and more recently 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 (Ballou, 1995; Cohen, Barnes, & Rankin, 1995; Morgan & White, 2003; Rankin & Taucher, 2003).

Although art therapy has not been extensively researched, a number of small studies of art therapy for veterans with PTSD have yielded promising results. In a 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. (The other 14 components were most effective for those with the least severe symptoms.) 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. Other studies also have

found art therapy to be more effective than verbal therapy for veterans with PTSD. Morgan and Johnson (1995) assessed a drawing task for treating nightmares in combat-related PTSD and found that those who did the drawing task when they were awakened by nightmares had fewer and less intense nightmares than those who did a writing task.

Art Therapists' Clinical Approaches to PTSD

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, we conducted a review of art therapists' published and unpublished descriptions of their approaches to treating PTSD. Thirteen art therapists responded to the survey. Ten published or unpublished written descriptions were reviewed. 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. Material pertaining to secondary topics that were not discussed at length, such as the use of art-based assessment tools, was not included in the thematic analysis.

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 hyperarousal, and less obvious negative symptoms such as avoidance and emotional numbing. The thematic analysis revealed seven primary therapeutic mechanisms: (a) reconsolidation of memories, (b) externalization, (c) progressive exposure, (d) reduction of arousal, (e) reactivation of positive emotion, (f) enhancement of emotional self-efficacy, and (g) improved self-esteem. The explanations that follow represent summaries of the material contained in the survey responses and written descriptions pertaining to primary therapeutic mechanisms.

Reconsolidation of memories. Art therapy was described as a means of reconnecting implicit and declarative memories and resolving the memory fragmentation that is an underlying cause of PTSD. It was acknowledged that individuals with PTSD may have difficulties constructing a coherent trauma narrative with words alone and that art making provides a non-verbal form of communication that may be more suitable to consolidating and integrating traumatic memories. Some of the art therapists gave detailed descriptions of the integration process and explained that only when traumatic material is seen as something that is owned by the person yet external to that person, can it be transformed from something that is distressingly active in the present to something passive that is part of the person's history.

Progressive exposure. Art therapy was presented as a way to address the avoidance symptom cluster through progressive exposure, in symbolic form, to stimuli that are being avoided and to emotions associated with these stimuli. It was pointed out that it is generally less threatening to express and reveal traumatic material non-verbally than verbally because the level of symbolism (more or less overt) can be more easily modulated.

Externalization. Externalization techniques are used in verbal therapies such as "narrative therapy" (White & Epston, 1990) to separate the problem from the person and make it easier to address the problem. In art therapy, traumatic material can be very literally externalized in the form of images or objects. This physical externalization helps a person with PTSD become an observer who views the traumatic material with a measure of emotional distance. Externalization and emotional distance pave the way for the creation of a coherent trauma narrative and the integration of the traumatic material into the person's self concept and personal history.

Reduction of arousal. Art making is generally experienced as relaxing, even meditative. The process of creating art, whether or not it directly relates to traumatic experiences, provides an opportunity to change one's level of arousal, such that the hyperarousal symptom cluster can be addressed immediately and throughout treatment.

Reactivation of positive emotion. A fundamental tenet of art therapy is that art making awakens emotion. In this way, it can directly address emotional numbing, including the numbing of positive emotions. Most people find creative expression pleasurable and satisfying. The pleasure of creating images and objects that others find interesting augments the reactivation of positive emotion and reward-driven motivation.

Enhancement of emotional self-efficacy. Emotional self-efficacy refers to one's confidence in one's ability to express emotions effectively and appropriately. The experience of expressing threatening or painful emotional material within the controllable "container" of an art work gives a sense of control. This helps build confidence that one can express important emotions in ways that will not be overwhelming to oneself or others. The format of an art therapy group provides opportunities to practice expressing emotions in new ways and to build trusting relationships.

Improved self-esteem. In group art therapy, troubling or shameful material is expressed openly, witnessed non-judgmentally, and recognized and even appreciated by others. Self-esteem can grow as group members are supportive witnesses to each other's struggles and growth.

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. In general, therapists working with younger populations (e.g., med-

ically injured children) favored more structure than therapists working with older populations (e.g., war veterans and war refugees). An art therapist with extensive experience working with war-zone veterans claimed it is crucial for veterans with PTSD to have the freedom to self-direct because permission for free expression gives the message that they can handle whatever emotions may arise.

A range of media and types of art activities were recommended, including collage, drawing, and quilting. Resistant materials such as pencils and chalk that can be used forcefully with predictable results were recommended for expressing intense or overwhelming emotions. Fluid materials such as watercolor paint, that often yield surprising results, were recommended for revealing and expressing hard-to-access emotions.

Art Therapy for Veterans with PTSD: "Best Practices"

In order to clarify "best practices" for art therapy as a treatment for veterans with PTSD, we considered psychiatrists' and art therapists' descriptions of current clinical practices together with research literature about treatments for PTSD, focusing in particular on group treatment for complex PTSD from prolonged trauma. From this review, the following recommendations can be made for group art therapy for veterans with PTSD.

Treatments for PTSD need to reduce immediate symptoms and to address the underlying problems that perpetuate symptoms. A three-stage approach is recommended, similar to the approach for treating complex PTSD 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 non-verbal 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.

An understanding of how trauma symptoms affect both emotions and physiology is key to successful "best practices." Art therapists who have had additional training in these areas have an advantage in applying art therapy approaches in clinical practice because they have contemporary knowledge of current treatment methodology, symptom expression, and developments in neuroscience.

Conclusion

Given the high incidence of PTSD among newly-returning American combat veterans and the various inadequacies of standard treatments for PTSD, there is a need to explore promising alternative treatments. Based on pre-

vious research with combat veterans, 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.

To support future research, we have outlined a conceptual foundation and theoretical rationale for using art therapy as a treatment for PTSD. Additionally, we have made "best practices" recommendations that utilize characteristics of art therapy that distinguish it from other forms of treatment for PTSD, especially with regard to avoidance and emotional numbing. These characteristics can be summarized as follows:

- *Relaxation* during art making directly reduces hyperarousal.
- *Non-verbal expression* facilitates the expression of memories and emotions that are difficult to put into words.
- *Containment* of traumatic material within an object or image gives a sense of control over terrifying and intrusive memories and promotes emotional self-efficacy.
- *Symbolic expression* makes progressive exposure/expression of traumatic material tolerable and helps overcome avoidance, thus allowing the therapeutic process to advance relatively quickly.
- *Externalization* of traumatic memories and emotions facilitates insight and the ownership of trauma and helps shift traumatic memories from the present to the past.
- The *pleasure* of creation builds self-esteem, helps rekindle responsiveness to rewards, reduces emotional numbness, and helps re-establish adaptive social functioning.

We further recommend specialized training in trauma intervention and PTSD theory and favor group treatment.

References

- American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders*. Washington, DC: American Psychiatric Association.
- Appleton, V. (2001). Avenues of hope: Art therapy and the resolution of trauma. *Art Therapy: Journal of the American Art Therapy Association*, 18, 6-13.
- Avrahami, D. (2005). Visual art therapy's unique contribution in the treatment of post-traumatic stress disorders. *Journal of Trauma and Dissociation*, 6(4), 5-38.
- Backos, A. K., & Pagon, B. E. (1999). Finding a voice: Art therapy with female adolescent sexual abuse survivors. *Art Therapy: Journal of the American Art Therapy Association*, 16, 126-132.
- Baker, B. A. (2006). Art speaks in healing survivors of war: The use of art therapy in treating trauma survivors. *Journal of Aggression, Maltreatment & Trauma*, 12(1/2), 183-198.

- Ballou, M. (1995). Art therapy. In M. Ballou (Ed.), *Psychological interventions: A guide to strategies* (pp. 68-72). Westport, CT: Praeger.
- Blake, D. D. (1993). Treatment outcome research on post-traumatic stress disorder [Electronic Version]. *NCP Clinical Newsletter*, 3. Retrieved May 15, 2006 from <http://www.ncptsd.va.gov/publications/cq/v3/n2/blake.html>.
- Brady, K., Pearlstein, T., Asnis, G. M., Baker, D., Rothbaum, B., Sikes, C. R., et al. (2000). Efficacy and safety of sertraline treatment of posttraumatic stress disorder: A randomized controlled trial. *Journal of the American Medical Association*, 283(14), 1837-1844.
- Breslau, N., & Davis, G. C. (1992). Posttraumatic stress disorder in an urban population of young adults: Risk factors for chronicity. *American Journal of Psychiatry*, 149(5), 671-675.
- Brett, E. A., & Ostroff, R. (1985). Imagery and posttraumatic stress disorder: An overview. *American Journal of Psychiatry*, 142(4), 417-424.
- Chapman, L., Morabito, D., Ladakakos, C., Schreier, H., & Knudson, M. M. (2001). The effectiveness of art therapy interventions in reducing post traumatic stress disorder (PTSD) symptoms in pediatric trauma patients. *Art Therapy: Journal of the American Art Therapy Association*, 2, 100-104.
- Christianson, S. A. (1992). *The handbook of emotion and memory*. Hillsdale, NJ: L. Erlbaum Associates.
- Cohen, B. M., Barnes, M. N., & Rankin, A. B. (1995). *Managing traumatic stress through art: Drawing from the center*. Lutherville, MD: The Sidran Press.
- Dohrenwend, B. P., Turner, J. B., Turses, N. A., Adams, B. G., Koenen, K. C., & Marshall, R. (2006). The psychological risks of Vietnam for US veterans: A revisit with new data and methods. *Science*, 313(5789), 979-982.
- Feeny, N. C., Zoellner, L. A., Fitzgibbons, L. A., & Foa, E. B. (2000). Exploring the roles of emotional numbing, depression, and dissociation in PTSD. *Journal of Traumatic Stress*, 13(3), 489-498.
- Foa, E. B. (2006). Psychosocial therapy for posttraumatic stress disorder. *Journal of Clinical Psychiatry*, 67 Suppl 2, 40-45.
- Foa, E. B., Stein, D. J., & McFarlane, A. C. (2006). Symptomatology and psychopathology of mental health problems after disaster. *Journal of Clinical Psychiatry*, 67 Suppl 2, 15-25.
- Ford, J. D., Courtois, C. A., Steele, K., Van der Hart, O., & Nijenhuis, E. R. S. (2005). Treatment of complex posttraumatic self dysregulation. *Journal of Traumatic Stress*, 18, 437-447.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *The American Psychologist*, 56(3), 218-226.
- Friedman, M. J. (2006). Posttraumatic stress disorder among military returnees from Afghanistan and Iraq. *American Journal of Psychiatry*, 163(4), 586-593.
- Golub, D. (1985). Symbolic expression in posttraumatic stress disorder: Vietnam combat veterans in art therapy. *The Arts in Psychotherapy*, 12(4), 285-296.
- Greenberg, M. S., & van der Kolk, B. A. (1987). Retrieval and integration of traumatic memories with the "painting cure." In B. A. van der Kolk (Ed.), *Psychological trauma* (pp. 191-216). Washington, DC: American Psychiatric Press.
- Hammarberg, M., & Silver, S. M. (1994). Outcome of treatment for post-traumatic stress disorder in a primary care unit serving Vietnam veterans. *Journal of Traumatic Stress*, 7(2), 195-216.
- Herman, J. L. (1992a). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress*, 5, 377-391.
- Herman, J. L. (1992b). *Trauma and recovery*. New York: BasicBooks.
- Hoge, C. W., Auchterlonie, J. L., & Milliken, C. S. (2006). Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *Journal of the American Medical Association*, 295(9), 1023-1032.
- Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine*, 351(1), 13-22.
- Howie, P., Burch, B., Conrad, S., & Shambaugh, S. (2002). Releasing trapped images: Children grapple with the reality of the September 11 attacks. *Art Therapy: Journal of the American Art Therapy Association*, 19, 100-105.
- Johnson, D. (1987). The role of the creative arts therapies in the diagnosis and treatment of psychological trauma. *The Arts in Psychotherapy*, 14, 7-14.
- Johnson, D. R., Lubin, H., James, M., & Hale, K. (1997). Single session effects of treatment components within a specialized inpatient posttraumatic stress disorder program. *Journal of Traumatic Stress*, 10(3), 377-390.
- Johnson, D. R., Rosenheck, R., & Fontana, A. (1997). Assessing the structure, content, and perceived social climate of residential posttraumatic stress disorder treatment programs. *Journal of Traumatic Stress*, 10(3), 361-376.
- Kashdan, T. B., Elhai, J. D., & Frueh, B. C. (2006). Anhedonia and emotional numbing in combat veterans with PTSD. *Behaviour Research and Therapy*, 44(3), 457-467.
- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. *Archives of General Psychiatry*, 52(12), 1048-1060.

- Litz, B. T. (2005, 4/7/05). A brief primer on the mental health impact of the wars in Afghanistan and Iraq: A National Center for PTSD fact sheet. Retrieved 3/29/06, from http://www.ncptsd.va.gov/facts/veterans/fs_iraq_afghanistan_lay_audience.html
- Litz, B. T., & Gray, M. J. (2002). Emotional numbing in post-traumatic stress disorder: Current and future research directions. *Australia and New Zealand Journal of Psychiatry, 36*(2), 198-204.
- Litz, B. T., Orsillo, S. M., Kaloupek, D., & Weathers, F. (2000). Emotional processing in posttraumatic stress disorder. *Journal of Abnormal Psychology, 109*(1), 26-39.
- Litz, B. T., Schlenger, W. E., Weathers, F. W., Caddell, J. M., Fairbank, J. A., & LaVange, L. M. (1997). Predictors of emotional numbing in posttraumatic stress disorder. *Journal of Traumatic Stress, 10*(4), 607-618.
- Malchiodi, C. A. (1997). *Breaking the silence: Art therapy with children from violent homes* (2nd ed.). New York: Brunner-Mazel.
- Marmar, C. R., Schoenfeld, F., Weiss, D. S., Metzler, T., Zatzick, D., Wu, R., et al. (1996). Open trial of fluvoxamine treatment for combat-related posttraumatic stress disorder. *Journal of Clinical Psychiatry, 57 Suppl 8*, 66-70.
- Marmar, C. R., & Spiegel, D. (in press). ASD and PTSD. In G. Gabbard (Ed.), *Treatments of Psychiatric Disorders, Third Edition*. Washington, DC: American Psychiatric Publishing.
- Marshall, R. D., Beebe, K. L., Oldham, M., & Zaninelli, R. (2001). Efficacy and safety of paroxetine treatment for chronic PTSD: A fixed-dose, placebo-controlled study. *American Journal of Psychiatry, 158*(12), 1982-1988.
- Morgan, C. A., & Johnson, D. R. (1995). Use of a drawing task in the treatment of nightmares in combat-related post-traumatic stress disorder. *Art Therapy: Journal of the American Art Therapy Association, 12*, 244-247.
- Morgan, K. E., & White, P. R. (2003). The functions of art-making in CISTD with children and youth. *International Journal of Emergency Mental Health, 5*(2), 61-76.
- Naitove, C. (1982). Art therapy with sexually abused children. In S. Sgroi (Ed.), *Handbook of clinical intervention in child sexual abuse* (pp. 290-308). Lexington, MA: Lexington Books.
- National Center for Post-Traumatic Stress Disorder. (2006, 7/20/06). Treatment of PTSD: A National Center for PTSD fact sheet. Retrieved 05/30, 2006, from http://www.ncptsd.va.gov/facts/treatment/fs_treatment.html
- National Institute of Mental Health. (2002, 3/29/06). Facts about post-traumatic stress disorder. Retrieved 5/30/06, from <http://www.nimh.nih.gov/publicat/ptsdfacts.cfm>
- O'Kearney, R., & Perrott, K. (2006). Trauma narratives in post-traumatic stress disorder. *Journal of Traumatic Stress, 19*(1), 81-93.
- Pennebaker, J. W. (1993). Putting stress into words: Health, linguistic, and therapeutic implications. *Behavioral Research and Therapy, 31*(6), 539-548.
- Pennebaker, J. W., Mayne, T. J., & Francis, M. E. (1997). Linguistic predictors of adaptive bereavement. *Journal of Personality and Social Psychology, 72*(4), 863-871.
- Pifalo, T. (2002). Pulling out the thorns: Art therapy with sexually abused children and adolescents. *Art Therapy: Journal of the American Art Therapy Association, 19*, 12-22.
- Powell, L., & Faherty, S. L. (1990). Treating sexually abused latency aged girls: A 20 session treatment plan utilizing group process and the creative arts therapies. *The Arts in Psychotherapy, 17*, 35-47.
- Pynoos, R., & Eth, S. (1986a). Special intervention programs for child witnesses to violence. In M. Lystad (Ed.), *Violence in the home* (pp. 193-216). New York: Brunner-Mazel.
- Pynoos, R., & Eth, S. (1986b). Witness to violence: The child interview. *Journal of the American Academy of Child Psychiatry, 25*, 306-319.
- Rankin, A. B., & Taucher, L. C. (2003). A task-oriented approach to art therapy in trauma treatment. *Art Therapy: Journal of the American Art Therapy Association, 20*, 138-147.
- Rauch, S. L., & Shin, L. M. (Eds.). (1997). *Functional Neuroimaging Studies in Posttraumatic Stress Disorder* (Vol. 821). New York: New York Academy of Sciences.
- Reisberg, D., & Hertel, P. (2004). Memory for emotional events. In D. Reisberg & P. Hertel (Eds.), *Memory and emotion* (pp. 3-41). New York: Oxford University Press.
- Scurfield, R., Kenderdine, S., & Pollard, R. (1990). Inpatient treatment for war-related post-traumatic stress disorder: Initial findings on a longer-term outcome study. *Journal of Traumatic Stress, 3*, 185-202.
- Seedat, S., Stein, D. J., Ziervogel, C., Middleton, T., Kaminer, D., Emsley, R. A., et al. (2002). Comparison of response to a selective serotonin reuptake inhibitor in children, adolescents, and adults with posttraumatic stress disorder. *Journal of Child and Adolescent Psychopharmacology, 12*(1), 37-46.
- Shalev, A. Y., Bonne, O., & Eth, S. (1996). Treatment of post-traumatic stress disorder: A review. *Psychosomatic Medicine, 58*(2), 165-182.
- Stember, C. (1980). Art therapy: A new use in the diagnosis and treatment of sexually abused children. In B. McComb Jones, L. Jenstrom & K. MacFarlane (Eds.), *Sexual abuse in children: Selected readings* (pp. 59-63). Washington, DC: US Government Publications.
- Terr, L. C. (1981). "Forbidden games": Post-traumatic child's play. *Journal of the American Academy of Child Psychiatry, 20*(4), 741-760.

van der Kolk, B. A., & Courtois, C. A. (2005). Editorial comments: Complex developmental trauma. *Journal of Traumatic Stress, 18*(5), 385-388.

van der Kolk, B. A., & Fisler, R. (1995). Dissociation and the fragmentary nature of traumatic memories: Overview and exploratory study. *Journal of Traumatic Stress, 8*(4), 505-525.

van der Kolk, B. A., Hostetler, A., Herron, N., & Fisler, R. E. (1994). Trauma and the development of borderline personality disorder. *Psychiatric Clinics of North America, 17*(4), 715-730.

Watson, D., Clark, L. A., McIntyre, C. W., & Hamaker, S. (1992). Affect, personality, and social activity. *Journal of Personality and Social Psychology, 63*(6), 1011-1025.

White, M., & Epston, D. (1990). *Narrative means to therapeutic ends* (1st ed.). New York: Norton.

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