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The Therapeutic Power of Creativity: The Role of Art Therapy in the Treatment of Post-Traumatic Stress Disorder

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Abstract

The Therapeutic Power of Creativity: The Role of Art Therapy in the Treatment of Post-Traumatic Stress Disorder

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Karcı, A., & Özel, Y. (2024). The Therapeutic Power of Creativity: The Role of Art Therapy in the Treatment of Post-Traumatic Stress Disorder. *Journal of Health, Medicine and Nursing*, *10*(6), 11–22. https://doi.org/10.47604/jhmn.3123 **Purpose:** This study will explore the role of creative art therapies in the treatment of PTSD, with the view of judging their efficacy in reducing symptoms of an emotional and psychological nature associated with trauma. Creative art therapies provide a complementary approach to other traditional treatments by facilitating emotional expression and working through traumatic experiences.

Methodology: A systematic review was conducted, and 11 randomized controlled trials and experimental studies published between 2014 and 2024 were included in the review. The databases used for searching include PubMed, PsycINFO, and Scopus. Study selection was performed based on specific inclusion criteria. The techniques of art therapy applied in the studies included visual arts, music, and drama.

Findings: The studies hint at how art therapies may contribute to symptom reduction, particularly in managing anxiety and depression among people with PTSD. Art therapy seemed to be effective in improving emotional regulation and processing trauma in more than one population, including refugee children and war veterans. However, its effectiveness varied based on the type of therapy, its duration, the person's characteristics, and cultural factors.

Unique Contribution to Theory, Practice, and Policy: This research provides evidence of the potential of art therapy as an adjunct treatment for PTSD. It also serves to accentuate the need for tailor-made therapy programs in view of individual and cultural differences. The results stress the integration of creative therapies with traditional psychotherapies to enhance outcomes. More largescale studies will be needed to develop standardized protocols and further expand the use of art therapy across mental health disorders.

Keywords: Art Therapy, Post-Traumatic Stress Disorder, Art, Mental Health, Art-Based Intervention, Mental Health, Trauma, Anxiety, Stress

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INTRODUCTION

Posttraumatic Stress Disorder, abbreviated as PTSD, is a psychiatric disorder that strongly impacts the lives of an individual person and usually results from experiences in wars, natural disasters, acts of terrorism, serious accidents, violence, sexual assault (*American Psychiatric Association*, 2024). This is estimated to be the case for 1 in every 3 people exposed to traumatic experiences; however, how and why some develop this condition while others do not remains more or less unknown. According to the World Health Organization, it is estimated that approximately 3.9% of the world's population would have had PTSD at some point in their lives (*WHO*, 2024). WHO estimates that up to 40% of people with PTSD recover within a year, yet only 1 in 4 people with PTSD in low- and middle-income countries report seeking any form of treatment. Barriers to care include lack of awareness that PTSD can be treated, lack of mental health services, social stigma, and lack of trained mental health care providers (*WHO*, 2024).

Posttraumatic stress disorder is characterized by a series of symptoms that deeply affect the cognitive and emotional worlds of individuals. Cognitive symptoms such as difficulty in remembering the main features of the traumatic event, having negative beliefs about oneself, other people or the world are prominent aspects of this condition (*Greenberg et al*, 2015). At the same time, negative emotions such as intense feelings of guilt towards oneself or others, ongoing fear, anger, shame or guilt can significantly reduce the quality of life of individuals (*PTSD*, 2024). Withdrawal from pleasurable activities, feelings of social isolation, and difficulties in feeling positive emotions such as happiness or satisfaction are among the emotional symptoms commonly encountered in this process. These symptoms may emerge or become more severe after the traumatic event; they may lead to a weakening of the individual's ties with family and friends and increase the feeling of disconnection from the social environment (*NIH*, 2024).

This complex nature of post-traumatic stress disorder can cause serious damage to individuals' daily lives, relationships and general functioning. Traditional treatment methods include trauma-focused cognitive behavioral therapy (TF-CBT), eye movement desensitization and reprocessing (EMDR), exposure therapy and pharmacological approaches (*Difede et al, 2014; Kirkpatrick & Heller, 2014; APA, 2024*). However, the fact that these methods are not sufficient for every individual and do not yield effective results, especially for people who have difficulty in verbalizing their traumatic experiences, reveals the need for alternative and complementary approaches.

The target population for this study includes individuals diagnosed with PTSD, with a particular focus on diverse groups such as refugee children, war veterans, and individuals from different cultural backgrounds. The study aims to explore the effectiveness of art therapy in managing PTSD symptoms across these varied populations, acknowledging the potential role of cultural and individual factors in therapeutic outcomes.

Problem Statement

Despite the widespread prevalence of PTSD and its devastating effects, traditional treatment methods often fail to address the needs of all individuals, particularly those who struggle to articulate their traumatic experiences verbally. In many cases, these methods also face accessibility challenges due to stigma, lack of resources, and inadequate mental health infrastructure, especially in low- and middle-income countries. This highlights the need for innovative, accessible, and non-verbal therapeutic approaches. Creative art therapy, as an



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alternative method, offers a unique avenue for trauma survivors to process their experiences through sensory and emotional engagement. However, the scientific evidence regarding its efficacy remains fragmented, and there is a need to evaluate its role systematically in PTSD treatment. At this point, creative and expression-oriented interventions such as art therapy have an important potential to touch the emotional world of individuals.

Throughout human history, art has existed not only as a form of aesthetic expression but also as a healing force. From cave paintings to modern sculpture, the creative process has allowed individuals to make sense of their emotional experiences and to relieve the burden of traumatic memories. Today, this ancient understanding is being re-evaluated within a scientific framework. In the literature, it is stated that some traumatic memories are usually stored in non-verbal ways and these memories can be recalled by triggering sensory, emotional, visual, auditory, olfactory or kinesthetic elements (*Gantt & Tinnin*, 2009; *Langer*, 2011; *Talwar*, 2007). Although verbal therapies may be insufficient to address the non-verbal dimensions of such memories, art therapy makes it possible to access these memories by activating sensory processes. Research suggests that art therapy can contribute to the organization of traumatic experiences, allowing these fragmented memories to be organized and processed in a meaningful unity (*Gantt & Tinnin*, 2009).

Art therapy serves as both a means of self-expression and a neurobiological transformation process. Research shows that the creative process affects the limbic system in the brain, facilitating emotional regulation and the processing of traumatic memories (*van der Kolk*, 2014). This effectiveness is particularly evident among individuals with challenges in verbal expression, including children and trauma survivors. The safe space provided by the creative process allows individuals to both express themselves and reconstruct the effects of trauma (*Malchiodi*, 2020). In this context, art therapy provides a safe way to approach traumatic memories through the use of symbols, which can facilitate the consolidation of experiences by transforming an artistic form that represents emotions and responses to trauma into linguistic communication. The research aims to address the role of art therapy in the treatment of PTSD from a multidimensional approach. By examining the theoretical background, application methods and effects of art therapy, the healing power of creative processes on the traumatized psyche of human beings is examined.

The study acknowledges van der Kolk's (2014) theory of trauma, which highlights the role of the limbic system in processing non-verbal traumatic memories. This perspective aligns with the mechanisms employed in art therapy, where sensory and emotional pathways are engaged to address trauma's fragmented nature.

Research Gaps

Despite growing evidence on the effectiveness of art therapy in managing PTSD symptoms, certain research gaps persist. Existing studies have largely focused on short-term outcomes, while the long-term effects of art therapy remain underexplored. Additionally, the role of cultural and individual differences in determining therapy outcomes has not been sufficiently addressed. This study aims to contribute to the literature by compiling existing studies and considering the work done in this field.



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METHODOLOGY

Research Type

This research is a review of the studies in the literature. Through a literature review, the role of art therapy in the treatment of PTSD was discussed.

Literature Review

The literature review conducted within the scope of this study included extensive databases such as PubMed (NCBI), PsycINFO (APA), Web of Science, Scopus, Google Scholar and ProQuest. The search was conducted using various combinations of the keywords "anxiety disorders", "stress", "post-traumatic stress", "art therapy and post-traumatic stress disorder", "post-traumatic stress disorder" and "art therapy". The keywords were selected based on MeSH (Medical Subject Headings) headings and the most appropriate terms were determined.

The search was limited to full-text randomized controlled trials and experimental studies published in international journals between January 2014 and December 2024. The 1249 studies obtained as a result of the search were evaluated and 11 studies were included in the systematic review at the end of the screening process in accordance with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) method. The details of the screening process are presented with the PRISMA flow diagram in Figure 1.

Selection of Studies

Specific inclusion and exclusion criteria were used to select eligible studies for the systematic review. The following criteria were considered for inclusion in the systematic review: (a) they were published between 2014 and 2024, (b) the sample group consisted of individuals with posttraumatic stress disorder, (c) the effect of art therapy on posttraumatic stress disorders was investigated, (d) the language of publication was English,

The exclusion criteria for the studies are as follows: (a) Published before 2014, (b) Sample group consisted of individuals without posttraumatic stress disorder, (c) Not having full text access, (d) Publication in a language other than English.

As a result of the selection process based on these criteria, the studies included in the systematic review were identified and evaluated (*Figure 1*).



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Quality of Studies

The quality of the studies included in this systematic review was independently assessed by two researchers using the "Risk of Bias Tool" developed by Cochrane. This tool was used to analyze the methodological reliability of randomized controlled and experimental trials examining the effect of art therapy on posttraumatic stress disorders. Each study was categorized under these headings as "low risk," "high risk," or "uncertain risk" and the overall quality rating was based on these results. Studies that were determined to have a low risk of bias and were considered methodologically reliable were included in the systematic review.

Research Analysis and Reporting

The outputs obtained from the studies within the scope of the review were grouped in the data summarization form and the data obtained were analyzed accordingly. The data of the studies



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were collected and analyzed in appropriate categories to better understand the effects of art therapy on posttraumatic stress disorders.

FINDINGS

The systematic review is limited to studies examining the effects of art therapy on posttraumatic stress disorder between 2014 and 2024. The data of 11 studies obtained in the literature are presented in Table 1.

Author, year	Study Design	Patient Population Characteristics		-Measurement Tool	Intervention	Conclusion	
Author, year	Study Design	Experiment Control		Wreasurement 100	Method		
Wang et al., 2015	RCT*	PTSD, motor vehicle accident victims (n=26)	PTSD, motor vehicle accident victims on the waiting list (n=26)	PTSD Scale, CAPS) and self- report instrument (Impact of Event Scale-Revised, IES- R)	8-week Creative Art Therapy	There was no significant difference in the baseline posttraumatic symptom scores between the experimental and control groups.	
Chambel et al., 2016	RCT*	War veterans (n=5) treated for PTSD received both Art Therapy and Cognitive Processing Therapy.	War veterans (n=6) treated for PTSD received only Cognitive Processing Therapy.	Beck Depression Inventory-II PTSD Checklist- Military Version (PCL-M)	8 sessions of individual Cognitive Processing Therapy 8 sessions of Art Therapy	The mean PCL-M score in the experimental group decreased significantly for the groups, the improvement with treatment was significant for both groups, the depression score was 37.0, SD = 11.7 ; 19.2 , SD = 14.4 in the experimental group and 27.2 , SD = 8.1 ; 17.6 , SD = 9.7 in the control group.	
Ugurlu et al., 2016	Pre-test, post-test Experimental Study	, 0		UCLA Post- Traumatic Stress Disorder Parent Child Depression Inventory State- Trait Anxiety Scale	Art therapy	The results of the study showed that the mean of the pre- assessment of trauma symptoms was statistically greater than the mean of the post-assessment, depression pre-test result 9.97 (1.01) post-test result 6.00 (4.54), anxiety pre-test result 36.92 (6.96) post-test result 30.28 (7.39).	
Meyer DeMott et al., 2017	7 RCT*	Unaccompanied minor asylum- seeking children (n=73)	Life as usual group (LAU) (n=70)	PTSS, General psychological distress (HSCL- 25A), current life satisfaction (CLS) and expected life satisfaction scales	5 weeks Expressive art intervention	During a 25-month follow-up, mental health complaints, life satisfaction and expectations showed some differences in their trajectories, with more favorable outcomes reported for the experimental group.	
Rowe et al, 2017	Pre-test, post-test Experimental Study	0 1		Piers-Harris Self- Concept Scale, Hopkins Symptom Checklist and Harvard Trauma Questionnaire (HTQ)	16 weeks Art therapy	After 16 weeks of art therapy, participants reported fewer anxiety symptoms. The changes in median scores for perceived and actual anxiety symptoms were statistically significant. The proportion of participants reporting anxiety symptoms reportedly decreased from 20.0% at baseline to 19.2% at follow-up.	

Table 1: Data on Post-traumatic Stress Disorder Studies with Art Therapy



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Table 1: Data on Post-traumatic Stress Disorder Studies with Art Therapy

Author, year	Study Design	Patient Population Characteristics		- Measurement Tool	Intervention Method	Conclusion
		Experiment	Control		Method	
Decker et al. 2019	RCT*	War veterans (n=19) treated for PTSD received both Art Therapy and Cognitive Processing Therapy.	War veterans (n=19) treated for PTSD received only Cognitive Processing Therapy.	Beck Depression Inventory-II PTSD Checklist-Military Version (PCL-M)	8 sessions of individual Cognitive Processing Therapy 8 sessions of Art Therapy	The experimental group showed statistically significantly greater improvement than the control group in terms of PTSD symptoms, as indicated by the PCL subscale. The reduction in depression symptoms was strongly correlated with the reduction in total PTSD symptoms, r (29) = .80, p < .000.
Schouten et al., 2019	Pre-test, post-test Experimental Study	Patients treated for PTSD (n=12)		PTSD symptom severity Harvard Trauma Questionnaire	Trauma-focused art therapy	Trauma Pre-test, Post- test measurements; 2.89 (0.44) 2.79 (0.54)
Van Westrhenen et al. 2019	RCT*	All children who met the inclusion criteria were enrolled in the therapy group (n = 74)	All children who participated in this court preparation program at the clinic and met the inclusion criteria were included in the control group (n = 51).	Posttraumatic stress symptoms Child PTSD Checklist Child Behavior Checklist Posttraumatic Growth Inventory for Children	10-session creative arts psychotherapy group program	avoidance symptoms ($d = 0.41$) decreased more in the treatment group compared to the control group.
Luzzatto et al. 2022	Pre-test, post-test Quantitative Study	Patients treated for PTSD (n=4)		Individual interview form	Trauma-focused art therapy	Feedback from four participants suggests that this art therapy protocol may be a useful intervention.
Gever et al, 2023	RCT*	Nigerian refugees fleeing the Russian- Ukrainian war (n=165)	Control group (n=165)	A 12-item question aimed at measuring PTSD symptoms	Art therapy Music therapy Drama	Although art, music and drama therapies are effective treatment options in reducing the symptoms of posttraumatic stress disorder in war victims, drama therapy has been reported to be the most effective among them.
Ewulu et al. 2024	RCT*	Children and adults who experienced abduction; music therapy (n=108) art therapy (n=108)	Control group (n=107)	International Trauma Questionnaire (ITQ) and Family Happiness Scale	Art therapy Music therapy	Music therapy was found to be more effective in reducing PTSD symptoms in children, while art therapy was found to be more effective in reducing PTSD in adults.

*RCT (Randomized controlled trial)

Discussion

Posttraumatic Stress Disorder (PTSD) is a condition characterized by long-lasting psychological and physical effects that occur after a traumatic event in an individual's life. Traditional psychotherapy methods used in the treatment of PTSD play an important role in helping patients process their trauma and alleviate their symptoms. However, in recent years, creative art therapies have attracted attention as an alternative approach to the treatment of PTSD. Art therapy offers a safe space to support individuals' emotional and psychological healing and can be an important tool in the posttraumatic recovery process. In this context, different studies have evaluated the effectiveness of this treatment method by examining the effects of creative art therapies on PTSD.

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Eleven studies in the systematic reviews show that creative art therapies have positive effects in the treatment of PTSD. In particular, studies such as Chambel et al. (2016) and Rowe et al. (2017) state that combining art therapy and other psychotherapy approaches significantly reduces posttraumatic stress symptoms. Chambel et al. (2016) emphasize that the combination of art therapy and cognitive processing therapy effectively improves PTSD symptoms. Rowe et al. (2017) reported that a 16-week art therapy intervention led to significant improvements in anxiety and depression symptoms. These findings suggest that art therapy techniques contribute to the management of psychological symptoms such as anxiety and depression in the treatment of PTSD.

Studies by Uğurlu et al. (2016) and Meyer DeMott et al. (2017) also show that art therapy has positive effects especially on children and contributes to the reduction of post-traumatic stress symptoms in refugee children. In trauma-exposed groups such as refugee children and asylum seekers, art therapy accelerates the healing process by supporting emotional expressions. These findings suggest that art therapy practices can be used as an effective psychological intervention tool for children and adolescents. However, the study by Wang et al. (2015) shows that an 8-week art therapy intervention on motor vehicle accident victims did not lead to a significant improvement in PTSD symptoms. This finding indicates that the effectiveness of art therapy may differ in each individual. The success of creative art therapies in the treatment of PTSD may vary depending on individual differences, duration and type of therapy. Another important point is that creative therapies should be customized considering individual differences and cultural factors. Studies such as Decker et al. (2019) and Gever et al. (2023) emphasized that creative therapies produce different levels of effects, and in some cases other creative interventions such as music therapy and drama therapy may be more effective. In particular, drama therapy stands out as a more effective method than art therapy for some participants. These findings suggest that the diversity of creative therapies and different techniques can increase the effectiveness of PTSD treatment.

Ewulu et al. (2024) reported that music therapy was more effective in children and art therapy was more effective in adults. This emphasizes the importance of individual and age-based customization of the therapeutic process. While art therapy creates a space of expression for participants to process their emotional difficulties, the type and duration of therapy can directly affect the effectiveness of the process.

In conclusion, the role of creative art therapies in the treatment of PTSD has significant potential, as many studies have shown. However, art therapy may not be equally effective for every case. Therefore, it seems that therapeutic interventions should be customized according to individual differences and specific types of trauma. Moreover, longer-term and large-scale studies will help us better understand the effectiveness of creative arts therapies. Integration of therapeutic approaches used in posttraumatic recovery with traditional psychotherapies and creative therapies will allow for the development of more comprehensive and effective treatment methods.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

In conclusion, the findings of 11 studies in this field revealed that creative art therapies can play an important role in the treatment of Posttraumatic Stress Disorder (PTSD). In particular, art therapy is an effective tool that can help individuals strengthen their emotional expression



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skills, process trauma-related emotional burdens and support psychological healing processes. Studies show that creative art therapies are effective in reducing symptoms in different populations, especially among children, refugees and survivors. However, art therapy may not be equally effective for all individuals and individual differences should be taken into account in the treatment process.

It is understood that creative art therapies contribute to the improvement of anxiety, depression and other psychological symptoms in the treatment of PTSD, and that these therapies can be diversified with various techniques (e.g. music, drama, visual arts) and can be customized according to different types of trauma. However, the effectiveness of art therapy has been limited in some studies. In particular, studies such as Wang et al. (2015) show that art therapy practices do not provide the same degree of improvement in all individuals and that individual factors, duration and type of therapy may have an impact on its effectiveness.

Recommendations

Individualized Therapy Approaches: Therapeutically, art therapy has to be tailored based on the needs of individuals in treatment with PTSD. A person's experience of trauma is unique; hence, there is a need to determine individually the techniques and the duration for that particular patient.

Multidisciplinary Approach: Art therapy may be integrated into the practice of traditional psychotherapy approaches. Combining art therapy with other psychotherapies, such as CBT and EMDR, could result in more robust therapeutic outcomes. Combinations such as these may speed up treatment by bringing a holistic approach into the therapy room.

Consideration of Cultural and Age Factors: The practices of art therapy need to be modified for people of different cultural backgrounds. Moreover, the preferences of different types of therapy for children and adults, considering age differences, should be followed: for instance, music therapy for children and visual arts or drama therapy for adults.

More Extended Research: There is a need for more long-term, multicenter, and large-scale studies in the pursuit of understanding the effectiveness of creative arts therapies. This can help identify conditions under which creative arts therapies may work best by delving into the effects of therapy more deeply.

Education and Awareness: It would need more education among health professionals and therapists on the role of creative arts therapies in the treatment of PTSD. Health professionals and therapists need to be educated further, and art therapy should be adopted as a psychotherapeutic intervention with more knowledge in that regard.

In the final analysis, creative art therapy can find its place as an important supportive tool in the treatment of PTSD. However, the effectiveness of this therapy may vary depending upon the customisation of the therapy, individual differences, and duration of therapy. Hopefully, future studies will clarify the effects that creative arts therapies have on larger populations, thereby being an effective option for their use in the treatment of PTSD.

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