## Arts & Healing Creative, Artistic, and Expressive Therapies for PTSD

By Joshua Smyth, PhD Pennsylvania State University

Successful treatment of post-traumatic psychological symptoms, including Post-Traumatic Stress Disorder (PTSD), is difficult. Individuals suffering with PTSD re-experience the traumatic event(s) years and even decades later, reliving their helplessness, fear, and horror (e.g., through flashbacks or nightmares) associated with the traumatic event. Such strong, negative reactions can create a motivation to avoid any environment in which re-living the anxiety of the trauma could be triggered. Although avoidance may prevent the onset of intense anxiety, it also results in social isolation and withdrawal from experiences that were previously enjoyed. For example, many individuals with PTSD describe years of declining invitations to social and family events to avoid anxiety and anger. In extreme cases, individuals endorse fear and discomfort about leaving the house at all, which they characterize as shameful and demoralizing. Thus, many individuals with PTSD perceive themselves as trapped in a cycle that reinforces avoidance of situations that may trigger anxiety, without a way out.

Fortunately, there are effective behavioral treatments for PTSD. But the most successful ways to treat PTSD, including exposurebased therapies, typically require individuals to gradually confront the anxiety associated with their traumas. In other words, exposure-based therapies operate in stark contrast to patients' motivation to avoid any environment that could trigger anxiety. For instance, a patient currently experiencing distress, such as from an abusive relationship, may not engage in such therapy, or respond poorly to exposure. Patients frequently begin these treatments and terminate them before they experience benefits, leaving some patients even more hopeless than they were when they began. More generally, a variety of social processes, including the stigma of mental illness, also can keep individuals from seeking traditional treatment. Thus, over the last two decades, researchers and clinicians have explored the effectiveness of a series of alternative or supplemental therapies for individuals with PTSD that do not necessitate exposure to the facts of the trauma, and/or may avoid the stigma of receiving mental health treatment. Such therapeutic approaches include expressive writing and expressive group therapy, a range of creative therapies (e.g., art, music, body-oriented), and mindfulness training.

Although these alternative therapies differ in their exact execution, they share an underlying set of assumptions. Each of these approaches allows individuals with PTSD to experience and/or express their thoughts and feelings without necessarily having to verbalize the trauma, share this verbalizing with others, or directly confront the trauma, if they are not ready. Alternative therapies, in general, also focus on creating an environment in which the patient feels safe, and then providing an expressive medium that does not threaten that feeling of safety.

#### The Current State of Research

A number of non-traditional creative/expressive therapies has demonstrated at least preliminary effectiveness in reducing PTSD symptoms, reducing the severity of depression (which often accompanies PTSD), and/or improving quality of life. This evidence ranges from the results of full-scale clinical trials where a treatment group is compared to a control condition, to descriptive case studies where results from the treatment of one or a few individuals are presented in great detail.

Expressive writing (EW). Expressive writing is a brief intervention that instructs individuals to write about their deepest thoughts and feelings about a stressful event without regard to the structure of the writing (see Box 1). Writing is typically done in 3-5 sessions of 15-20 minutes over the course of hours, days, or weeks. This approach is thus highly personal, emotional, and based on the individual being willing and able to express themselves through language and writing. A number of clinical trials examining the effectiveness of alternative therapies on PTSD have been conducted with expressive writing, and several of these trials have demonstrated some beneficial effects of EW. These successful trials demonstrate that EW can reduce the distress that accompanies one's thoughts and feelings over time. A set of trials that failed to find positive effects suggests that EW may be more beneficial when writing about the trauma privately, without verbally sharing the trauma with others. More generally,

#### Box 1: Expressive Writing instructions.

For the next (three) days, I would like for you to write about your very deepest thoughts and feelings about an extremely important emotional issue that has affected you and your life. In your writing, I'd like you to really let go and explore your very deepest emotions and thoughts. You might tie your topic to your relationships with others, including parents, lovers, friends, or relatives. You might tie your writing to your past, your present, or your future, or to who you have been, who you would like to be, or who you are now. You may write about the same general issues or experiences on all days of writing, or write about different topics each day. All of your writing is completely confidential. Don't worry about spelling, sentence structure, or grammar. The only rule is that you once you begin writing, you continue until time is up.

From Smyth, J.M., Pennebaker, J.W., & Arigo, D. (in press). What are the health effects of disclosure? In A. Baum & T. Revenson (Eds.), Handbook of Health Psychology (2nd ed.) New York, NY: Taylor & Francis. these trials suggest that EW is most effective for individuals currently experiencing strong negative emotions related to the trauma.

Additional research has shown that EW offers the opportunity for exposure, in that individuals habituate to the anxiety aroused by writing about their experiences across sessions. Like exposurebased therapies, EW thus carries the risk of increasing immediate anxiety, but can reduce anxiety over time. This brief treatment may be particularly suitable for individuals who are comfortable with verbal expression but have concerns about potential reactions from loved ones or therapists. EW also may be used as an adjunct to traditional psychotherapy. Qualitative data from case reports and clinical trials show that patients often perceive EW as a meaningful, positive experience (see Box 2).

#### **Creative Therapies**

The creative therapies, including art, music, drama, and bodyoriented approaches, are a diverse set of techniques that hold in common that thoughts and feelings about a trauma are represented without verbal descriptions of the event(s). Visual and auditory stimuli are used to symbolize the pain and suffering that result from trauma (such as fear, horror, loneliness, and distrust), and the process of expressing oneself is often more important than the finished product. Although the literature on these methods is largely limited to case studies of successful implementations of the specific therapy without comparison groups, the long history of their use in residential and inpatient treatments for PTSD speaks to the impression that they are effective. Also noteworthy is that studies directly comparing language-based and artistic expression of trauma-related thoughts and emotions tend to demonstrate some participant preference for drawing, sculpting, and painting over writing. This preference is perhaps due to artistic methods often inducing less anxiety than language-based methods (see Box 3). Many of the creative therapies studies have not used control conditions or long-term follow-up assessments of PTSD symptoms, and each study typically includes only a small number of individuals. Consequently, it is as of yet unclear whether (and for whom) creative expression is most beneficial for PTSD symptoms. Some preliminary conclusions suggest that the creative therapies might be particularly effective with patients who struggle with language (either due to age, developmental deficiency, or other co-morbid disorder). Specifics about each type of creative therapy are presented below.

Art therapies involve patients using some medium (e.g., painting, drawing, collage) to represent their feelings or emotions related to their trauma; the creative product also may be used as a starting point to disclose a patient's traumatic experiences to a therapist or group. A set of randomized controlled trials that employed the use of drawings and collages with adults experiencing PTSD-symptoms demonstrated that art therapy lowered PTSD symptom severity more than control groups, but that these reductions did not extend to depression or other physical symptoms reported at a follow-up period at least a month away. Deriving firm conclusions about art therapy is difficult because these programs often employ both creative and cognitive processing of trauma. The success of these multi-modal programs suggests that art therapy is useful as accompaniment to verbal therapies, but more research is needed to understand how and when art therapies

## Box 2: Feedback from patients with PTSD who have participated in Expressive Writing.

"I thought a lot about what I wrote in between the writing sessions, and each one was easier to get through than the last. Before the writing, I held back from telling others about (the trauma). I never told anyone about it. But afterward, I opened up to close friends about it, and I think that it made our relationships better."

"Thank you for giving me the opportunity to write about (my traumas). I was really down before I did this, but now I feel a lot better. It's as if a huge burden has been lifted."

Adapted from Sloan, D.M, & Marx, B.P. (2006). Exposure through written emotional disclosure: Two case examples. Cognitive and Behavioral Practice, 13, 227-234.

should be used with patients (particularly in the absence of other therapeutic approaches).

Music therapies engage patients to use music in a variety of ways (e.g., playing music, beating a drum, listening to and sharing songs) to encourage emotional expression in a non-threatening environment. Through the playing of music patients are able to learn how to self-regulate emotions and can form interpersonal connections when playing with others. The majority of evidence for the positive benefit of creating and playing music comes in the form of case studies with children, suggesting music as a way to create bonds with a caregiver or therapist when language use is difficult. Alternatively, music therapies that involved listening to songs that represented oneself or a stressful event/trigger of PTSD has been used with both survivors of childhood abuse and combat veterans. In these studies, the music offers a starting point for the therapist or group to lead a discussion where the patient describes what thoughts are coming to mind while listening. Thus far, evidence for music therapy largely comes from case studies lacking control groups; as a result, it is unknown whether the music therapy itself is effective or whether benefits are due to other factors, such as patients discussing emotions with a therapist or group, social contact, etc. Furthermore, although some salutary effects of music therapy on PTSD have been observed (e.g., increasing disclosure, reducing behavioral problems due to the trauma in children), more long-term follow-ups are needed that explicitly examine reductions in PTSD symptom severity and other co-morbid disorders. This addition to the literature would allow examination of the extent to which music therapy is effective on its own, or is best served when partnered with other types of cognitive-based therapies.

Drama therapies create safe, playful environments where patients are able to act out anxieties or conflicts due to their trauma. The goal is evoke a patient's emotions and provide a platform on which one's anxiety can be expressed and the stigma of those emotions can be expelled. Drama therapy has been used with a group of Vietnam veterans, for example, where patients acted out confrontations with enemy fighters or personal events, such as punishment scenes where the patients or others are chastised for weakness. These scenes enabled the veterans to see that they were not alone in their anger and grief, and also demonstrated that they could tolerate the emotions associated with their memories. Unfortunately, there is little self-report or objective evidence that this method reduces symptoms of PTSD, and it has yet to be directly contrasted with other approaches.

Dance and body movement therapies propose that one's negative, emotion-laden experiences are represented in the body in the form of tension and pain. Thus, dealing with a patient's trauma must involve physical processing so that unconscious conflicts can be brought into one's awareness. Dance and body movement therapies often begin with teaching the patient how to relax and then slowly increasing movement and contact with others. Other forms of body movement therapies uses procedures akin to acupuncture, where negative memories associated with various locations in the body are tapped so as to relieve stress and create balance in one's life. Little peer-reviewed empirical evidence has been published in support of dance and body movement therapies, and the results that have been published remain controversial as they lacked effective baseline and follow-up analyses.

A set of related approaches utilize a mix of relaxation and creative approaches involving nature. Nature-assisted therapies include both horticultural therapy (i.e., the use of plants and

### Box 3: Feedback from patients with PTSD who have participated in Creative Interventions.

*Artwork:* "The drawings were an excellent way of subconsciously getting down to the real feelings that so many of us have tried to build a wall around. Sometimes these walls need to come down so real healing can begin...thank you."

Quoted in Henderson, P., Rosen, D., & Mascaro, N. (2007). Empirical study on the healing nature of mandalas. Psychology of Aesthetics, Creativity, and the Arts, 1, 148-154.

"It was more annoying to write...I couldn't write fast enough...the words just didn't do it right. (With drawing), I'm not sweaty or jumpy when I wake up (from a nightmare)...I'm calmer. More relaxed. I can go back to bed and go to sleep. (Also), the nightmare starts sooner than it used to...I wake up before I get to the ambush."

Quoted in Morgan, C.A., & Johnson, D.R. (1994). Use of a drawing task in the treatment of nightmares in combat-related Post-Traumatic Stress Disorder. Art Therapy, 12, 244-247.

"(Artwork) has provided me with a lot of relief, and helped me to feel more comfortable and calmer."

American Art Therapy Association (2010). Art therapy for the treatment of PTSD. Mundelein, IL: Stadler, J.

*Expressive Group Therapy:* "I really benefitted from participating. This group was one of the most useful pieces of my treatment."

Adapted from Zaidi, L.Y. (1994). Group treatment of adult male inpatients abused as children. Journal of Traumatic Stress, 7, 719-727.

Group Drumming: "...it gives a feeling of togetherness which makes it possible for you to share everything with the group...it's as if they saw everything, so I can tell them about myself. If I spoke about personal issues it's only due to the group drumming which enabled us to open up."

*Quoted in Bensimon, M., Amir, D., & Wolf, Y. (2008). Drumming through trauma: Music therapy with post-traumatic soldiers. The Arts in Psychotherapy, 35, 34-48.* 

*Body Movement Therapy:* "She described her wounded heart as full of 'poisonous pus,' and that she wanted to be rid of it. As she shared this image with me, she also shared that she had recently spoken with her children for the first time since leaving them. In previous phone calls, she had been unable to speak because of her intense grief. Expressing a desire to 'push the pus away,' she named it 'shame,' and through visualization and movement, we created a movement sequence to 'push' it out of her heart. At the end of this session, she expressed gratitude for her exercises, saying, 'they allow me to touch the pain in my heart.'"

Adapted from Gray, A. E. L. (2001). The body remembers: Dance/movement therapy with an adult survivor of torture. American Journal of Dance Therapy, 23, 29-43.

*Horticultural Therapy:* "One of the things that fuelled my (alcohol) addiction was the pain I felt as a survivor of severe sadistic childhood physical and sexual abuse, at the hands of my father and other relatives. Working with you and your staff in the greenhouse, or on the grounds, was just what I needed at the end of a long hard day of spiritual, mental, and emotional work. Sometimes, not often, I would come to you feeling completely overwhelmed, disoriented and panicky and your quiet supportive manner and the work with God's earth soothed me tremendously."

*Quoted in Hewson, M. (2001). Horticultural therapy and post-traumatic stress recovery. Journal of Therapeutic Horticulture, 12, 1-9.* 

gardening techniques to induce clinical change) and natural-environments therapies (i.e., experiential group processes that involve adventure and/or wilderness expeditions). As in several of the creative therapy literatures, much of the existing evidence comes from case reports and qualitative studies, with a few uncontrolled (pre/post) and randomized controlled trials. This literature generally supports the use of these techniques for patients with a range of cognitive and behavioral symptoms, such as Alzheimer's disease, depression, substance abuse, and chronic illness. When applied to PTSD, the inclusion of a wilderness expedition did not enhance the effect of inpatient treatment in a nonrandomized trial. The addition of horticultural therapy to residential and inpatient programs are received well by patients (mainly combat veterans), treatment providers, and other staff, and users often anecdotally report benefit. These methods require further investigation using randomized, controlled trials, but they may have potential for reducing distress among patients with PTSD.

#### **Mindfulness Therapies**

Mindfulness approaches focus primarily on observing one's internal and external states and accepting one's past experiences, so as to better tolerate the distress associated with trauma reminders (see Box 4). Mindfulness has been tested using experimental methods but with small samples, often without control conditions, primarily among veterans, and typically in group settings. These studies suggest that mindfulness therapies may be effective in the short-term for reducing PTSD symptom severity, but that the effectiveness of these therapies do not persist over time (although it remains to be seen if ongoing practice will maintain benefits). It is also important to again note that group based treatments in and of themselves (regardless of specific approach) may be beneficial for individuals with PTSD who often avoid social interaction to prevent triggering trauma-related anxiety (by way of fostering

#### Box 4. Principles of Mindfulness Training.

(1) Effortful focus on environment and internal states (awareness of the present moment)

(2) Nonjudgmental observance and acceptance of emotions, thoughts, and physical sensations

(\*) Relevant to PTSD, mindfulness practice may provide the skills necessary to:

- Increase tolerance of distress associated with negative experiences (i.e., "surfing the wave" of negative emotion) to reduce avoidance
- Enable attention to immediate emotions during psychotherapy
- Engage more fully in life as it occurs, rather than focusing on the past or future, which may improve relationships and quality of life

Adapted from Vujanovic, A.A., Niles, B., Pietrefesa, A., Schmertz, S.K., & Potter, C.M. (2011). Mindfulness in the treatment of posttraumatic stress disorder among military veterans. Professional Psychology: Research and Practice, 42, 24-31.

safe and supportive social interactions, etc.). The short-term effectiveness of mindfulness-based therapies shows potential for using such approaches as first-line treatments for PTSD (which may be useful for stabilization and establishing a sense of safety), but indicates the need for additional and/or ongoing intervention. Clinical observation and case reports document the relief experienced by individuals who are able to increase their distress tolerance. This improvement is associated with greater self-efficacy and readiness for exposure-based work (see Box 5), suggesting that this approach may be useful as an initial intervention in sequenced or stepped care models.

#### What We Do Not Know

Although there is promise to these creative/expressive therapies for the treatment of PTSD, the lack of high quality controlled trials leaves many questions unanswered. First and foremost, it is unclear which type of PTSD patient would be most benefited by which therapy. Characteristics of the patient, the nature of the cause of PTSD, and the degree to which the patient can trust a mental health provider, and many other factors will influence which treatment will be preferred and which most successful. Notably, there has been little consistency across research with respect to the severity of PTSD in patients, the co-morbidity of PTSD with depression and other conditions, and the extent to which a patient is currently experiencing trauma-related symptoms or not.

Another issue concerns the extent to which the therapy itself is effective or whether many of the salutary effects for patients are due to the engaging in (safe and supportive) interpersonal interactions. Due to the avoidance tendencies of individuals suffering with PTSD, many patients withdraw themselves from others, including from close friends and family members. Many studies conducted lack control conditions and, further, even in the studies that did, many of the patients in the control group still improved. Although the results of the controlled clinical trials examining the salutary effects of EW on PTSD, for example, cannot be fully explained by referencing the opportunity for positive social interaction, nevertheless the opportunity to experience and express emotion in a safe and controlled interaction for PTSD sufferers appears to be important. Any study that lacked an appropriate control condition is limited in its interpretation as a patient's positive gains can be attributed to the opportunity to interact with others (e.g., therapist, other patients), or other nonspecific factors, rather than the specific therapy.

Related to the above, it is often not clear precisely what components of a therapy are necessary, and which component(s) leads to treatment success. The studies described above were grouped according to their general modes of intervention, but there is often great variability both within and between therapies. For example, music therapy might consist of having patients physically create music using a drum, or having patients present songs they feel define their stressful event which are then played to a group and discussed. Furthermore, the creative therapies often employ multi-modal designs (e.g., patients both play music and create art sculptures, or patients both engage in both creative and cognitive components), making it difficult to ascertain what specifically caused the positive effects. Even expressive writing, which has been tested most widely based on an established protocol, varies widely in its execution of instructions (e.g., what patients are told to write about, whether patients are asked to talk to others about their writing). These variations likely have an influence on whether the therapy will be successful or not.

Finally, the number of treatment sessions ranges from 3 (for tests of expressive writing) to upward of 100 (for descriptions of some art and multi-modal therapies), and follow-up intervals range from immediately post-treatment to 24 months after treatment concludes. As a result, it is not clear how much of each treatment is necessary for symptom reduction or how long the effects of a given treatment may last. It will be necessary to determine these aspects of expressive, creative, and mindfulness approaches before clinical recommendations or best-practice guidelines are warranted.

#### What We Need to Do Next

Expressive, creative, and mindfulness-based approaches appear acceptable to patients, and show some promise for treating PTSD – especially for patients currently experiencing trauma-related symptoms and for those unable to articulate their symptoms and memories in words. Yet much work remains to be done before it is possible to conclusively state the effectiveness of expressive, creative, and mindfulness therapies and bring these healing approaches to patients.

The most immediate action item is to conduct more high quality research, ideally including appropriate control conditions, careful measurement, and long-term assessments. Research should also assess patient characteristics and how they relate to treatment preference and response, so as to learn how best to match individuals with an appropriate therapy. A number of more specific questions also remain unanswered, including the importance of interpersonal interactions to the therapy, the importance of co-morbidity to the expected benefits of the specific therapy, and the importance of the nature of the trauma that caused the PTSD. Just as exposure-based therapy is not appropriate for all patients, neither will any non-traditional creative/expressive therapy be universally suitable. The direction of future research must be aimed at understanding which specific type of therapy will have the most positive effects for a particular patient. Furthermore, as part of the need for more research, cost analyses should be considered. Although exposure based therapies have proven effective, they can be time- and resourceintensive. Some of the creative/expressive therapies are lower in cost to administer. In addition, the potential to use group therapy for some individuals with PTSD would significant lower the burden of cost of treating patients. With that said, many of these treatments are currently implemented in an ongoing (and often time- and labor-intensive) fashion. Determining the best "fit" to patients, and the most effective and efficient manner of delivery, remains a vital objective for ongoing work.

# Box 5. Feedback from patients with PTSD or trauma histories who have participated in mindfulness training.

"Don't ask me, what I was expecting the other people to be? Raving lunatics, people with axes in their hands, I haven't a clue – but they were not....it was you, it was my next door neighbour. They weren't giggling half wits. I know that is rather narrow minded but they were ordinary everyday run of the mill people which reinforces the fact that that is what I am as well. I'm not a nut...I'm just an ordinary, everyday run of the mill person who ended up in the crap for whatever reason, and so are they. So that was another thing that was a great plus."

"...I felt the meditation was going inside the body.... as if I've got into the root, is probably the best way to describe it. And I can get right to the nucleus of it and I can feel it."

Quoted in Finucane, A., & Mercer, S.W. (2006). An exploratory mixed methods study of the acceptability and effectiveness of mindfulness-based cognitive therapy for patients with active depression and anxiety in primary care. BMC Psychiatry, 6, 1-14.

"I am feeling things the pain has been masking. It [the pain] took up all my energy. I have a lot of things to talk [about] to my therapist now—that I had not thought of before."

Quoted in Price, C.J., McBride, B., Hyerle, L., & Kivlahan (2007). Mindful awareness in body-oriented therapy for female veterans with post-traumatic stress disorder taking prescription analgesics for chronic pain: A feasibility study. Alternative Therapies in Health and Medicine, 13, 32-40.

#### About the Author and the Foundation for Art & Healing

**Joshua Smyth** is Professor of Biobehavioral Health and Medicine at the Pennsylvania State University. His research takes an interdisciplinary approach using psychological, behavioral, social, and biological factors to understand and improve human health and functioning. He is an active member of the Foundation for Art & Healing Advisory Board.

The Foundation for Art & Healing, a 501(c)3 public charity, was founded in 2003 to explore the connection between creative expression and healing. The Foundation's mission is to create and expand general awareness about the relationship between art and healing, to bring forward through research and related explorations critical knowledge about this vital relationship, and to help make this knowledge available at the individual and community level in the form of accessible and effective programs.



#### References

Baer, R.A., Smith, G.T., & Allen, K.B. (2004). Assessment of mindfulness by self-report: The Kentucky inventory of mindfulness skills. *Assessment*, 11, 191-206.

Batten, S.V., Follette, V.M., Rasmussen Hall, M.L., & Palm, K.M. (2002). Physical and psychological effects of written disclosure among sexual abuse survivors. *Behavior Therapy*, 33, 107-122.

Bensimon, M., Amir, D., & Wolf, Y. (2008). Drumming through trauma: Music therapy with post-traumatic soldiers. *The Arts in Psychotherapy*, 35, 34-48.

Blake, R.L., & Bishop, S.R. (1994). The Bonny Method of guided imagery and music (GIM) in the treatment of post-traumatic stress disorder (PTSD) with adults in the psychiatric setting. *Music Therapy Perspectives*, 12, 125-129.

Bonny, H. (1978). *Facilitated guided imagery and music sessions* (GIM Monograph #1). Balitimore, MD: ICM Books.

Brown, E.J., & Heimberg, R.G. (2001). Effects of writing about rape: Evaluating Pennebaker's paradigm with severe trauma. *Journal of Traumatic Stress*, 14, 781-790.

Bugg, A., Turpin, G., Mason, S., & Scholes, C. (2009). A randomized controlled trial of the effectiveness of writing as a self-help intervention for traumatic injury patients at risk for developing Post-Traumatic Stress Disorder. *Behavior Research and Therapy*, 47, 6-12.

Callahan, R.J., & Callahan, J. (2000). Stop the nightmares of trauma: Thought Field Therapy, the power of therapy for the 21st century. Chapel Hill, NC: Professional Press.

Collie, K., Backos, A., Malchiodi, C., & Spiegel, D. (2006). Art therapy for combat-related PTSD: Recommendations for research and practice. *Art Therapy*, 23, 157-164.

Creamer, M., O'Donnell, M.L., & Pattison, P. (2004). The relationship between acute stress disorder and posttraumatic stress disorder in severely injured trauma survivors. *Behaviour Research and Therapy*, 42, 315-328.

Deaver, S. (2002). What constitutes art therapy research? *Art Therapy*, 19, 23-27.

Foa, E.B., Hembree, E.A., & Rothbaum, B.O. (2007). *Prolonged* exposure therapy for PTSD: Emotional processing of traumatic experiences. Therapist guide. New York: Oxford University Press.

Folkes, C.E. (2002). Thought field therapy and trauma recover. *International Journal of Emergency Mental Health*, 4, 99-104.

Frattaroli, J. (2006). Experimental disclosure and its moderators: A meta-analysis. *Psychological Bulletin*, 132, 823-865.

Frisina, P.G., Borod, J.C., & Lepore, S.J. (2004). A meta-analysis of the effects of written emotional disclosure on the health outcomes of clinical populations. *Journal of Nervous & Mental Disease*, 192, 629-634.

Gidron, Y., Peri, T., Connolly, J.F., & Shalev, A.Y. (1996). Written disclosure in posttraumatic stress disorder: Is it beneficial for the patient? *Journal of Nervous and Mental Disease*, 184, 505–507.

Gordon-Cohen, N. (1987). Vietnam and reality – The story of Mr. D. *American Journal of Dance Therapy*, 10, 95-109.

Gaudiano, B.A., & Herbert, J.D. (2000). Can we really tap our problems away? A critical analysis of thought field therapy. *The Skeptical Inquirer*, 24, 29-33.

Henderson, P., Rosen, D., & Mascaro, N. (2007). Empirical study on the healing nature of mandalas. *Psychology of Aesthetics, Creativity, and the Arts*, 1, 148-154.

Hoyt, T., & Yeater, E.A. (2011). The effects of negative emotion and

expressive writing on post-traumatic stress symptoms. *Journal of Social and Clinical Psychology*, 30, 549-569.

Hussey, D.L., Reed, A.M., Layman, D.L., & Pasiali, V. (2007). Music therapy and complex trauma: A protocol for developing social reciprocity. *Residential Treatment for Children & Youth*, 24, 111-129.

James, M., & Johnson, D.R. (1996). Drama therapy in the treatment of combat-related post-traumatic stress disorder. *The Arts in Psychotherapy*, 23, 383-395.

Johnson, C., Mustafe, S., Sejdijaj, X., Odell, R., & Dabishevci, J. (2001). Thought Field Therapy – Soothing the bad moments of Kosovo. *Journal* of *Clinical Psychology*, 57, 2137-1240.

Johnson, D.R. (1982). Developmental approaches in drama therapy. *The Arts in Psychotherapy*, 9, 183-189.

Johnson, D.R. (1986). The developmental method in drama therapy: Group treatment with the elderly. *The Arts in Psychotherapy*, 13, 17-33.

Johnson, D.R. (1991). The theory and technique of transformations in drama therapy. *The Arts in Psychotherapy*, 18, 285-300.

Kabat-Zinn, J. (2000). Indra's net at work: The mainstreaming of Dharma practice in society. In G. Watson, S. Batchelor, & G. Claxton (Eds.), *The psychology of awakening: Buddhism, science, and our day-to-day lives* (pp. 225-249). York Beach, ME: Samuel Weiser.

Kaiser, D., Dunne, M., Malchiodi, C. Feen, H., Howie, P., Cutcher, D., & Ault, R. (2005). *Call for art therapy research on PTSD*. Mundelein, IL: American Art Therapy Association, Inc.

Kimbrough, E., Magyari, T., Langenberg, P., Chesney, M., & Berman, B. (2010). Mindfulness intervention for child abuse survivors. *Journal of Clinical Psychology*, 66, 17-33.

King, L.A. (2001). The health benefits of writing about life goals. *Personality and Social Psychology Bulletin*, 27, 798-807.

King, L.A., & Miner, K.N. (2000). Writing about the perceived benefits of traumatic events: Implications for physical health. *Personality and Social Psychology Bulletin*, 26, 220-230.

Koopman, C., Ismailji, T., Holmes, D., Classen, C.C., Palesh, O., & Wales, T. (2005). The effects of expressive writing on pain, depression, and Posttraumatic Stress Disorder symptoms on survivors of intimate partner violence. *Journal of Health Psychology*, 10, 211-221.

Krakow, B., Sandoval, D., Schrader, R., Keuhne, B., Mcbride, L. Yau, C.L., & Tandberg, D. (2001). Treatment of chronic nightmares in adjudicated adolescent girls in a residential facility. *Journal of Adolescent Health*, 29, 94-100.

Johnson, D.R., Lubin, H., James, M., & Hale, K. (1997). Single session effects of treatment components within a specialized inpatient Post-Traumatic Stress Disorder program. *Journal of Traumatic Stress*, 10, 377-390.

LeLieuvre, R.B. (1998). "Goodnight Saigon": Music, fiction, poetry, and film in readjustment group counseling. Professional Psychology: *Research and Practice*, 29, 74-78.

Lepore, S.J., & Greenberg, M.A. (2002). Mending broken hearts: Effects of expressive writing on mood, cognitive processing, social adjustment and health following a relationship breakup. *Psychology & Health*, 17, 547-560.

Lepore, S.J., Silver, R.C., Wortman, C.B., & Wayment, H.A. (1996). Social constraints, intrusive thoughts, and depressive symptoms among bereaved mothers. *Journal of Personality and Social Psychology*, 70, 271-282.

Lyshak-Stelzer, F., Singer, P., St. John, P., & Chemtob, C.M. (2007). Art therapy for adolescents with posttraumatic stress disorder symptoms: A pilot study. *Art Therapy*, 24, 163-169.

Morgan, C.A., & Johnson, D.R. (1995). Use of a drawing task in the treatment of nightmares in combat-related post-traumatic stress disorders. *Art Therapy*, 12, 244-247.

Nakamura, Y., Lipschitz, D.L., Landward, R., Kuhn, R., & West, G. (2011). Two sessions of sleep-focused mind-body bridging improves self-reported symptoms of sleep and PTSD in veterans: A pilot randomized control trial. *Journal of Psychosomatic Research*, 70, 335-345.

Niles, B.L., Klunk-Gillis, J., Ryngala, D.J., Silberbogen, A.K., Paysnick, A., & Workl, E.J. (2011). Comparing mindfulness and psychoeducation treatments for combat-related PTSD using a telehealth approach. *Psychological Trauma: Theory, Research, Practice, and Policy.* 

Nixon & Kling (in press).

Pennebaker, J.W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science*, 8, 162-166.

Pennebaker, J.W. (2000). Telling stories: The health benefits of narrative. *Literature and Medicine*, 19, 3-18.

Pennebaker, J.W., & Beall, S.K. (1986). Confronting a traumatic event: Toward an understanding of inhibition and disease. *Journal of Abnormal Psychology*, 95, 274–281.

Pennebaker, J.W., Colder, M., & Sharpe, L.K. (1990). Accelerating the coping process. *Journal of Personality and Social Psychology*, 58, 528-537.

Possemato, K., Ouimette, P., & Geller, P.A. (2010). Internet-based expressive writing for kidney transplant recipients: Effects on posttraumatic stress and quality of life. *Traumatology*, 16, 49-54.

Reichert, E. (1994). Expressive group therapy with adult survivors of sexual abuse. *Family Therapy*, 21, 99-105.

Resick, P. A., Monson, C. M., & Chard, K. M. (2007). *Cognitive processing therapy: Veteran/military version*. Washington, DC: Department of Veterans' Affairs.

Robarts, J.Z. (2000). Music therapy and adolescents with anorexia nervosa. *Nordic Journal of Music Therapy*, 9, 3-12.

Robarts, J.Z. (2003). The healing function of improvised songs in music therapy with a child survivor of early trauma and sexual abuse. In S. Hadley (Ed.), *Psychodynamic music therapy: Case studies* (pp.141-182). Gilsum, NH: Barcelona.

Robarts, J.Z. (2006). Music therapy with sexually abused children. *Clinical Child Psychology and Psychiatry*,11, 249-269.

Röhricht, F. (2009). Body oriented psychotherapy: The state of the art in empirical research and evidence-based practice: A clinical perspective. *Body, Movement, and Dance in Psychotherapy*, 4, 135-156.

Sakai, C.E., & Connolly, S.M., & Oas, P. (2010). Treatment of PTSD in Rwandan child genocide survivors using Thought Filed Therapy. *International Journal of Emergency Mental Health*, 12, 41-49.

Sloan, D.M., & Marx, B.P. (2004). A closer examination of the written emotional disclosure procedure. *Journal of Consulting and Clinical Psychology*, 72, 165-175.

Sloan, D.M., & Marx, B.P. (2006). Exposure through written emotional disclosure: Two case examples. *Cognitive and Behavioral Practice*, 13, 227-234.

Sloan, D.M., Marx, B.P., & Epstein, E.M. (2005). Further examination of the exposure model underlying the efficacy of written emotional disclosure. *Journal of Consulting and Clinical Psychology*, 73, 549-554.

Sloan, D.M., Marx, B.P., & Greenberg, E.M. (2011). A test of written emotional disclosure as an intervention for posttraumatic stress disorder. *Behaviour Research and Therapy*, 49, 299-304.

Smith, B.W., Ortiz, J.A., Steffen, L.E., Tooley, E.M., Wiggins, K.T., Yeater, E.A., Montoya, J.D., & Bernard, M.L. (2011). Mindfulness is associated with fewer PTSD symptoms, depressive symptoms, physical symptoms, and alcohol problems in urban firefighters. *Journal of Consulting and Clinical Psychology*, 79, 613-617.

Smyth, J. M. (1998). Written emotional expression: Effect sizes, outcome types, and moderating variables. *Journal of Consulting and Clinical Psychology*, 66, 174–184.

Smyth, J.M., Hockemeyer, J.R., & Tulloch, H. (2008). Expressive writing and post-traumatic stress disorder: Effects of trauma symptoms, mood states, and cortisol reactivity. *British Journal of Health Psychology*, 13, 85-93.

Smyth, J.M., Nazarian, D., & Arigo, D. (2008). Expressive writing in the clinical context. In A. Vingerhoets, I. Nyklicek, & J. Denollet (Eds.), Emotion regulation and the anxiety disorders: *Adopting a selfregulation perspective* (pp. 215-233). New York: Springer.

Stadler, J. (2010). *Art therapy for the treatment of PTSD*. Mundelein, IL: American Art Therapy Association, Inc.

Stanton, A. L., Danoff-Burg, S., Sworowski, L. A., Collins, C. A., Branstetter, A. D., Rodriguez-Hanley, A., et al. (2002). Randomized, controlled trial of written emotional expression and benefit finding in breast cancer patients. *Journal of Clinical Oncology*, 20, 4160–4168.

Tacon, A.M. (2011). Mindfulness, cancer, and pain. *Alternative Medicine Studies*, 1, 60-63.

Vujanovic, A.A., Niles, B., Pietrefesa, A., Schmertz, S.K., & Potter, C.M. (2011). Mindfulness in the treatment of posttraumatic stress disorder among military veterans. *Professional Psychology: Research and Practice*, 42, 24-31.

Zaidi, L.Y. (1994). Group treatment of adult male inpatients abused as children. *Journals of Traumatic Stress*, 7, 719-727.

Zang, Y., Hunt, N., & Cox, T. (2002). The effect of a guided narrative technique among children traumatized by the earthquake. http://www.inter-disciplinary.net/wp-content/uploads/2011/02/zangtpaper.pdf