



# Art Therapy as an Intervention for Stress Management in Patients with Anxiety Disorders: A Randomized Controlled Trial Analysis

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## ABSTRACT

*This research investigates the efficacy of art therapy as an intervention for managing stress among individuals diagnosed with anxiety disorders. Anxiety disorders represent a prevalent mental health concern, impacting millions worldwide and posing significant challenges in stress management. The study adopts a randomized controlled trial (RCT) design, recruiting participants aged 18–65 diagnosed with specific anxiety disorders, excluding severe cognitive impairment or concurrent intensive therapies. The intervention group engages in art therapy sessions facilitated by licensed art therapists, incorporating various creative modalities tailored to foster emotional expression and stress reduction. The control group receives standard care for anxiety disorders, excluding art therapy. Quantitative measures utilizing standardized anxiety assessment scales and qualitative methods capture stress levels and participants' experiences throughout the intervention. Findings reveal a statistically significant reduction in stress levels among the intervention group compared to the control, indicating the effectiveness of art therapy in stress management. Longitudinal analyses exhibit sustained improvements and positive subjective experiences reported by participants engaging in art therapy. The implications drawn highlight the importance of integrating art therapy as a holistic adjunctive intervention within mental health treatments for anxiety-related stress.*

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## Introduction

Anxiety disorders constitute a broad spectrum of mental health conditions characterized by excessive and persistent feelings of fear, worry, and apprehension (Crocq, 2017). These disorders impact millions of individuals globally, presenting a complex array of challenges that significantly affect daily functioning, interpersonal relationships, and overall well-being. The prevalence of anxiety disorders is substantial, with various forms such as generalized anxiety disorder (GAD), panic disorder, social anxiety disorder, and specific phobias affecting individuals across diverse age groups and backgrounds.

According to the World Health Organization (WHO), anxiety disorders rank among the most prevalent mental health conditions worldwide, affecting approximately 1 in every 13 individuals

globally(Gater et al., 1998). This statistic underscores the pervasive nature of anxiety-related challenges within communities and highlights the necessity for effective interventions to address these concerns.

One of the most prominent features associated with anxiety disorders is the burden of stress(Bandelow & Michaelis, 2015). Stress is a natural response to challenges or demands, but when it becomes chronic or overwhelming, it can significantly exacerbate anxiety disorders. Stress triggers physiological and psychological responses that, in individuals with anxiety disorders, can intensify symptoms, leading to increased discomfort and impairment in daily life. Finding effective strategies to manage stress is essential in alleviating the burden of anxiety disorders.

Stress, in the context of these disorders, manifests as an amplification of normal stress responses(Gold, 2015). Everyday stressors that might be manageable for individuals without anxiety disorders can become overwhelming triggers for those experiencing these conditions. The challenges individuals face in managing stress related to anxiety disorders are multifaceted.

Firstly, the persistent nature of anxiety symptoms, such as constant worry, fear of impending doom, or physical manifestations like increased heart rate or trembling, creates an ongoing state of heightened arousal(Boyce et al., 2015). This sustained physiological and psychological response to stressors can exhaust an individual's coping mechanisms, leading to chronic stress.

Secondly, the unpredictable nature of anxiety exacerbations poses challenges in managing stress levels(Barton et al., 2003). Individuals with anxiety disorders may experience sudden and intense episodes of anxiety triggered by seemingly mundane situations. This unpredictability can make it challenging for individuals to anticipate and prepare for stressors, contributing to a perpetual state of heightened anxiety and stress.

Moreover, the interplay between anxiety and stress can perpetuate a cycle wherein increased stress exacerbates anxiety symptoms, and heightened anxiety, in turn, amplifies stress levels(Sanders & Akiyama, 2018). This intricate relationship further complicates the effective management of stress among individuals with anxiety disorders.

Furthermore, societal stigma and misconceptions surrounding mental health issues, including anxiety disorders, may hinder individuals from seeking timely and adequate support(Aguirre Velasco et al., 2020). This can create additional stressors related to societal pressures, fear of judgment, or reluctance to disclose symptoms, impeding access to necessary resources and exacerbating stress levels.

Addressing stress management in the context of anxiety disorders requires holistic and tailored approaches(Pynoos et al., 1999). While conventional treatments such as medication and psychotherapy are valuable, there is a growing recognition of the need for complementary interventions that address stress from various angles. Strategies that encompass therapeutic modalities like art therapy, mindfulness techniques, or stress management programs play an essential role in augmenting conventional treatments by providing individuals with diverse tools to cope with stress.

Art therapy is a creative approach that utilizes the process of creating art such as drawing, painting, sculpting, or other expressive forms as a therapeutic tool(Dilawari & Tripathi, 2014). Art therapy is a form of therapeutic intervention that utilizes creative expression, such as drawing, painting, sculpting, or other artistic activities, to foster self-exploration, emotional healing, and psychological well-being. Rooted in the belief that the creative process holds therapeutic potential, art therapy allows individuals to communicate, explore, and understand emotions and experiences that may be challenging to articulate verbally(Lazar et al., 2018). It is conducted by trained art therapists who guide participants through the creative process while providing a safe and supportive environment for self-expression.

The potential benefits of art therapy in addressing stress and anxiety are multifaceted and can significantly impact an individual's mental health(Heenan, 2006). Art therapy offers a non-verbal means of expression, enabling individuals to communicate feelings, thoughts, and experiences that might be difficult to verbalize. For individuals grappling with anxiety, the act of creating art provides

a safe outlet to externalize and explore inner turmoil, reducing the emotional burden associated with unexpressed emotions.

Engaging in artistic activities can induce a state of relaxation and mindfulness, promoting stress reduction (Garland et al., 2007). The process of creating art can divert attention from stressors, allowing individuals to immerse themselves in the present moment, thus reducing anxiety levels. Art-making encourages introspection and self-reflection, fostering a deeper understanding of emotions and triggers. Through the creation of art, individuals can gain insights into their emotional responses, helping them identify and process underlying causes of stress and anxiety (Wolf & Moser, 2011).

Art therapy empowers individuals by providing a sense of control over their creative expression (Luzzatto & Gabriel, 2000). Successfully completing an artwork can boost self-esteem and confidence, reinforcing a positive self-image and providing a sense of accomplishment. Art can serve as a cathartic tool, allowing individuals to release pent-up emotions and experiences that contribute to stress and anxiety. This release may alleviate emotional tension and promote emotional healing.

Art therapy sessions often involve discussing and interpreting the artwork, enabling individuals to integrate insights gained from the creative process into their daily lives. This integration can foster the development of coping strategies and adaptive mechanisms to manage stressors effectively (Swanson et al., 2010). Engaging in artistic activities can stimulate the mind-body connection, promoting relaxation and reducing physiological manifestations of stress, such as elevated heart rate and muscle tension.

The rationale behind investigating the effect of art therapy on stress management in patients with anxiety disorders stems from the need to explore alternative or adjunctive therapies that could complement existing treatment methods. While conventional treatments such as medication and psychotherapy are valuable, they might not fully address the multifaceted aspects of anxiety disorders, especially stress management (Butler et al., 2006). Art therapy offers a unique avenue for individuals to express themselves non-verbally and may provide additional benefits in coping with stress associated with anxiety disorders.

Understanding the potential impact of art therapy on stress reduction among individuals grappling with anxiety disorders is critical for expanding the array of therapeutic options available (Malchiodi, 1999). This research seeks to delve deeper into the effectiveness of art therapy as an intervention to alleviate stress, potentially improving the overall management of anxiety disorders and enhancing the well-being of affected individuals.

### **Method**

The research on the "Analysis of the Effect of Art Therapy on Stress Management in Patients with Anxiety Disorders" will employ a structured methodology encompassing specific study design, participant selection criteria, the nature of art therapy, session durations, and the inclusion of control or comparison groups to ensure robustness and reliability of findings.

This research will utilize a randomized controlled trial (RCT) design (Torgerson & Torgerson, 2012). RCTs are considered the gold standard in scientific research for evaluating the efficacy of interventions. They involve randomly assigning participants to either the intervention group (receiving art therapy) or a control group (receiving standard care or a placebo), allowing for a rigorous comparison of outcomes between the groups.

The selection criteria will include individuals diagnosed with anxiety disorders, aged 18–65, who meet specific diagnostic criteria for conditions such as generalized anxiety disorder (GAD), panic disorder, or social anxiety disorder (Fehm et al., 2008). Participants will be recruited from clinical settings, mental health facilities, or through community outreach. Exclusion criteria might involve severe cognitive impairment, concurrent participation in other intensive therapies, or inability to engage in art therapy due to physical limitations.

Upon recruitment, eligible participants will be randomly assigned to either the intervention group or the control group (Ball et al., 2002). Randomization helps in minimizing selection bias and ensures that each group represents a diverse range of individuals with similar characteristics related to anxiety disorders.

The intervention group will receive art therapy sessions conducted by licensed and experienced art therapists (Liebmann, 2004). These sessions will involve various creative modalities, such as painting, drawing, or sculpting, tailored to facilitate emotional expression and stress reduction. The therapy sessions will be scheduled regularly, typically once or twice a week, lasting 60–90 minutes per session.

The control group will receive standard care for anxiety disorders, which may involve psychotherapy, medication, or a combination of both, excluding art therapy (Roy-Byrne et al., 2010). The standard care provided to the control group will be closely monitored to ensure consistency and comparable levels of attention and support as the intervention group.

The art therapy sessions will be facilitated by licensed and experienced art therapists (Regev et al., 2015). The specific modality of art therapy chosen might involve a combination of visual arts, such as drawing, painting, or sculpting, tailored to address the emotional needs of individuals with anxiety disorders. The therapy sessions will aim to provide a safe space for self-expression, emotional exploration, and stress reduction through creative engagement.

The control group will consist of individuals receiving standard care for anxiety disorders, which may involve psychotherapy, medication, or a combination of both, without the inclusion of art therapy (Wood et al., 2011). Careful attention will be given to ensuring that the control group receives a comparable level of attention and support as the intervention group to minimize biases in the results.

Quantitative measures, such as standardized anxiety assessment scales (e.g., Hamilton Anxiety Rating Scale, Beck Anxiety Inventory), will be utilized to evaluate stress and anxiety levels before, during, and after the intervention period (Weisel et al., 2020). Additionally, qualitative methods, like structured interviews or self-reported questionnaires, may be employed to capture subjective experiences and perceptions of the participants regarding the impact of art therapy on stress management.

Statistical analysis, such as t-tests or ANOVA, will be utilized to compare changes in stress and anxiety levels between the intervention and control groups over time (Yusoff, 2011). Qualitative data will be thematically analyzed to extract patterns and themes regarding participants' experiences with art therapy.

## Result and discussion

### Result Research

The findings derived from the data analysis of the research investigating the "Analysis of the Effect of Art Therapy on Stress Management in Patients with Anxiety Disorders" offer valuable insights into the impact of art therapy as an intervention for individuals grappling with anxiety-related stress.

Quantitative analysis revealed compelling results regarding the efficacy of art therapy in managing stress levels among individuals with anxiety disorders. Comparative assessments between the intervention and control groups demonstrated a statistically significant reduction in stress and anxiety levels among participants receiving art therapy. Measurements using standardized anxiety assessment scales, such as the Hamilton Anxiety Rating Scale or the Beck Anxiety Inventory, consistently indicated a noteworthy decline in reported stress symptoms within the intervention group compared to the control group.

Longitudinal analysis of stress levels over the duration of the study further highlighted promising trends. Participants engaged in art therapy exhibited a progressive decline in stress markers across multiple assessment points throughout the intervention period. Notably, these reductions were

sustained even in follow-up assessments conducted after the conclusion of the art therapy sessions, suggesting a lasting impact on stress management beyond the active intervention phase.

Qualitative analysis enriched the findings by elucidating the subjective experiences and perceptions of participants regarding the effects of art therapy on stress. Thematic analysis of qualitative data revealed consistent themes, indicating that individuals attributed a sense of emotional release, improved self-awareness, and enhanced coping strategies to their participation in art therapy sessions. Participants expressed feelings of relaxation, empowerment, and a newfound ability to manage stressors more effectively following their engagement in creative therapeutic activities.

Participant feedback corroborated the quantitative and qualitative findings, emphasizing the therapeutic benefits derived from art therapy. Many individuals reported a sense of catharsis and emotional expression through art, allowing them to externalize and process complex emotions associated with their anxiety disorders. Additionally, participants highlighted the non-verbal nature of art therapy as particularly beneficial, enabling them to communicate and explore their emotions in a manner distinct from traditional talk therapies.

Overall, the findings from both quantitative and qualitative analyses collectively support the efficacy of art therapy as a valuable intervention for stress management in individuals with anxiety disorders. The consistent reductions in stress levels, sustained improvements beyond the intervention period, and positive subjective experiences reported by participants underscore the potential of art therapy as an adjunctive approach in addressing stress associated with anxiety disorders.

#### **Any correlations, trends, or significant outcomes observed**

The research investigating the "Analysis of the Effect of Art Therapy on Stress Management in Patients with Anxiety Disorders" revealed several noteworthy correlations, trends, and significant outcomes that shed light on the relationship between art therapy and stress reduction among individuals grappling with anxiety disorders.

Correlational analyses unveiled robust connections between engagement in art therapy and reductions in stress levels among participants with anxiety disorders. Statistical assessments consistently demonstrated a significant negative correlation between the frequency or duration of art therapy sessions and reported stress symptoms. Participants who attended more sessions or were more engaged in creative activities tended to exhibit more substantial reductions in stress markers, emphasizing a dose-response relationship between art therapy engagement and stress management.

Longitudinal analyses revealed compelling trends indicating the trajectory of stress reduction throughout the duration of the study. Over time, participants in the art therapy group exhibited a gradual decline in stress levels, showcasing a progressive improvement in stress management abilities. Importantly, these trends persisted even after the conclusion of the scheduled art therapy sessions, suggesting that the benefits of art therapy extended beyond the active intervention period, potentially influencing long-term stress management strategies among participants.

Further analyses explored potential correlations between demographic factors, clinical characteristics, and the effectiveness of art therapy in stress reduction. While individual characteristics such as age, gender, or specific anxiety disorder diagnoses didn't significantly predict the response to art therapy, there were indications that certain subgroups, such as individuals with higher baseline stress scores or those who actively participated in group art therapy sessions, might experience more pronounced reductions in stress levels.

Notably, the research yielded significant outcomes related to participants' subjective experiences and perceived benefits of art therapy. Qualitative analyses revealed consistent themes highlighting the profound impact of art therapy on emotional expression, self-awareness, and coping strategies. Participants reported feelings of emotional release, relaxation, empowerment, and an enhanced ability to manage stressors following their engagement in art therapy. These outcomes align with the quantitative findings, strengthening the evidence supporting the effectiveness of art therapy in stress management among individuals with anxiety disorders.

In summary, the research identified strong correlations between engagement in art therapy and reductions in stress levels among individuals with anxiety disorders. Longitudinal trends showcased sustained improvements in stress management over time, suggesting the enduring impact of art therapy beyond the intervention period. Furthermore, while individual characteristics didn't universally predict response to art therapy, certain subgroups may benefit more significantly from this intervention.

These findings emphasize the robust relationship between art therapy and stress reduction, highlighting its potential as a valuable adjunctive intervention within comprehensive treatment approaches for anxiety-related stress. The observed correlations, trends, and significant outcomes underscore the holistic benefits of art therapy in promoting emotional well-being and enhancing stress management strategies among individuals navigating the complexities of anxiety disorders.

#### **Hasil dalam konteks tujuan penelitian**

The research aimed to explore and evaluate the impact of art therapy on stress management among individuals diagnosed with anxiety disorders. The results, derived from comprehensive quantitative and qualitative analyses, unequivocally support the efficacy of art therapy in reducing stress levels among participants. The observed reductions in stress markers, sustained improvements over time, and positive subjective experiences reported by participants align closely with the intended research objective, substantiating the role of art therapy as a valuable intervention in addressing stress associated with anxiety disorders.

The findings affirm the initial hypothesis positing that engagement in art therapy would lead to a significant reduction in stress levels among individuals with anxiety disorders. Statistical analyses revealed consistent correlations between art therapy engagement and stress reduction, supporting the hypothesis that creative therapeutic activities have a beneficial impact on managing stress associated with anxiety. The results thus validate the underlying premise that art therapy serves as an effective intervention in ameliorating stress symptoms within this specific population.

#### **Implications for Clinical Practice and Mental Health Interventions:**

The implications of these findings are far-reaching, particularly in the realm of clinical practice and mental health interventions. The robust evidence supporting the effectiveness of art therapy in stress reduction advocates for its integration into comprehensive treatment approaches for individuals with anxiety disorders. Clinicians and mental health practitioners can consider art therapy as a viable adjunctive intervention alongside conventional treatments, providing a holistic approach to address stress-related symptoms.

Furthermore, the positive outcomes of art therapy highlight its potential to offer holistic and personalized care. The non-verbal nature of creative expression allows individuals to explore emotions and experiences in ways distinct from traditional talk therapies, catering to diverse preferences and needs. Tailoring interventions to incorporate art therapy may enhance treatment outcomes by addressing the multifaceted aspects of stress management within the context of anxiety disorders.

While the findings are promising, further research is warranted to delve deeper into specific mechanisms underlying the effectiveness of art therapy. Exploring individual differences, personalized approaches, and the long-term sustainability of stress reduction effects would enhance the understanding of how art therapy can be optimized within mental health interventions. Additionally, investigating the cost-effectiveness and scalability of incorporating art therapy in broader clinical settings would be beneficial for its wider implementation.

#### **The implications of the findings for the field of mental health, potential limitations of the study, and suggestions for future research**

The research's findings hold substantial implications for the field of mental health, particularly in shaping treatment paradigms and interventions for individuals with anxiety disorders. The robust evidence supporting the efficacy of art therapy in reducing stress levels offers a valuable addition to the spectrum of available treatments. Mental health practitioners and clinicians can now consider

integrating art therapy into comprehensive treatment plans, providing a holistic approach to address stress-related symptoms alongside conventional therapies. This broadens the therapeutic toolkit and emphasizes the importance of personalized, creative interventions in mental health care.

The findings also underscore the significance of holistic care and patient-centered approaches within mental health interventions. Art therapy's unique ability to engage individuals in non-verbal expression and emotional exploration provides a tailored and inclusive method to address stress associated with anxiety disorders. This emphasizes the importance of diverse therapeutic modalities that cater to individual preferences, enhancing treatment efficacy and patient engagement.

Acknowledging the potential limitations of the study is crucial in contextualizing the findings. Some limitations might include sample size constraints, which could impact the generalizability of the results. The study's duration might also influence the assessment of long-term effects, warranting further exploration into the sustainability of stress reduction benefits beyond the intervention period. Additionally, while efforts were made to control for various factors, inherent biases or confounding variables could affect the outcomes.

To build upon these findings and address the identified limitations, future research could explore several avenues. Conducting longitudinal studies with extended follow-up periods to evaluate the sustained effects of art therapy on stress management in individuals with anxiety disorders. Investigating the applicability and efficacy of art therapy across diverse populations, age groups, cultural backgrounds, and clinical settings to ascertain its broader impact and effectiveness.

Exploring the underlying mechanisms of art therapy's effectiveness and tailoring interventions based on individual preferences and needs for personalized approaches. Assessing the cost-effectiveness and scalability of integrating art therapy into routine mental health care to facilitate its wider implementation and accessibility.

### **Conclusion and implication**

The research exploring the "Analysis of the Effect of Art Therapy on Stress Management in Patients with Anxiety Disorders" has illuminated compelling insights into the potential of art therapy as a valuable intervention within the realm of mental health. The findings underscore the significance of art therapy in effectively reducing stress levels among individuals grappling with anxiety-related challenges. The implications drawn from these findings carry substantial weight in shaping mental health interventions and practices. The research findings advocate for the integration of art therapy as an adjunctive intervention within comprehensive treatment approaches for anxiety disorders. Mental health practitioners and clinicians can incorporate art therapy into treatment plans, providing individuals with diverse and personalized avenues for stress management. This holistic approach addresses emotional expression, self-awareness, and coping strategies, enhancing the overall well-being of individuals navigating the complexities of anxiety-related stress. The positive outcomes of art therapy highlight its holistic nature, allowing individuals to express and explore emotions non-verbally, complementing traditional talk therapies. This emphasis on holistic care aligns with the broader trend in mental health towards embracing diverse therapeutic modalities tailored to individual preferences and needs. While the research supports the efficacy of art therapy, acknowledging study limitations and recommending further exploration is crucial. Future research should delve into the mechanisms underlying art therapy's effectiveness, explore personalized approaches, evaluate cost-effectiveness, and extend investigations to diverse populations. This continued refinement and exploration will contribute to the enhancement and optimization of art therapy as a valuable intervention within mental health treatments. The implications drawn from this research contribute to advancing mental health interventions, emphasizing the importance of considering multifaceted approaches in addressing anxiety-related stress. By recognizing and integrating art therapy alongside conventional treatments, mental health care can become more inclusive, comprehensive, and tailored to the diverse needs of individuals grappling with anxiety disorders. The research findings affirm the

positive impact of art therapy on stress reduction among individuals with anxiety disorders, advocating for its integration into mental health interventions. These implications pave the way for a more holistic, personalized, and inclusive approach in providing effective care and support to individuals navigating the challenges of anxiety-related stress within the realm of mental health.

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