

Creative Expression as Healing: The Benefits of Art on Mental Health

by

Tia Reiser

Submitted to the School of Liberal Studies and Continuing Education
in partial fulfillment of the requirements
for the degree of Bachelor of Arts in Liberal Studies

Purchase College
State University of New York

May 2019

Instructor: Owen Borda

Table of Contents

Abstract:	3
Definitions of Terms:	4
Introduction:	6
Thesis Statement and Research Questions:	6
Methods:	7
Literature Review:	9
Analysis:	23
Conclusion:	34
References:	36

Abstract

This paper aims to gather abundant evidence which supports the use of the creative arts (music, visual art, creative movement, and/or drama) as a means of healing symptoms associated with post-traumatic stress disorder (PTSD). In other words, it will function as an examination of the creative arts' therapeutic benefits, particularly, their ability to reduce adverse mental health issues associated with PTSD. One challenge of treating PTSD symptoms with conventional methods of therapy such as Trauma-Focused Cognitive Behavioral Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) is that depending on the individual experiencing the PTSD symptoms, verbal expression of self, symptoms, and traumatic experiences may not be viable. This paper explores the ways in which the creative arts not only serve as a beneficial and accessible means of treatment for individuals with PTSD, but one essential to improving one's mental health. This paper also analyzes the creative arts' ability to reduce PTSD symptoms within adolescents, adults, veterans, refugees, and active duty military service members, particularly, by increasing coping strategies, feelings of community, sense of control, and self-efficacy.

Keywords: The creative arts, PTSD, Mental health, Trauma-Focused Cognitive Behavioral Therapy, Eye Movement Desensitization and Reprocessing

Definitions of Terms

Art therapy: A treatment, facilitated by an art therapist, in which patients use art materials, the creative process, and the resulting artwork to explore their emotions, foster self-awareness, reduce anxiety, and increase self-esteem (American Art Therapy Association, 2014).

Eye Movement Desensitization and Reprocessing (EMDR): A structured therapy that encourages the patient to briefly focus on the traumatic memory while simultaneously experiencing bilateral stimulation, typically in the form of eye movements. (American Psychological Association, 2017).

Mandala: A meditative tool used in various religions, most famously Tibetan Buddhism, which consists of a circular design thought to promote psychological healing and integration when created by an individual (Henderson et al., 2007, p. 149).

Mental health: A harmonious relationship between body and mind which entails basic cognitive and social skills such as the ability to recognize, express, and modulate one's own emotions and the flexibility and ability to cope with adverse life events (Galderisi et al., 2015, pp. 231-233).

Music Therapy: A treatment, facilitated by an art therapist, in which one's emotions and fantasies are expressed and experiences of contact are created through the use of different instruments or one's own voice (Martin, 2018, p. 3).

Post-traumatic Stress Disorder (PTSD): An anxiety disorder that can develop after exposure to a terrifying event(s) in which grave physical harm occurred or was threatened, causing feelings of intense fear, helplessness, or horror (National Institute of Mental Health, 2002).

The Creative Arts/Creative Arts Therapies (CATS): Encompasses art, music, dance/movement, and drama therapy as four major modalities intentionally used to offer therapeutic change, prevent stress, and improve stress management (Martin et al., 2018, p. 1).

Trauma-focused Cognitive Behavioral Therapy (CBT): An evidence-based treatment approach shown to help children, adolescents, and their parents overcome trauma-related difficulties (U.S. Department of Health and Human Services, 2018).

Visual Art Therapy: A therapeutic process based on creative expression using various art materials and techniques such as painting, drawing, sculpture, and collage which calls to the creative, healthy part of the client, enables a non-threatening expression, and opens new possibilities for change and growth (Avrahami, 2006, pp. 6, 10).

Creative Expression as Healing: The Benefits of Art on Mental Health

A variety of studies (e.g., Smith, 2016; Spiegel et al., 2006) have reported on the inability of conventional methods of therapy such as CBT and EMDR to sufficiently and thoroughly treat the symptoms of PTSD; The poor efficacy of these methods is due to PTSD sufferer's inferior ability to verbally express their trauma. Specifically, scholars (e.g., Landis-Shack et al., 2017; Schouten et al., 2018) have found that individuals with prolonged traumatization, emotional over-modulation, and inefficient verbal memory often fail to experience therapeutic benefits from conventional treatment methods for this reason and so, it was proposed that expression through art-making could suffice as a more beneficial and accessible alternative treatment for individuals with PTSD; Also of note are the findings (e.g., Kaimal et al., 2018; Smith, 2016) that art making may encourage individuals with PTSD to overcome fear of social stigma and seek out treatment as well as diminish the likelihood of reliance on unfavorable coping strategies such as substance abuse. While art making has been considered an alternative treatment for PTSD due to its non-verbal potential, it has also been proposed as a beneficial way for victims of abuse, violence, and war to recall and reintegrate their trauma as well as recover from the symptoms and mental health issues resulting from the trauma. In turn, the creative arts have the therapeutic ability to reduce adverse mental health issues and symptoms associated with PTSD and so, are essential factors in the improvement of one's mental health.

Thesis Statement and Research Questions

Concerning the inability of CBT and EMDR to sufficiently and thoroughly treat adverse symptoms of PTSD, this paper will set out to prove the following: That the creative arts have the therapeutic ability to reduce adverse mental health issues and symptoms associated with PTSD

and are essential factors in the improvement of one's mental health. This paper will also address the following research questions: What are the therapeutic benefits of the creative arts, in what ways do they facilitate healing, and are certain creative modalities more effective in reducing PTSD symptoms?

The next section of this paper will demonstrate the research approaches taken in acquiring relevant literature on the relationship between the creative arts and PTSD. Afterward, a review of relevant literature will ensue followed by an analysis of that literature in relation to the thesis and research questions stated above. The final section of the paper will summarize the previous discussion and provide suggestions for areas which require future research.

Methods

The methods in this paper were modeled after Landis-Shack et al. (2017) and Van Lith (2016). Concerning Landis-Shack et al., research was conducted within databases and articles were selected for further review based on their relevance to key search terms. For this paper, sources were collected using the Purchase library databases, specifically, PsycARTICLES, Health Management, PubMed, MEDLINE, and PsycINFO and searched by pairing the terms "the creative arts", "creative expression", and "art therapy" with "PTSD", "depression", "anxiety", and "stress"; Occasionally, key search terms such as "treatment" and "healing" were included. In order to reduce the number of articles for final review, Van Lith's method which grouped articles from 1994 to 2014 according to specific inclusion criteria was also incorporated. For instance, since this topic is young in comparison to other mental health research, literature published between 2006 and 2018 was selected as it was the most relevant and comprehensive means of gathering information supportive of the argument that the creative arts not only have

the therapeutic ability to reduce adverse mental health issues and symptoms associated with PTSD, but are essential factors in the improvement of one's mental health.

Within the review of literature, the creative arts' ability to reduce adverse PTSD symptoms is examined. The review is not only structured in relation to my thesis statement, but according to creative arts modality. For instance, the review examines the effects of general creative interventions like art, dance, and music on individual PTSD symptoms like stress and depression, explores the effects of specific creative modalities like music therapy and visual art on PTSD, and investigates the effects of single art therapy methods like mask-making and mandala drawing on PTSD. Also, in placing it in opposition to CBT and EMDR, the review assesses the essentiality of the creative arts to the improvement of one's mental health. In order to assure that the data incorporated fully explore my thesis, different demographics that suffer from PTSD such as veterans, adults, refugees, and adolescents are considered.

The analysis section of this paper is structured around the following research questions: What are the therapeutic benefits of the creative arts, in what ways do they facilitate healing, and are certain modalities more effective in reducing PTSD symptoms? Specifically, it rests upon the notion that the creative arts' therapeutic benefit is its ability to reduce adverse mental health issues associated with PTSD. It then explores the ways in which general creative interventions, specific creative modalities, and single art therapy methods facilitate healing within PTSD sufferers before analyzing how specific creative modalities such as group music and group visual art therapy are the most effective in reducing symptoms of PTSD. Primarily, these questions are explored through the elements of rhetorical analysis, or the use of persuasive language which not

only defends the claims introduced, but critiques the purpose, methods, techniques, findings, and effectiveness of the authors analyzed.

By borrowing the methods of Landis-Shack et al. (2017) and Van Lith (2016) and utilizing the elements of rhetorical analysis, further insight and the development of appropriate conclusions regarding the relationship between the creative arts and adverse symptoms of PTSD were able to reliably transpire. Such methods not only facilitated the comprehensive analysis of the sources in relation to actuality, but facilitated the exploration of the topic in relation to various perspectives and approaches. Thus, enabling an examination of the creative arts' therapeutic benefits to be demonstrated.

Literature Review

Numerous studies (e.g., Smith, 2016; Spiegel et al., 2006) have reported on the inability of CBT and EMDR to adequately treat PTSD. The aim of this review is to examine literature that explores the creative arts as a beneficial and accessible form of PTSD treatment. This topic is young in comparison to other mental health research and so, literature published between 2006 and 2018 was selected as it was the most relevant and comprehensive. To begin, the review examines the effects of general creative interventions like art, dance, and music on individual PTSD symptoms like stress and depression. Then, it explores the effects of specific creative modalities like music therapy and visual art on PTSD. Lastly, it investigates the effects of single art therapy methods like mask-making and mandala drawing on PTSD. The following literature review argues that the creative arts are essential to improving one's mental health, claims that creative expression can reduce adverse PTSD symptoms, and concludes that further research is needed regarding art's therapeutic benefits and uses.

General Creative Interventions

To many, the creative arts are a hobby, however, studies have shown that art reduces PTSD symptoms and improves mental health. While explored in relation to general creative arts interventions (art, music, and dance), this study by Martin, Oepen, Bauer, Nottensteiner, Mergheim, Gruber, and Koch (2018) demonstrated the creative arts' positive impact on mental health and the need for further research on commonalities found among various art modalities. By reviewing 37 studies from 1980 to 2016, the authors provided an overview of the creative arts' efficacy in reducing stress, a common symptom of PTSD.

Through an analysis of relevant literature and the use of the Stress Adjective Checklist, the Perceived Stress Questionnaire, and the Global Measure of Perceived Stress scale, Martin et al. (2018) found creative arts interventions to reduce stress; Art such as drawing and clay work were found to reduce stress in 8 studies, music was found to reduce stress in 16 studies, and dance was found to increase coping abilities within all studies. The authors concluded that the aesthetic experience and nonverbal characteristics of creative arts interventions facilitated cognitive ways of coping and increased emotion regulation, control, as well as one's connection to reality. In further support of these findings, Stuckey and Nobel (2010) revealed that art not only reduced stress, but alleviated symptoms of chronic disease. In this case art, music, and dance interventions successfully inhibited as well as improved stress and even anxiety. Thus, indicating the creative arts' therapeutic ability to reduce adverse PTSD symptoms.

Additional findings by Martin et al. (2018) demonstrated that stress reduction corresponded with artistic theme, for instance, when compared to those that were negative, positive themes encouraged greater stress reduction. In this way, the condition in which arts

interventions were carried out impacted their ability to build coping strategies and reduce PTSD symptoms. In support of these findings, Blomdahl et al. (2016) argued that the clinical condition in which art therapy was carried out, such as the length of therapy or artistic modality engaged with, impacted effects on depression, another symptom which co-occurs alongside PTSD.

While, under specific conditions, the creative arts reduce adverse mental health issues, their therapeutic ability can also be recognized by the way they improve depressive feelings. Regarding this notion, Blomdahl et al. (2016) highlighted the most beneficial facet of art therapy. In Sweden, the authors held a study where 18 occupational therapists with 5-35 years of work and art therapy experience were given a questionnaire consisting of 74 assertions about therapeutic factors, goals of treatment, art media, and impact of surroundings. Utilizing the Delphi technique, a procedure where experts ranked their agreements on the assertions made within a questionnaire, the beneficial facets of art therapy were presented; Art therapy sufficiently strengthened personal boundaries and improved control. In tandem with Stuckey & Nobel (2010), who found that expressive writing improved depressed moods, Blomdahl et al. concluded that art improved depressive symptoms as it explained emotional experiences, promoted the integration of traumatic events, and, in support of Martin et al. (2018), enhanced coping strategies. These positive outcomes emphasized the creative arts' ability to not only reduce depression, but function as essential factors in the improvement of one's mental health.

Also, Blomdahl et al. (2016) identified two assertions agreed upon by experts regarding art therapy and verbal dialogue: Art was a "catalyst" for the expression of depressive thoughts and, through its meaning, art was a beneficial way to withdraw dialogue (Blomdahl et al., 2016, p. 530). Lyshak-Stelzer, Singer, Patricia, and Chemtob (2007) also explored this relationship,

however, in this case, art therapy was praised as a facilitator of dialogue which manifested, assessed, and treated PTSD symptoms in adolescents. In other words, both authors demonstrated the essentiality of the creative arts in reducing PTSD symptoms, in adults and adolescents.

Although youth respond to trauma differently than adults, studies have shown that the creative arts have similar therapeutic effects on both demographics. Within two inpatient facilities in the Bronx and Long Island, Lyshak-Stelzer et al. (2007) investigated the efficacy of art therapy in reducing PTSD symptoms in adolescents. Patients aged 10 to 18 were randomly assigned to 1 of 2 treatment conditions, each consisting of 1-hour group sessions over a 16-week period: A treatment-as-usual (TAU) condition including standard craft activities or a trauma-focused art therapy treatment. The authors analyzed the efficacy of each treatment by measuring PTSD symptom severity according to the UCLA PTSD Reaction Index and concluded from the data collected, pre and post-treatment, that structured art therapy was more effective in reducing PTSD symptoms than TAU; Reaction Index scores were shown to decrease 20.8 points in the art therapy group and decrease only 2.5 points in the control group (Lyshak-Stelzer et al., 2007, p. 167). Overall, art therapy was found to help adolescents verbalize and explore their trauma. These outcomes emphasized the creative arts' ability to reduce PTSD symptoms not only in adults, but in adolescents as well.

Although limited in their ability to conduct a follow-up study, Lyshak-Stelzer et al. (2007) addressed and disproved the clinical concern that the expression of trauma could cause adolescents to destabilize. Therefore, trauma-focused art therapy was deemed a reliable method of healing unlikely to aggravate symptoms. Similarly, Stuckey and Nobel (2010) were also limited in their ability to conduct a follow-up study, however, they identified four artistic

modalities most likely to promote mental healing. Although limited in their ability to verify the long-term effects of art on PTSD symptoms, both articles established reliable evidence with regards to the therapeutic relationship between the creative arts and mental health.

Specific Creative Modalities

Based on the notion that engagement with the creative arts improves one's well-being and psychological state, Stuckey and Nobel (2010) investigated the theory that music, visual arts, movement-based expression, and expressive writing could reduce PTSD symptoms like anxiety, stress, and mood disturbances. The authors assessed relevant literature to discover which arts modalities were most utilized by adults within clinical practices in North America. In a study conducted among female victims of domestic violence, music calmed neural activity and reduced depression, anxiety, and stress. In another study, conducted among 40 caregivers of cancer patients, the visual arts promoted short-term well-being; Similar to Martin et al. (2018), who found that drawing reduced stress, participants in this study reported significantly reduced stress and intensified positive emotions after engagement with visual art. Lastly, in a study concerning expressive writing, writing one's trauma improved control over pain and depressed mood. These results proved that the creative arts possessed the therapeutic ability to reduce depression, anxiety, and stress, adverse symptoms associated with PTSD.

Also within Stuckey and Nobel's (2010) study, the creative arts reduced physiological PTSD symptoms. Since symptoms like depression and stress have negative cardiovascular effects, it was concluded that the creative arts, or, in this case, music, could reduce physiological symptoms which resulted from psychological symptoms. In support of these findings, Landis-Shack, Heinz, and Bonn-Miller (2017) examined the cognitive and neurobiological ways

music therapy reduced PTSD symptoms. Particularly, music was found to increase the release of endorphins and reduce cortisol. In this case, music was therapeutic in its ability to reduce both psychological and physiological PTSD symptoms.

Since music therapy reduces stress, anxiety, and depression, further research has been conducted regarding its ability to improve resilience towards PTSD. Within their study, Landis-Shack et al. (2017) explored two questions: How music therapy impacts PTSD symptoms like intrusions, negative cognition and mood, avoidance, and arousal as well as how music therapy promotes healing; The authors presented a theoretical evaluation of music therapy by reviewing 25 peer-reviewed articles consisting of participants aged 18 and older for further review. Similar to Martin et al. (2018), who found the aesthetic experience to improve emotional dysregulation, or reminders of trauma, Landis-Shack et al. found music therapy to address such intrusions through its ability to place individuals in the present. Also, in support of Stuckey and Nobel (2010), who found music to calm brain activity, Landis-Shack et al. found music to improve negative cognition and mood through its ability to activate the mesolimbic dopaminergic system, the part of the brain responsible for pleasure. The authors concluded that music therapy was a “resilience-enhancing intervention” which reduced PTSD symptoms, most efficiently, those of mood, through its ability to re-introduce one to normality (Landis-Shack et al., 2017, p. 340).

These results of Landis-Shack et al. (2017) correlated with those concerning avoidance and arousal. Regarding avoidance, group music therapy functioned as a “stand-in social process” as it encouraged connection within a safe space (Landis-Shack et al., 2017, p. 337). Concerning arousal, group drumming therapy diminished anger through cathartic release. Also focusing on

group art therapy's effects in reducing PTSD symptoms, Van Lith (2016) emphasized its ability to improve mood by providing individuals with an empathetic environment where they could freely express distress. Thus, the social characteristics of group music and art therapy are capable of reducing adverse PTSD symptoms.

Dissimilar to other articles in this review, group art therapy was only addressed according to specific therapeutic approaches as opposed to non-clinical art-making interventions. By reviewing the literature on creative approaches proven successful in clinical practice, Van Lith (2016) identified those most effective in reducing adverse PTSD symptoms; The author examined 11 articles, 2 of which addressed PTSD using specific approaches such as the check art therapy protocol and group art therapy. The check protocol, conceived to enable the reconstruction of responses to stressors, reduced anxiety and avoidance behaviors and, in support of Landis-Shack et al. (2017), facilitated resilience due to the stabilization skills learned in art therapy. The group art therapy approach, analyzed by way of the "Draw A Story" intervention, increased mood and reduced anxiety according to the Emotional Content and Self-Image Scales (Van Lith, 2016, p. 20). These findings demonstrated that group art therapy reduced adverse PTSD symptoms and improved overall functioning, thus supporting the notion that the creative arts are essential to mental health improvement.

While various studies have agreed on the creative arts' ability to reduce PTSD symptoms, opposing views exist regarding duration and structure. In terms of duration, Van Lith (2016) favored long-term treatment; The author aimed to see how art therapy aided in relapse, or deterioration suffered after a period of time. In support of Blomdahl et al (2016) and Martin et al. (2018) who claimed that structure impacted efficacy, Van Lith also favored structured treatment

as she declared a three-level intervention most efficient. Contrary to this, Spiegel, Malchiodi, Backos, and Collie (2006) asserted that, in order to provide sufferers of trauma freedom and control, treatment should be brief and less-structured (p. 161). Although opposing views exist, the use of art to improve symptoms of trauma is clearly represented and supported.

Concerning veterans with PTSD, Spiegel et al. (2006) proposed a 3-phase art-based group treatment model which focused on symptom reduction, the processing of traumatic memories, and integration. In order to define the art therapy practices most beneficial for PTSD treatment, the authors considered expert interpretations of clinical applications along with relevant literature. In the model proposed, the first stage aimed to decrease arousal symptoms, reduce emotional numbness, and foster communication, the second stage focused on traumatic memories, and the final stage set out to separate perception from trauma; For each stage, the use of visual art media such as pencils and chalk, materials capable of expressing intense emotions, or watercolor paints, materials capable of expressing deep-seated emotions were suggested. Through art, relaxation diminished hyperarousal, symbolic expression reduced avoidance, and, in agreement with Smith (2016), creation supported the re-establishment of joy and self-esteem while reducing numbness caused by dissociation. The authors proved that group art therapy possessed superior therapeutic ability in treating PTSD than CBT and EMDR as it reduced adverse mental health issues commonly untreated like avoidance and emotional numbing.

Additional findings by Spiegel et al. (2006) depicted the creative arts' ability to displace trauma through externalization. The authors found that art-making contained trauma within symbols; Agreed upon by Avrahami (2006) and Smith (2016), this concept of containment was found to enable a sense of control within PTSD sufferers. The containment and externalization of

symbols were also referred to in all of the studies examined by Smith and was found to give veterans the chance to perceive trauma from another angle. These findings portrayed the visual arts' therapeutic ability to reduce adverse PTSD symptoms through symbolic expression.

While commonly perceived as an alternative to CBT and EMDR, art is also perceived as an alternative method of exploring trauma through poor coping strategies like substance abuse. As the only article in this review to explore the therapeutic effects of art in this manner, Smith (2016) examined PTSD symptom reduction in veterans by reviewing 11 studies written by mental health professionals. From these studies, Smith recognized the following themes: The group process, containment, the externalization of symbols, non-verbal/verbal processes, and artistic pleasure. Similar to Van Lith (2016) and Landis-Shack et al. (2017), the author found that the group process positively affected dissociation and facilitated the creation of a "safe" space where veterans could "re-experience" their trauma (Smith, 2016, p. 68). Also, in further support of Blomdahl et al. (2016) and Lyshak-Stelzer (2007), art therapy was found to facilitate the verbalization of repressed experiences and emotions. In this case, the creative arts provided a safe and therapeutic alternative to conventional therapies and poor coping strategies often acquired by undiagnosed veterans with PTSD.

Additional findings by Smith (2016), which cited Spiegel et al. (2006), emphasized the therapeutic effects of art with regards to pleasure. Specifically, the creative process was deemed essential in improving self-esteem and relaxation as well as helpful in reducing hyperarousal. Schouten, Hooren, Knipscheer, Kleber, and Hutschemaekers (2018) also addressed this notion as they found that PTSD sufferers who underwent visual art therapy reported improved self-esteem

and relaxation as well as decreased stress and intrusive thoughts. Therefore, the creative arts' induced positive feelings and so, possess therapeutic abilities.

While many studies observed art therapy in relation to veterans with PTSD, Schouten et al. (2018) investigated visual art therapy as a valid treatment for adult refugees with PTSD. Based on research and expert assertions, the authors formulated a three-phase study in which 12 adults were provided 11 art therapy sessions at the Dutch National Centre for Diagnostics and Treatment. While each phase utilized drawing, collage, and mandala coloring the first focused on stress reduction, the second focused on the expression of positive and negative memories, and the third focused on integration; Before and after completion, symptom severity was measured with the Harvard Trauma Questionnaire. Contrary to other articles in this review, Schouten et al. found that, while 6 participants experienced a decrease in symptom severity, 3 experienced an increase in symptom severity. It was concluded that severity increased in those with early childhood traumatization, or those with a longer history, a larger quantity, and greater severity of trauma. However, they also concluded that, in those with trauma caused by violence, severity decreased due to the non-verbal aspects of art which diminished avoidance, encouraged positive perception, and, in agreement with Blomdahl et al (2016), decreased depression. Although the creative arts' therapeutic ability to reduce adverse PTSD symptoms was demonstrated, further research regarding the relationship between art and early childhood traumatization is needed.

Similar to the findings of Avrahami (2006), Smith (2016), and Spiegel et al. (2006), Schouten et al. (2018) emphasized the essentiality of the creative arts' symbolic nature in improving access to traumatic memories. However, Schouten et al. also included how symbols alleviated the expression of sorrow and loss, common emotions felt by those with PTSD. Also

related to the therapeutic use of symbols in art, Avrahami (2006) concluded that they facilitated understanding of trauma; Also, changes made within artwork were found to lead to changes in reality. These outcomes further emphasized the ability of symbols and images to reduce adverse symptoms of trauma and improve mental health.

While identified as a unifying approach to healing, visual art therapy was recognized by Avrahami (2006) as a suitable PTSD treatment due to research found in three areas: The processing of traumatic memories, symbolization-integration and containment, and transference. The author conducted a case study of two male veterans with PTSD, a 65-year-old who developed symptoms following the Six Days War and a 58-year-old who developed symptoms following the Yom Kippur War, at a rehabilitation center for battle-shocked patients; Over 6 months, both veterans were treated with visual art therapy for a 1-hour session each week. Consisting of three stages, the sessions began with dialogue, were followed by creation through painting, drawing, clay, woodwork, and/or the use of mosaic stones, and concluded with dialogue that emerged from the art. Avrahami found that, since trauma is expressed in images instead of emotions, the use of shapes, lines, and colors enabled memories to find consciousness and, ultimately, external expression. Also, in terms of transference, art therapy was found to provide a buffer to the patient-therapist dynamic as it eased feelings of distrust and idealization. Overall, the creative arts were found to positively affect PTSD symptomatology and mental health.

Avrahami (2006) also discerned that, outside of the group setting, a variety of visual arts media was the most beneficial means of healing. For instance, the second veteran expressed one symbol with pencils and charcoal, then moved on to plasticine and oil pastels; Within this

externalized symbol, the veteran was found to be emotionally suffering from loneliness. On the other hand, Kaimal, Walker, Herres, French, and Degraba (2018) suggested that mask imagery, a specific visual arts media, was most beneficial. However, similar to Avrahami, Kaimal et al. found the externalized symbols of military service members to be representative of their emotions; The color blue represented depression and military symbols represented anxiety. And so, among varying visual arts media, the symbolic image represented internal trauma.

Single Art Therapy Methods

Based on the notion that the symbolic image was the foundation of the therapeutic process, Kaimal et al. (2018) inspected the relationship between themes found in “trauma masks” and analogous measures of PTSD symptoms (p. 2). Unlike Smith (2016), who excluded trauma unrelated to a PTSD diagnosis, the authors analyzed art created by 370 military service members not only diagnosed with PTSD, but with traumatic brain injury during a 4-week art therapy program at the Walter Reed National Military Medical Center in Maryland; The data examined whether the themes presented within artwork (psychological injury or military identity) could externally depict internal PTSD symptoms. It was found that those whose masks symbolized psychological injury reported the most severe PTSD symptoms and so, the external depiction of trauma was concluded to sufficiently indicate specific symptoms to be targeted and treated. In support of Spiegel et al. (2006), the article unveiled that 136 participants reported greater joy and 72 reported improved concentration. However, similar to Schouten et al. (2018), it disclosed that 11 participants reported negative experiences, in this case, due to disinterest in and discontent with the artwork. Overall, mask-making facilitated the ability to cope and desensitize fear and so, proved that the creative arts are efficient in alleviating PTSD symptoms.

This study was limited in two ways: It was primarily concerned with male service members and the data was not only self-reported, but marginal data acquired from the clinical setting; The inclusion of female participants and primary data acquired directly from participants may have altered the results. Similarly, Henderson, Rosen, and Mascaro's (2007) study also contained two limitations concerning participants and data. Participants in this study were exclusively undergraduate students with mild levels of trauma and the art therapy method wasn't compared with a variety of control groups; Including a larger demographic with greater symptom severity and control groups with varying factors would've allowed for more definitive data. Although limited in terms of participants and data, both male service members and undergraduate students were found to benefit from art therapy.

While first used to calm distressing experiences by psychoanalyst Carl Jung, the mandala has come to be used as a way to induce expression, conflict resolution, and symptom relief. Concerning these aspects, Henderson et al. (2007) examined the therapeutic effects of mandala drawing. In this study, 36 undergraduate students from a southwestern university were pre-screened using the PTSD Scale, a 49-item self-report measure which aided in the diagnosis of mild levels of PTSD; The students experienced trauma like assault, the death of a loved one, abuse, and/or the witnessing of a traumatic event. Students were randomly placed in a mandala or control group and asked to draw a mandala or an assigned object in three 20-minute sessions over three days; At a 1-month follow-up, the authors found that the mandala group experienced greater PTSD symptom reduction. In support of the results of Schouten et al. (2018), in which mandala coloring was found to enable access to trauma, the authors found that, through the creation of a narrative, mandala drawing provided meaning to traumatic memories, transforming

them into less-traumatic ones. Henderson et al. suggested that, since such results were exhibited even after a month, mandala drawing could induce “changes deep within cognition”, thus proving it’s worth a viable alternative to treating adverse PTSD symptoms (2007; p. 151).

The Essentiality of Art in Healing

While some findings (e.g., Kaimal et al., 2018; Schouten et al., 2018) contradicted this review’s aim, a substantial amount of evidence demonstrated the creative arts’ therapeutic ability to improve mental health and reduce adverse PTSD symptoms. As identified by three studies mentioned in the first section of this review, general creative interventions like art, dance, and music reduced depression, stress, and anxiety by the way they facilitated the integration of trauma and coping strategies. Concerning specific modalities like visual art and group music therapy, several studies demonstrated that they enhanced resilience towards PTSD symptoms as they diminished hyperarousal, reduced avoidance, enabled control, and established self-esteem through the means of relaxation, socialization, containment, and pleasure. Lastly, single art therapy methods like mask-making and mandala drawing presented non-verbal internal trauma externally, indicating symptoms to be targeted during treatment. Currently, however, further research regarding the relationship between art and victims of early childhood traumatization is needed. While many studies concurred that group art treatment was the most therapeutic, opposing views regarding duration and structure were revealed and so, further research regarding the most effective method of treatment is needed as well. However, due, in part, to its non-verbal potential, the creative arts exhibit the therapeutic ability to reduce adverse mental health issues associated with PTSD and so, not only serve as a beneficial and accessible alternative to CBT and EMDR, but one essential in the improvement of one’s mental health.

Analysis

What are the Therapeutic Benefits of the Creative Arts?

Due to a reliance on verbal expression, conventional therapies such as CBT and EMDR are incapable of adequately treating adverse symptoms of PTSD. While the creative arts encourage individuals to overcome the fear of social stigma and diminish reliance on unfavorable coping strategies such as substance abuse, primarily, they are commended as an alternative form of PTSD treatment which is accessible, therapeutic, and beneficial. In a multitude of ways, general creative interventions (art, dance, and music), specific creative modalities (music and visual art therapy), and single art therapy methods (mask-making and mandala drawing) have been found to facilitate healing within PTSD sufferers. Among the creative arts, specific creative modalities such as group music and group visual art therapy have been proposed by multiple authors to be most effective in treating PTSD symptoms. Overall, the creative arts have the therapeutic ability to reduce adverse mental health issues associated with PTSD and are essential factors in the improvement of one's mental health.

In What Ways Do the Creative Arts Facilitate Healing?

The creative arts are essential factors in the improvement of one's mental health due to their therapeutic ability to reduce adverse PTSD symptoms. However, the ways in which the creative arts facilitate healing are numerous. Notably, general creative interventions, specific creative modalities, and single art therapy methods facilitate healing within PTSD sufferers by the way in which they reduce symptoms of depression, stress, and anxiety, enhance resilience towards PTSD symptoms, and externally present non-verbal internal trauma respectively.

According to Martin et al. (2018), Blomdahl et al. (2016), and Lyshak-Stelzer et al. (2007), general creative interventions facilitate the healing of PTSD symptoms like stress, anxiety, and depression by the ways in which they enhance coping strategies, control, and verbalization. Concerning Martin et al., the PTSD symptom of stress was measured using a variety of measurement tools such as the Stress Adjective Checklist, the State-Trait Anxiety Inventory, The Global Measure of Perceived Stress, and the Perceived Stress Questionnaire. In utilizing multiple instruments, the authors logically appealed to the audience by revealing consistent results, thus providing findings consisting of a definitive quality. Due to the effectiveness of this method, the authors firmly informed audiences that it was the non-verbal aspects of art, music, and dance which facilitated cognitive ways of coping, increased sense of control, and reduced symptoms of stress and anxiety (Martin et. al., p. 2). Also due to an effective method, Blomdahl et al. (2016) built credibility by including therapists within their study who possessed an average of 27 years and 19 years of work and art therapy experience respectively, or, in other words, educated and experienced experts in the fields of psychological and artistic healing. In this way, the authors assured audiences that their assertions of art therapy, such as that it was capable of improving control, enhancing coping strategies, and functioning as a precipitator of verbal dialogue, were trustworthy and reliable (Blomdahl et al., pp. 527, 529-530). Appealing to audience emotions, Lyshak-Stelzer et al. brought attention to the notion that adolescents re-experience trauma differently than adults (p. 163); This notion is representative of the authors' goal to persuade audiences of the complexity of PTSD and the significance of proper treatment in order to facilitate healing. By referencing youth with PTSD, the authors not only highlighted the value of art therapy's non-verbal characteristics, which

encourage verbalization within those who have a diminished capacity to verbalize their trauma, but its ability to decrease stress (Lyshak-Stelzer, p.168). In these instances, the authors effectively informed audiences of the ways in which general creative interventions facilitate the healing of PTSD symptoms.

As stated by several authors, specific creative modalities like music and visual art therapy facilitate the healing of and resilience towards PTSD symptoms through the means of relaxation, socialization, pleasure, and containment. Concerning Stuckey and Nobel (2010) and Landis-Shack et al. (2017), music therapy was praised to calm brain activity and foster communication. Throughout, Stuckey and Nobel utilized examples of clinical case studies in order to strengthen credibility and reinforce their argument. For instance, in one study analyzed, 80 patients admitted to a coronary care unit were randomly assigned to a music therapy or control group in which levels of stress were measured through apical heart rate, peripheral temperatures, and evaluative data; The results implicated that, within the music therapy group, apical heart rates decreased and peripheral temperatures increased and so, illustrated how music fostered relaxation and healing (Stuckey and Nobel, pp. 256-257). Drawing on the logic and skepticism of audiences, Landis-Shack et al. relied on indisputable clinical evidence to support their claims. In examining fMRI neuroimaging studies, the authors demonstrated how music increased cerebral blood flow to the areas of the brain associated with pleasure and so, exemplified music's ability to neutralize negative emotions and suppress stress (Landis-Shack et al., p. 335). This inclusion of an irrefutable study was effective in supporting the authors' attempt to sway audiences' positive perception of conventional PTSD treatments towards that of the creative arts. As a modality which re-establishes social functioning, increases the release of

endorphins, and reduces cortisol levels, music therapy is not only a “resilience-enhancing intervention”, but one capable of facilitating healing with regards to PTSD symptoms (Landis-Shack et al., 2017, pp. 339-340). In these instances, the authors used clinical studies in order to relate to audiences on a factual level while defending the claim that, through relaxation, pleasure, and socialization, music therapy is a means of facilitating healing and resistance towards PTSD symptoms.

Similar to music therapy, the specific creative modality of visual art therapy sufficiently facilitates the healing of and resilience towards PTSD symptoms through the means of relaxation, socialization, pleasure, and containment. As accepted by a myriad of authors, visual art therapy encourages the external expression of traumatic memories in a non-threatening and encouraging manner. Considering Spiegel et al. (2006), the authors aimed to identify the art therapy practices most beneficial to PTSD treatment; This goal was carried out effectively as the authors clearly stated their methods and findings in an accessible way. Lacking convoluted tables and charts, the findings were clearly articulated and so, audiences were not only convinced that they had the right to this information, but were successfully persuaded that, through visual art therapy, relaxation diminished hyperarousal, containment reduced avoidance, and, in agreement with Smith (2016), creation re-established pleasure and self-esteem (Spiegel et al., p. 161). Also considerate of audience response, after anticipating their emotionality and empathy, Schouten et al. (2018) included therapist reports of PTSD patient experiences post-visual art therapy treatment. For instance, the authors relayed the experience of a veteran who witnessed the death of a small child and included how, after creating a small clay statue of this intrusive memory, the trauma became less burdensome (Schouten et al., pp. 122-123). By referencing such a personal

experience, the authors startled audiences as to the seriousness of PTSD-related trauma. However, they also consoled audiences with regards to the notion that the visual arts enhance resilience to trauma by highlighting patient reports of alleviated intrusive thoughts as well as improved self-esteem and relaxation (Schouten et al., p. 116). Also concerning the audience, Avrahami (2006) informed readers of the historical usage of artistic expression within rituals and ceremonies (p. 8). In this way, the author appealed to the audience's logic by providing factual evidence of the visual arts' healing attributes. Due to the fact that past evidence has shown shapes, lines, and colors to enable trauma to be contained within symbolic boundaries, this evidence enabled the author to build credibility and convince audiences of the importance of artistic traumatic expression (Avrahami, p. 11). And so, by referencing the historical usage of visual art, audiences were persuaded that the image could mediate, heal, and foster resilience towards trauma. In these instances, the ways in which the authors reported their findings while anticipating audience response enabled them to establish credibility as well as defend the claim that visual art therapy facilitates healing and resistance towards PTSD symptoms.

Lastly, single art therapy methods such as mask-making and mandala drawing facilitate the healing of PTSD symptoms by the way in which they present non-verbal internal trauma externally and so, indicate specific symptoms to be targeted during treatment. With regards to Kaimal et al. (2018), the direct nature in which the authors demonstrated their findings enabled them to effectively enlighten audiences and establish credibility. For instance, the authors directly addressed areas of inconsistency and so, enlightened audiences and built credibility by citing convincing statistics which not only supported their purpose, but contrasted it; While they unveiled that 208 participants reported a reduction in PTSD symptoms, they also revealed that 11

participants reported negative experiences due to disinterest in and discontent with mask-making (Kaimal et al., p. 5). To further enlighten audiences, the authors provided evidence with regards to participants whose masks symbolically depicted psychological injury. They revealed that these participants reported the most severe PTSD symptoms and so, concluded that the external depiction of trauma was of clinical significance due to the fact that it directed focus towards specific symptoms to be targeted during treatment (Kaimal et al., p. 6). These findings are few of many which enlightened audiences while logically supporting the claim that mask-making facilitates the identification and healing of adverse PTSD symptoms. Drawing on audience logic and emotionality, Henderson et al. (2007) educated readers with regards to the conception of and response to their study on mandala drawing and so, demonstrated their prowess as well as their sensibility. For instance, the authors identified the two precedents in which their study was founded: Carl Jung's use of mandala drawing as a symbolic representation of traumatic material and James Pennebaker's written disclosure paradigm which promoted mental well-being (Henderson et al., p. 148). This technique demonstrated the authors' knowledge of their topics' past and convinced audiences of their reliability. Considering sensibility, the authors disclosed the personal accounts of participants who experienced repeated exposure to adverse stimuli through mandala drawing, or, in other words, the repetitive externalization of internal trauma; In multiple instances, mandalas depicted a symptom which many participants admitted to have avoided, anxiety, and so, that specific symptom began to be focused on in treatment (Henderson et al., p. 149). In these instances, the authors appealed logically and empathetically to audiences, effectively presenting the ways in which single art therapy methods heal PTSD symptoms.

Are Certain Creative Modalities More Effective in Treating PTSD Symptoms?

The ways in which general creative interventions, specific creative modalities, and single art therapy methods facilitate healing are multitudinous. However, not all creative modalities are commended equally. According to Blomdahl et al. (2016), the clinical condition in which art therapy is carried out, like the artistic modality engaged with, impacts its efficacy on PTSD symptoms (p. 527). Amongst the creative arts, specific creative modalities such as group music therapy and group visual art therapy have been proposed by multiple authors to be most effective in treating PTSD due to their comprehensive ability to reduce mood disturbances, encourage social connectedness, and/or facilitate the processing of trauma within an empathetic environment.

According to Stuckey and Nobel (2010) and Landis-Shack et al. (2017), group music therapy is the most effective form of PTSD treatment due to its ability to reduce stress, anxiety, avoidance, and arousal as well as improve social support and collaboration. Although subtle in their approach, Stuckey and Nobel (2010) incorporated authentic patient reports post-group music therapy in order to reinforce their argument and sway audience perspective. While, initially, the authors garnered audience attention by discreetly drawing on their interests in personal health and wellness, they seamlessly introduced findings which illustrated group music therapy's ability to reduce anxiety and encourage social support (Stuckey and Nobel, pp. 255-256). For instance, in one study analyzed, self-reported levels of trauma among 7 female victims of domestic violence were assessed following group music therapy; The results showed that patients experienced reductions in depression and anxiety, thus illustrating group music therapy's efficacy in reducing mood disturbances and facilitating collaboration among victims of trauma (Stuckey and Nobel, p. 256). This inclusion of authentic patient reports was effective in

supporting the authors' attempt to sway audiences' perspectives of group music therapy towards that which is most effective. Drawing on audience rationality, Landis-Shack et al. (2017) effectively cited convincing factual evidence to illustrate their credibility and support their claim regarding the efficacy of group music therapy. For instance, in a study recognizing group music therapy as an effective means of reducing mood disturbances and encouraging social connectedness within Alzheimer's patients, the authors appealed to audience rationality by recognizing its ability to impact PTSD sufferers in a comparable manner (Landis-Shack et al., p. 335). Additionally, they illustrated their credibility by citing evidence directly related to PTSD. Most notably, the results of a study on the effects of group drumming therapy on adults with PTSD presented the treatment as a "stand-in social process" which not only encouraged collaboration within a safe space, but diminished negative emotional states like anger, avoidance, and arousal through cathartic release (Landis-Shack et al., pp. 337-338). Overall, both authors logically appealed to audiences by effectively utilizing authentic reports and convincing factual evidence regarding group music therapy's efficacy in reducing mood disturbances and encouraging social connectedness.

As recognized by Van Lith (2016), Smith (2016), and Spiegel et al. (2006), group visual art therapy is the most effective form of PTSD treatment due to its ability to diminish depression, dissociation, and emotional numbing, encourage validation and social bonding, as well as facilitate the processing of trauma. With regards to Van Lith, the author aimed to identify the efficacy of group visual art therapy on PTSD sufferers' symptoms and overall functioning; The author effectively carried out this objective by systematically organizing her findings, thus convincing audiences of her expertise. For instance, in a section entitled "Art Therapy

Approaches Practiced With People Who Have PTSD”, the author included a study which referenced the effects of group drawing therapy on 112 veterans with PTSD; By unambiguously incorporating this study, the author effectively demonstrated group visual art therapy’s efficacy in reducing mood disturbances such as depression while clearly portraying her expertise (Van Lith, p. 20). In order to further denote group visual art therapy’s effectiveness, the author illustrated findings which demonstrated how a shared understanding of trauma enabled feelings of validation (Van Lith, p. 21). And so, these findings informed audiences of group visual art therapy’s efficacy in reducing mood disturbances and encouraging social connectedness. While anticipating audience emotionality, Smith relayed the typical experience of PTSD sufferers regarding the social stigma toward mental illness and conventional therapies; Particularly, audiences were informed that, due to social stigma, many veterans endure PTSD symptoms for about 15 years before seeking treatment (Smith, p. 66). By appealing to emotionality in this way, the author not only alarmed audiences of a major social issue, but reassured them that group visual art therapy was an inviting and effective treatment virtually free from social stigma. Particularly, the author appealed to potential doubt by showing how group visual art therapy improved mood disturbances and social connectedness; Within 8 studies analyzed, the group process was shown to heal symptoms like dissociation and create a space where veterans could safely re-experience their trauma (Smith, p. 68). By referencing these findings in this way, the efficacy of group visual art therapy was effectively presented. While appealing to audience logic, Spiegel et al. relied on verifiable findings to support the same claim. In vetting research on brain imaging, the authors illustrated how trauma processing is inhibited by hypoactivity in the area of the brain responsible for speech production and hyperactivity in those responsible for fear

perception, visual processing, and memory (Spiegel et al., p. 158). By including evidence of the neural hindrances experienced by PTSD sufferers, the authors effectively accentuated group visual art therapy's efficacy as a method of non-verbal expression capable of facilitating trauma processing. To further appeal to audience logic, the authors also included expert interpretations of clinical applications of group visual art therapy. By providing the results of a survey completed by registered art therapists experienced in PTSD treatment, the authors demonstrated group visual art therapy's ability to diminish emotional numbing and encourage the expression of trauma within a non-judgmental environment (Spiegel et al., p. 160). In these instances, systematic organization as well as appeals to audience emotion and logic effectively presented the ways in which group visual art therapy reduced mood disturbances, encouraged social connectedness, and facilitated the processing of trauma, thus asserting its effectiveness as a creative modality capable of treating PTSD symptoms.

Creative Expression as Healing

Overall, although different approaches were taken with regards to the inadequacy of conventional therapies such as CBT and EMDR, the authors effectively championed the creative arts as an accessible, therapeutic, and beneficial alternative to PTSD treatment. Due to such effective research methods and techniques as well as convincing findings and evidence, globally, professionals within the medical field have progressively recognized the creative arts' healing potential with regards to PTSD and so, the utilization of art, as opposed to conventional therapies, has become more prominent (Stuckey and Nobel, 2010, p. 258). However, with the advent of current and more specified research which demonstrates the ways in which the creative arts facilitate healing and their overall effectiveness, the further utilization of art-based therapies

is likely, therefore, providing a solution to inadequate conventional therapies while encouraging individuals to seek treatment regardless of the social stigma associated with such therapies. For instance, while, due to a reliance on verbalization, conventional therapies oftentimes fail to treat adverse PTSD symptoms such as avoidance and emotional numbing, general creative interventions (art, dance, and music), specific creative modalities (music and visual art therapy), and single art therapy methods (mask-making and mandala drawing) have been found to facilitate healing in a multitude of ways; Most notably, by reducing symptoms of depression, stress, and anxiety, enhancing resilience towards PTSD symptoms, and presenting non-verbal internal trauma externally. In this way, the creative arts are proven to be more effective than conventional therapies as they comprehensively treat PTSD symptoms in an emotionally accessible, non-verbal manner. Specifically, among the creative arts, group music and group visual art therapy have been asserted by multiple authors to be the most effective creative modalities due to their comprehensive ability to reduce mood disturbances, encourage social connectedness, and/or facilitate the processing of trauma within an empathetic environment. Considering the ways in which they facilitate healing as well as their overall effectiveness, the creative arts exhibit the therapeutic ability to reduce adverse mental health issues associated with PTSD and so, not only serve as an alternative to conventional therapies, but, due to their ability to appear less threatening than conventional therapies, encourage individuals to overcome the fear of social stigma and seek treatment. While this research has inspired mental health professionals to recognize the creative arts' healing potential with regards to PTSD, further research will not only accelerate its induction into conventional practice, but procure its position as an alternative treatment essential to improving one's mental health.

Conclusion: Creative Expression is Healing

While CBT and EMDR fail to comprehensively treat PTSD symptoms due to verbal tendencies, the creative arts possess the therapeutic ability to reduce adverse mental health issues associated with PTSD due, in part, to non-verbal tendencies and so, not only serve as an accessible alternative to conventional therapies, but one essential to mental health improvement. Although also acknowledged for the ability to encourage individuals to overcome the fear of social stigma and diminish reliance on unfavorable coping strategies like substance abuse, primarily, the creative arts are commended as a therapeutic and beneficial alternative to PTSD treatment. While certain findings (e.g., Kaimal et al., 2018; Schouten et al., 2018) contradict this claim, numerous studies demonstrate the creative arts' therapeutic ability to reduce adverse PTSD symptoms through the examination of the ways in which they facilitate healing as well as their overall effectiveness. Most notably, general creative interventions (art, dance, and music), specific creative modalities (music and visual art therapy), and single art therapy methods (mask-making and mandala drawing) facilitate healing as they reduce individual PTSD symptoms such as depression and stress, enhance resilience toward adverse symptoms, and present non-verbal internal trauma externally. Amongst these creative modalities, group music and group visual art therapy are praised as the most effective means of PTSD treatment due to their comprehensive ability to reduce mood disturbances, encourage social connectedness, and facilitate trauma processing within adolescents, adults, veterans, refugees, and active duty military service members. While this research has raised awareness with regards to the creative arts' therapeutic ability to reduce PTSD symptoms, further research on the topic, particularly, that concerning the structure and duration of treatment, would be beneficial. By acquiring

specific clinical evidence on varying treatment structures and lengths of creative engagement, the public may realize the creative arts to be a form of PTSD treatment which is not only legitimate, but more therapeutic and efficient than conventional treatments. In this way, the creative arts would not only be perceived as an effective means of healing PTSD symptoms which is most effective within the group setting, but would also be regarded as effective due to the duration and structure in which it is engaged with. Considering the ways in which they facilitate healing as well as their overall effectiveness, the creative arts exhibit the therapeutic ability to reduce PTSD symptoms and so, not only serve as an alternative to conventional therapies, but are crucial to the improvement of one's mental health.

References

- Avrahami, D. (2006). Visual Art Therapy's Unique Contribution in the Treatment of Post-Traumatic Stress Disorders. *Journal of Trauma & Dissociation*, 6(4), 5-38. doi:10.1300/j229v06n04_02
- Blomdahl, C., Gunnarsson, B. A., Guregård, S., Rusner, M., Wijk, H., & Björklund, A. (2016). Art Therapy for Patients with Depression: Expert Opinions on its Main Aspects for Clinical Practice. *Journal of Mental Health*, 25(6), 527–535. <https://doi.org/10.1080/09638237.2016.1207226>
- Henderson, P., Rosen, D., & Mascaro, N. (2007). Empirical Study on the Healing Nature of Mandalas. *Psychology of Aesthetics, Creativity, and the Arts*, 1(3), 148-154. doi: <http://ezproxy.purchase.edu:2111/10.1037/1931-3896.1.3.148>
- Kaimal, G., Walker, M. S., Herres, J., French, L. M., & Degraha, T. J. (2018). Observational study of associations between visual imagery and measures of depression, anxiety and post-traumatic stress among active-duty military service members with traumatic brain injury at the Walter Reed National Military Medical Center. *BMJ Open*, 8(6), 1-9. doi:10.1136/bmjopen-2017-021448
- Landis-Shack, N., Heinz, A. J., & Bonn-Miller, M. O. (2017). Music therapy for posttraumatic stress in adults: A theoretical review. *Psychomusicology: Music, Mind, and Brain*, 27(4), 334-342. doi:10.1037/pmu0000192
- Lyshak-Stelzer, F., Singer, P., Patricia, S. J., & Chemtob, C. M. (2007). Art Therapy for

- Adolescents with Posttraumatic Stress Disorder Symptoms: A Pilot Study. *Journal of the American Art Therapy Association*, 24(4), 163-169.
doi:10.1080/07421656.2007.10129474
- Martin, L., Oepen, R., Bauer, K., Nottensteiner, A., Mergheim, K., Gruber, H., & Koch, S. C. (2018). Creative Arts Interventions for Stress Management and Prevention-A Systematic Review. *Behavioral Sciences (Basel, Switzerland)*, 8(2).
<https://doi.org/10.3390/bs8020028>
- Schouten, K. A., Hooren, S. V., Knipscheer, J. W., Kleber, R. J., & Hutschemaekers, G. J. (2018). Trauma-Focused Art Therapy in the Treatment of Posttraumatic Stress Disorder: A Pilot Study. *Journal of Trauma & Dissociation*, 20(1), 114-130.
doi:10.1080/15299732.2018.1502712
- Smith, A. (2016). A literature review of the therapeutic mechanisms of art therapy for veterans with post-traumatic stress disorder. *International Journal of Art Therapy*, 21(2), 66-74.
doi:10.1080/17454832.2016.1170055
- Spiegel, D., Malchiodi, C., Backos, A., & Collie, K. (2006). Art Therapy for Combat-Related PTSD: Recommendations for Research and Practice. *Art Therapy*, 23(4), 157-164.
doi:10.1080/07421656.2006.10129335
- Stuckey, H. L., D.Ed, & Nobel, Jeremy, M.D., M.P.H. (2010). The connection between art, healing, and public health: A review of current literature. *American Journal of Public Health*, 100(2), 254-63. doi:10.2105/AJPH. 2008.156497
- Van Lith, T. (2016). Art therapy in mental health: A Systematic Review of Approaches and

Practices. *The Arts in Psychotherapy*, 47, 9-22.

doi:<http://ezproxy.purchase.edu:2111/10.1016/j.aip.2015.09.003>