

Effects of Expressive Arts Therapy (EAT) on Patients with Depression and Anxiety

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Abstract - A vast number of individuals are affected by severe anxiety and depression. Traditional forms of therapies have proven to be unreliable and thus alternatives must be found. Expressive Arts Therapy (EAT) has emerged as the future of mental health treatment protocols. This literary review aims to assess the effects of EAT on patients with depression and anxiety. Depression is defined as a continuous state of hopelessness. Anxiety is defined as feelings of tension and worried thoughts. This literary review elucidates the effects that EAT may have on depression and anxiety. The groups range from mental health patients to inmates. The results of the studies found art therapy to benefit those struggling with mental health issues. However, all studies concluded that further research on the topic must be conducted in order to solidify EAT's effectiveness in treatment.

Keywords - art therapy, depression, anxiety

I. INTRODUCTION

Art is a form of expression and an outlet for many. Over the past few years, the application of art in fields such as medicine and technology has grown exponentially [3]. Treatment for patients with mental illnesses has advanced throughout centuries, beginning in 1752 as the first mental hospital in America [5]. These treatments consisted of various medications, verbal therapy, and other methods to return patients to a normal mental state where they can continue to live as accepted members of society. The growth of the arts and treatments has contributed to a form of therapy known as Expressive Arts Therapy (EAT), also known as creative arts therapy. EAT is an expression of art therapy that utilizes a diverse range of arts, such as but not limited to photography, music, collaging, sketching, painting, and videography [6]. Numerous studies have examined the effectiveness of EAT in the medical field. A 2003 publication highlights this importance and mentions that patients have found the therapeutic process that goes into EAT to be more effective than the art produced from therapy [3]. The publication goes on to mention that choosing and facilitating the artwork initiates a sense of control for the patients who find significant meaning in sharing their experiences with one another on their terms [3]. Furthermore, an article by the American Congress of Rehabilitation Medicine discusses the benefit that producing artwork has on the brain [11]. It is suggested that creating art can reduce stress and increase happiness. A study reviewed in this article found that looking at art has also

been shown to increase blood flow in the brain by up to 10%. This is an immense step forward in the field of mental health and healing, both in and outside of the hospital.

According to the American Psychological Association, anxiety is the continuing feeling of tension, concern, and worried thoughts. Physical symptoms include dizziness, sweating, rapid heartbeat, and trembling [8]. An article by the National Institute of Mental Health examines the symptoms, possible causes, and treatments of depression [9]. Some of the symptoms include a continuously sad or anxious state, hopelessness, and in some cases, suicidal thoughts. Physical symptoms occur as well. These may include decreased energy or fatigue, difficulty concentrating, and irregularities with sleep such as oversleeping or difficulty falling asleep. Common treatments for depression include psychotherapy and antidepressants, in some cases, a combination of the two. Although these can be very beneficial, individuals below the age of 25 who take antidepressants are prone to experience suicidal thoughts while taking them [9]. For individuals that are within the age and experience suicidal thoughts, it may be beneficial to explore other areas of treatment. Both of these mental illnesses will be analyzed throughout the review along with the benefits art therapy can offer for either.

The COVID-19 epidemic prompted many teenagers and young adults to develop severe anxiety and depression. This is most commonly due to lack of communication with outside relationships and peers. According to a study by the Pennsylvania State University Social Sciences Research Institute, anxiety among teenagers has increased by 29% since the start of COVID-19 [10]. Considering this increase, it is extremely important to find the most optimal forms of treatment for teenagers. Additionally, the article stated that one out of three teenagers experience high levels of anxiety, this further highlights the importance of effective treatments.

A recent study found that EAT was beneficial for not only patients experiencing symptoms of anxiety and depression, but also those who were hospitalized for surgical interventions and sudden illnesses [2]. Shella [2], a member of the Art Therapy Department at the Cleveland Clinic, designed an experiment to test whether this implementation of EAT was viable. She found that of the total 195 patients included in the study, 82% found EAT to garner a positive difference in their health [2]. The results

from these multiple publications highlight the need for additional study in this field. This review aims to further analyze and delve deeper into the connection between expressive arts therapy and patients with anxiety and depression.

II. METHODOLOGY

Our review is based on information from published research studies from Science Daily. Electronic searches were through GoogleScholar and Science Direct, and we downloaded relevant articles. We also extracted information from reviews of current work and consultations with other experts and health providers in the specialty of EAT.

III. LITERATURE REVIEW

A study done by Yan et al. [6] found that through their experiments, EAT can improve the cognition and mental health in patients with dementia and other cognitive impairments. The aim of the study was to test the feasibility of EAT intervention in older adults with cognitive impairments and depression. A total of 48 older patients, ages 60-85, participated, with 24 assigned to the EAT intervention group and 24 assigned to the control group. More than half of the participants were female, and all were or have been married. The intervention group received 60-90 minutes of EAT sessions twice a week for six weeks. Three trained instructors conducted the experiments in a quiet, well-lit classroom, with the group of 24 undergoing the therapy at the time. They utilized EAT to its full extent, with different activities per session, including watercolor and acrylic painting, clay work, paper rolling, and mixed media collages. The sessions were divided up into four stages, including sharing their artwork with their peers. The sharing aspect of the sessions was to encourage a bond between the participants. Additionally, they included a wrap-up session to calm and neutralize the patients before they returned to their standard lives. The results revealed an improvement in the anxiety and overall happiness in the intervention group. There were also similar improvements in the self-efficiency and self-esteem in the intervention group as well as an 87.5% retention rate and 95.24% satisfaction result. Yan et al., [6] concluded that the results of the pilot study concluded that EAT was a feasible treatment for patients with cognitive impairments, anxiety, and depression. While the results seem to prove EAT as an effective intervention for patients with depression and cognitive impairments, this was a pilot study done only on a select group of older patients aged 60-85. The lack of research regarding other ages, genders, and individuals indicates the need for more extensive research on this topic.

The University of Gothenburg [7], one of the largest universities in Sweden, researched the effects of art therapy on severe depression. This experiment was conducted individually and spanned ten sessions each being one hour. All participants had either severe or moderately severe depression, and 46 participants underwent the treatment while 36 were part of the control group. A majority of the patients were unable to work due to the

severity of their depression. The treatment consisted of manual-based art therapy designed by Christina Blomdahl, PhD., at the institute of health and career sciences, licensed occupational therapist, and art therapist. As well as receiving the treatment, the patients also underwent cognitive behavioral therapy, medications, psycodermic therapy, and physical therapy. Each session was conducted by specially trained art therapists and began with a short briefing and relaxation exercise. The participants were then provided with crayons, watercolors, and other supplies and were prompted to create artwork that symbolized their feelings that day. The therapists then discussed with each patient individually what the art expressed or meant to them. Blomdahl found that after ten, one-hour-long therapy sessions, the patients' health had improved substantially.

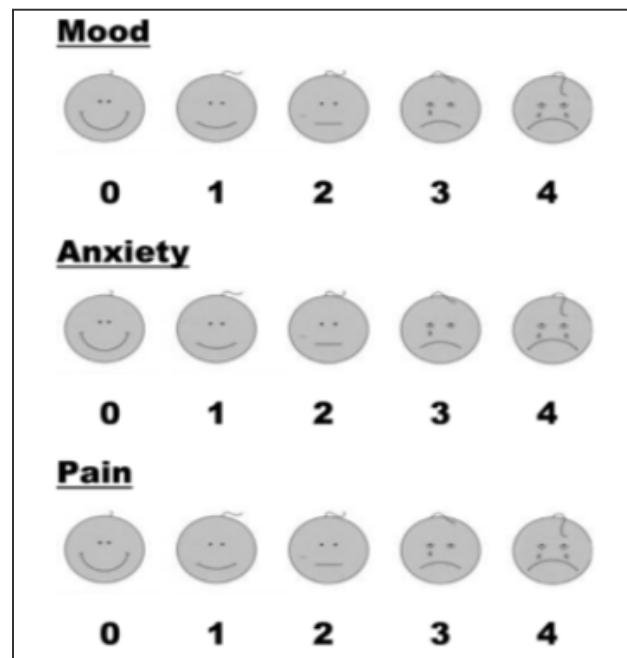


Figure 1: Rogers' Happy/Sad Face Scale as used in the study [7]

On a rating scale used for depression, as shown in Fig. 1, the patients had on average five steps of improvement, which enabled them to go back to their own standards of living. The participants were also tested on their anxiety, sleep, and ability to take initiative, and they found improvements in all those categories. Although some patients did not experience immediate improvement, Blomdahl says, "Painting pictures based on themes and discussing the pictures with the therapist promotes self-reflection and brain stimulation that takes place outside of the conscious mind," therefore improving the patient's cognitive functions. Blomdahl goes on to mention, "The focal point [of the study] was that people felt like they were meeting themselves; that the picture served as a mirror where you could see and make new discoveries about yourself, a bit like coming to life." While the researchers claim this study shows a clear effect on patients with severe depression, the study was only done once and did not

mention the patient demographics, including age, gender, and marital status. This study requires further research and detail to fully support Blomdahl's claim.

A study done by Gussak [1] compared the effectiveness of art therapy on female and male prison inmates who exhibited depression and difficulties with Locus of Control (LOC). LOC is defined as an individual's feeling of control application. An internal LOC is an individual's view of their personal actions and how it determines the environment around them. On the other hand, an external LOC is the perspective that exterior factors determine the events in their lives. The sessions were conducted over fifteen weeks with a one-hour session per week; the study collected data on two of these fifteen week sessions. The inmates would participate in activities such as, but not limited to, creating name embellishment, white paper sculptures, and draw-and-pass; these activities required the participants to socialize and problem solve. During the sessions, participants utilized materials including a variety of non-toxic painting supplies, a variety of paper and cardboard, model magic, and white glue; scissors were occasionally used. It was apparent that women tended to develop closer familial relations within internal groups to compensate for the loss of their exterior affiliations, unlike their male counterparts.

This study tested the hypothesis on 76 female experimental patients and 37 experimental male patients as well as 20 females and 25 males in the control group. A portion of both groups was given psych medications. To determine the differences between the female and male experimental groups, the changes in scores from pretest to post-test from both the Adult Nowicki-Strickland Locus of Control Scale (ANS) and Beck Depression Inventory (BDI-II) test were observed; the results were as follows. Both male and female groups had changes in scores; however, female patients tended to have greater decreases in scores in comparison to the male subjects; this could potentially be due to some of the women undergoing additional therapies. Female inmates have higher tendencies to develop depression rather than men.

It was observed throughout the study that the female inmates began to empathize with one another and provide a sense of moral support, while the men began with a tendency to make negative comments about other men's artwork. This soon progressed to a situation similar to the females, resulting in mood improvements in both groups and consequently the positive change in LOC. Previous studies had been done predominantly on males, and consequently, not much information was available on females because of the few female inmates. It was assumed that male criminal behaviors are sufficiently similar to females that it was not of any importance to study females as well. However, this view changed when the number of female inmates increased significantly, and a new interest had been developed to study them. In order to achieve more accurate results for this hypothesis, a study must be done over a broader spectrum. This study was conducted while testing two prisons in a rural region of Florida, limiting the information sample. The results of this study support Gussak's claim; however, without further study and research, it cannot be fully supported.

IV. DISCUSSION

A trend seems to appear when looking at the three studies reviewed. It can be seen that the hypothesis could not be fully supported by any of the studies due to the lack of widespread research. This provides for uncertainty on whether art therapy is beneficial to depression and anxiety. Therefore, in order for the most accurate results and for this treatment to become standard, more studies must be conducted for the benefits to be solidified as fact. However, the results of each study did support the hypothesis by demonstrating positive changes in individuals who struggled with mental health. The results of the study did not show to be anomalous; there were no negative effects discussed in any of the studies reviewed.

Throughout each study, many variables may have significantly influenced the results of the studies. For instance, two studies reviewed had male and female participants with a substantial difference in quantity between the genders. There were far more female volunteers than males, and it is unclear why this may have occurred

Sample Size	Age	Race	Education	Psych medication
W-Experimental 98(76)	25-5 1	70% White 26% Black 4% Hispanic	46% HS or GED 15% some college	56% received medication
W-Control 29(20)	20-4 7	65% White 12% Black 12% Hispanic 12% Other	20% HS or GED 33% some college	43% received medication
M-Experimental 75(37)	22-5 0	61% White 31% Black 8% Hispanic	39% HS or GED 11% some college	77% received medication
M-Control 45(25)	24-5 1	61% White 28% Black 11% Hispanic	48% HS or GED 24% some college	69% received medication

Table 1: Demographics of the four participant groups. W: women; M: men. [1]

and if the effects on either gender vary. Furthermore, race, education, and income may affect the studies' results; however, these variables were not largely discussed among the studies reviewed.

V. CONCLUSION

Art therapy is a new coming alternative to traditional therapies that could introduce a new perspective to treatments of depression and anxiety. The method has been tested on individuals who have different mental conditions, and results have proven to have had positive effects. This therapy differs greatly from others in a way that allows patients to express themselves without the detrimental effects other therapies may have. A vast number of people could benefit from art therapy greatly, including children ranging in age from 2 to 17 who suffer from anxiety or depression. According to the CDC [4], 7.1% of children in this age range suffer from anxiety and are immediately presented with the sole option of psychotherapy which can be difficult to endure. Children who suffer from anxiety or depression may have difficulty communicating with adults and verbally expressing their emotions. It may be more beneficial for children to communicate their emotions through art on paper which would help a specialist understand the child's thought process and treat them more effectively. For older children, such as high school students, art therapy may allow them to disclose information without aggravating "feelings or ideas that might leave him [or her] vulnerable," as stated by Gussak [1] while discussing the benefits of art therapy. Thus, art therapy may be a better alternative for these individuals and could potentially be offered as therapy for many high school students struggling with mental health. This alteration is only one example of many where art therapy could be a more beneficial alternative to traditional verbal therapy. Unfortunately, studies regarding the effects of art therapy on children have not specifically targeted depression and anxiety. Thus, a low amount of information is accessible regarding the matter.

This therapy opens many doors for the use of art therapy in modern medicine and therapies for a variety of individuals of all ages and genders.

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¹ Author's name is originally in Greek, the version written in the citation has been translated (Ειρήνη Σκουφά).