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The Effects of School-Based Art Therapy on Depressed Adolescents

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The Effects of School-Based Art Therapy on Depressed Adolescents

by

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NURS 4500 Nursing Research and Senior Thesis

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Abstract

Adolescence is a time period for growth and development. It is the transitional stage between childhood and adulthood (Cleveland Clinic, 2023). Depression in adolescents is associated with deficient behavioral and health outcomes (Fletcher, 2019). Because adolescents suffer such consequences, it is important to treat depression when it is identified. The intervention for this issue that will be investigated is the use of art therapy. Art therapy has been shown to be effective in treating mental illness. Art therapy is a form of treatment that makes use of art media through creative processes to yield artwork. It improves an individual's well-being and functioning using reflection and self-expression (Haeyen, 2020). The purpose of this research proposal is to determine if art therapy executed in the school setting, decreases depression in adolescents. The literature review explores six research articles regarding art therapy's effects on adolescent depression and overall well-being. This research proposal includes a quasi-experimental design with a convenience sample of 124 depressed high school students randomized into a control group and an experimental group. The experimental group will receive the intervention and participate in school-based art therapy. Beck's Depression Inventory-II and The Scale of Positive and Negative Experience will be used to measure the participant's depression and overall well-being scores before (pre-test) and after (post-test) the completion of art therapy. Scores will be compared between the intervention and control group to obtain results.

Introduction

Depression is a mental health condition that negatively affects an individual's thoughts, actions, and feelings. A lack of interest in activities occurs, which can lead to a decrease in one's ability in daily functioning (Torres, 2020). Unfortunately, depression can affect younger age populations. In 2020, 17% of adolescents (4.1 million people) in the US aged 12-17 experienced

a major depressive episode (Substance Abuse and Mental Health Services Administration, 2021). Adolescence is a time period for emotional and physical development. It is the transitional stage between childhood and adulthood (Cleveland Clinic, 2023). It's often a stage filled with emotional instability, increased thinking, and difficulties with forming one's self-identity and self-esteem (Nair et al., 2004). Depression in adolescents is associated with deficient behavioral and health outcomes. This includes increased risk of substance abuse, disorderly behaviors, unsafe sex practices, anxiety, and violence (Fletcher, 2019). Because adolescents suffer such consequences, it is important to treat depression when it is identified.

There are mainstream options available to treat depression such as medication. However, there are non-traditional treatments that can aid adolescents with depression as well. Art therapy has been shown to be effective in treating mental illness. Art therapy is a form of treatment that makes use of art media through creative processes to yield artwork. It improves an individual's well-being and functioning using reflection and self-expression. This process includes an art therapist that guides and interprets the individual's problematic feelings using their artwork (Haeyen, 2020).

Problem Statement

Although art therapy has known benefits, it's not easily accessible to depressed adolescents in a school setting. In school settings, depressive symptoms are often linked to lower test scores and poor relationships among peers (Fletcher, 2019). There is limited research regarding high schools providing art therapy for their depressed students. Student's academic success depends on successfully treating their depression. Community health nurses take an upstream approach to issues. Therefore, they can play a vital role in advocating for the inclusion

of art therapy in high schools to provide adequate mental health support, which can ultimately improve their academic success and overall well-being.

Purpose Statement

After examining the current research on art therapy and determining the effectiveness in reducing and preventing depression, this research proposal will address the gap by implementing this therapy in the school setting. The purpose of this research is to study the effectiveness of art therapy on depressed adolescents in a high school setting, with the intent of decreasing depressive symptoms. Collaboration among community health nurses, art therapists, and school administrators will be required to carry out this implementation.

Problem Question

How will art therapy impact student's depressive symptoms in high school?

Literature Review

Depression symptoms in the youth often go unnoticed. Due to physical and psychological changes adolescents go through, withdrawal from their family can be misconstrued as a normal finding. As a result, parents often miss signs of depression (Monroe, 2014). Adolescents living with mental health challenges are susceptible to discrimination, health problems, stigma, social isolation, obstacles with their education, and partaking in risky behavior (WHO, 2021).

The following literature review explores art therapy as an intervention to decrease adolescent depression levels and increase overall well-being. Using the Dominican University of California Library database, articles used for this review were retrieved from CINAHL Complete, APA PsycInfo, and APA PsycArticles. With each database, keywords included “the effects of art therapy”, “adolescents”, “youth”, “high school students”, “students”, “art therapy

in school”, and “school-based art therapy” to find each article that relates to the topic. The criteria for articles to be included in this literature review include primary sources, systemic reviews, peer reviewed, and articles published in the last 11 years. A total of six articles were selected for this literature review and are organized under the following subheadings:

- Prevalence and impact of depression among adolescents
- Art therapy as an intervention for improving psychological outcomes and resilience among adolescents
- Perceptions and experiences of adolescent clients in art therapy within school settings

Prevalence and Impact of Depression Among Adolescents

The article in this category is based on general information regarding the prevalence and impact depression has on adolescents. Shorey et al. (2022) conducted a systematic review and meta-analysis to research the global prevalence of depression amidst adolescents. Seventy two quantitative studies from six databases were reviewed and included 324,859 adolescents from studies published in Asia, Europe, Africa, North America, Middle East, Oceania, and South America. Cohort, case-control, and cross sectional study designs were utilized. Studies inclusion criteria included: if the study sample focused on adolescents aged 10-19, if the study gave adequate information for the researchers to determine the prevalence of depression or elevated depressive symptoms, and if the prevalence rates of depression were calculated using self-report surveys, validated standardized tools, or clinically structured interviews. These studies were evaluated using Joanna Briggs Institute’s Critical Appraisal Checklist for Studies Reporting Prevalence Data. Studies were excluded if they used the following: parent-reported data, focused on a particular sample group, did not use a reliable and validated tool for the results, and if it included a patient sample (Shorey et al., 2022).

11 of the 72 studies focused on clinical depression (major depressive disorder and dysthymia) and 61 studies were on elevated depressive symptoms. The researchers found the global prevalence of major depressive disorder (MDD) to be 8%, dysthymia to be 4%, and elevated depressive symptoms to be 34% in the adolescent population. Researchers concluded that the prevalence of MDD in adolescents is higher compared to preceding cross-national studies that studied MDD in the general population (adults included) (Shorey et al., 2022). Researchers also found the percentage of adolescents with elevated depressive symptoms (34%), to be higher than university medical students (27%) (Tam et al., 2019) and university students (30.4%) (Ibrahim et al., 2012). Based on these findings, it's evident that depression is significant with adolescents and is a problem that needs to be addressed. Because this was a global study, language translation may have affected data accuracy. This limitation may have altered the researcher's findings if the participant's responses were not accurately translated to English.

In this article, the researchers emphasized how adolescents are often overlooked regarding their depression compared to the young adult population. Research findings showed that the prevalence of depression in this population is in fact higher than young adults. Due to this finding, it is necessary for further research to be conducted regarding depression detection methods within the adolescent population.

Art Therapy as an Intervention for Improving Psychological Outcomes and Resilience Among Adolescents

The articles in this category relate to the effects art therapy has on adolescents that are dealing with barriers in their life that prevent them from reaching their fullest capabilities. The following articles will discuss the effects art therapy has on ego-resilience, certain psychological symptoms, depression, anxiety, and the subjective well-being of adolescents.

Kim et al. (2014) conducted a study on depressed and anxious 1st year high school student's subjective-well being before and after participating in group art therapy with breath meditation. Participants were separated into three groups. Group 1 (n=8) consisted of the implementation of group art therapy with breath meditation. Group 2 (n=8) solely used group art therapy as an intervention. Lastly, Group 3 (n=8) is the control group where no interventions took place (Kim et al., 2014).

Students took the Beck's Depression Inventory and Anxiety test from one high school in South Korea. Twenty four students with higher depression and anxiety scores were selected for the study. The course was held weekly, for a total of 13, 80-minute sessions. A subjective well-being scale adapted by Campbell, Converse, and Rodgers (1976) was used to calculate the participant's well-being before art therapy (pre-test), after the art therapy course ended (post-test), and a follow-up test 12 weeks after the ending of the course (Kim et al., 2014).

After 10 sessions, adolescents in group one and two expressed themselves freely and had a new self image as a result of group art therapy. In addition they had significantly higher subjective well-being post-test and follow-up test scores compared to the control group. Group one had higher scores compared to group two. Group one follow-up test score was 5.58, while group two's was 5.00. Group three's follow-up test score was 3.01 (Kim et al., 2014). Overall, art therapy was used as a successful tool for the adolescents in the experimental groups. However, it is difficult to generalize this study's results because of a small sample size, in which all participants were male. In order to confirm the study's conclusions, more research on high school students needs to be done to find any gaps between genders.

Gürcan & Turan (2021) studied 60 hospitalized adolescents to evaluate the use of mandala drawing as an intervention for their anxiety, depression, and psychological symptoms.

A randomized controlled trial design was conducted in a hematology and oncology clinic in Turkey. The inclusion criteria required Turkish speaking participants with cancer aged 12-17 who were receiving cancer treatment. This study consisted of an intervention and control group. The intervention group (n=30) participated in 1-2 hour mandala drawing sessions while the control group (n=30) only received their usual routine care in the hospital. Two sessions of mandala drawing within a span of five days were conducted on the intervention group. The Hospital Anxiety and Depression Scale (HADS) and The Memorial Symptom Assessment Scale (MSAS-P) were used before (pre-test) and after (post-test) the 5 days to measure the results of the adolescents (Gürcan & Turan, 2021).

HADS scores in the intervention group were lower compared to the control group after five days of intervention ($p < 0.01$). This indicates that hospital anxiety and depression decreased with the use of mandala drawing sessions. Also, MSAS-P scores of the intervention group decreased, compared with the control group ($p < 0.001$). This means that the intervention group experienced fewer psychological symptoms such as difficulty concentrating, feeling sad, feeling irritable, difficulty sleeping, feeling worried, and feeling nervous, after mandala drawing sessions (Gürcan & Turan, 2021). Limitations in this study include the use of only two sessions. Furthermore, future studies should investigate the benefits of using more mandala drawing sessions on adolescents.

Kim et al. (2022) used a quasi-experimental design to study the effects of art therapy on Korean immigrants aged 15-25. Participants (n=25) from alternative schools were chosen with the help of teacher referrals to complete five sessions of art therapy. However, only 17 participants remained for the 3 month follow up (post-test). Nonetheless, to determine effectiveness of treatment on these participants, the Patient Health Questionnaire-9 (PHQ-9),

Generalized Anxiety Disorder-7 (GAD-7), Perceived Stress Scale (PSS-10), a visual analogue scale (VAS), and acceptability of the individuals were measured during the pre-test, post-test, and follow-up (Kim et al., 2022).

Researchers found that PHQ-9 ($p=0.006$) and PSS-10 ($p=0.03$) scores significantly decreased. Participants reported a reduction in depression and stress. GAD-7 (anxiety) scores lowered as well, but was not statistically significant ($p=0.233$). A VAS was used to measure satisfaction of the art therapy among each individual. Researchers classified each of the participant's responses as positive. For example, one participant said "it was a healing experience" (Kim et al., 2022, p. 126). Regarding acceptability, 78.2% of the participants stated that art therapy was a pleasant intervention for psychological stability (Kim et al., 2022). This study supports the beneficial effects art therapy has on youth. Loss of participants from this study is a limitation because there is a risk that the remaining sample is no longer representative of the population.

Jang et al. (2012) conducted research to determine if clay-based group art therapy increased the ability for adolescents to control their feelings. Researchers focused on 16 adolescents with a low socioeconomic status (SES) from an educational welfare program. These students were chosen based on recommendations from their teacher as needing psychological and emotional help. The adolescents were separated into an experimental group ($n=8$) and a control group ($n=8$). The experimental group participated in a clay-based group art therapy program which consisted of 18 weekly 80 minute sessions. The control group was given no intervention. The researchers used an ego-resilience scale to measure the ego-resilience. Ego-resilience is the ability for the participant to adapt to change and recover from stressful situations (Jang et al., 2012).

The experimental group showed a statistically significant increase in ego-resilience scores on the post-test and follow-up test compared to the control group's scores. Experimental group scores: 3.07 at pretest, 3.72 at posttest, and 3.38 at the follow-up test. Higher scores meant higher ego-resilience. One participant in the last session stated "It was fun. I am glad that I have learned something new, and working with soil, I think, makes people feel relaxed and comfortable" (Jang et al., 2012, p. 249). On the other hand, the control group's scores decreased as the study progressed. Control group scores: 3.09 at pretest, 2.81 at posttest, and 2.64 at the follow-up test. Overall, the therapy caused "emotional loosening and positive interactions among the participants, which led to the improvement of the interpersonal relationships among them" (Jang et al., 2012, p. 249). Such results indicate that the art therapy stimulated positive elements within the participants. A limitation to this study is the small sample size. Also, the experimental groups were separated into genders. This study may miss out on the nuanced ways in which gender affects art therapy outcomes and the individual experiences of the participants.

Collectively, these studies demonstrated the benefits of art therapy on adolescents undergoing mental and emotional barriers. The researchers emphasized the utilization of group art therapy as means for adolescents to identify any concealed negative emotions (Kim et al., 2014). Certain forms of art therapy are easy, nonpharmacological, safe, and low-cost (Gürcan & Turan, 2021).

Perceptions and Experiences of Adolescent Clients in Art Therapy Within School Settings

Art therapy in schools offers a wide range of support for the youth. It creates a support system for them and allows therapists to collaborate with teachers and staff, which lessens the adolescent's sense of isolation (Regev et al., 2015; Snir et al., 2018). Research shows a high correlation between student's emotional well-being and their social and intellectual success in

school (Paternite, 2005; Suldo et al., 2014; Gryglewicz et al., 2018). The environment of a school has a direct impact on a student's personal, emotional, and behavioral aspect of themselves (Fisher & Brown, 2018; Ogden & Hagen, 2018). Reduced risk behaviors can result from the school system's effective involvement, which includes parental and educational staff assistance (Wang & Fredricks, 2014). As a result, schools are important environments for identifying risk in certain students. Therefore, schools can be an appropriate setting for providing treatment (Dunne et al., 2017).

Harpazi et al. (2020) used principles of Consensual Qualitative Research (CQR) as a basis for obtaining results and analyzing data from 12 adolescent clients (ages 14-18) that have participated in art therapy in a school setting for more than a year, in groups or individually. Participants were from different school backgrounds: A regular educational setting, regular educational school for at-risk youth, special education school, and special education class with a regular school structure. Semi-structured interviews involving open-ended questions lasting from 20 minutes to one hour were conducted to receive subjective input from each participant. Examples of questions that were asked included “tell me what art therapy in school means to you”, “tell me about your relationship with the art therapist”, and “has being in art therapy affected your relationships with your classmates or with the educational staff?” (Harpazi et al., 2020).

After the interviews were conducted, all participants stated that art therapy was fundamentally a part of their weekly routine at school and contributed to their ability to cope with daily stressors. The participants were satisfied with their art therapy room and equipment, had control over what they wanted to do in their sessions, and felt comfortable about being in school-based art therapy. Adolescents described the therapy as a break from the normal school

schedule; “an hour to relax”. The majority of participants reported that they felt more eager to attend class on days where they had sessions. Most participants viewed art therapy as an important source of support for them: “It’s the greatest source of support you can give a person who is going through a social or educational crisis” (Harpazi et al., 2020, p. 7). Lastly, some participants reported feeling more confident as a result of therapy. Some discussed developing greater social bonds and self-expression, as well as a sense of an increased emotional resilience: “I’m not afraid to be hurt, I feel I can say whatever I want without hurting people, but I also need to talk. I have to talk; I have to express myself” (Harpazi et al., 2020, p. 7). Limitations include using an adolescent population who have already participated in art therapy for at least a year. They may already have a positive perspective on therapy due to their experience.

Overall, the findings from the above literature review indicate high satisfaction among the youth regarding the use of art therapy in a school-setting. Due to the lack of research, school-based art therapy for adolescents must be studied more in order to examine the efficacy of current study’s results. Accessibility and sustainability of art therapy are key components that should be explored more in order to implement successful art therapy programs in school-based settings.

Theoretical Framework

Erik Erikson’s stages of development is an approach used to understand different age ranges at a psychosocial level. Each of the eight stages within this theory corresponds to a different age range. Each stage is characterized by a specific challenge that the individual must overcome in order to progress to the next stage. Fulfilling each stage’s requirements is believed to form a healthier personality and greater ability to cope with conflict. Failure to complete a

stage decreases the chances of completing further stages, possibly leading to a more unhealthy sense of self (Mcleod, 2022).

The focused stage for this research is the adolescence stage; the fifth stage of the theory. This consists of individuals aged 12-18. The goal of this psychosocial stage is for adolescents to self-reflect on their current state in order to create an identity for themselves. Exploration of other possibilities in their life is encouraged and can ultimately assist them with forming their identity. An adolescent may examine their hypothetical role as an adult based on the outcomes of their explorations. Failure to create an identity for themselves results in role confusion. Those who are unsuccessful in completing this stage are unsure of who they are and what their role is in society. They may feel overwhelmed with their responsibilities and expectations. This serves as a barrier for establishing their identity. Experimenting with lifestyle changes can provide assistance to reach this stage (Mcleod, 2022).

Erickson's theory and the nursing metaparadigm both focus on the individual's psychological, social, physical, and spiritual needs in order to progress in development. Nurses can provide guidance to adolescents during this time period to assist with their growth.

Having knowledge of how adolescents operate in this stage will provide better insight into this study, allowing a greater purpose for the art therapy. Art therapy sessions can be catered towards the adolescents to make it relevant for them. These sessions can be framed in a specific way, based on the main ideas from Erik Erikson.

Research Design

This study will be conducted as a quasi-experimental quantitative research design. To recruit participants, flyers with pertinent information will be posted throughout the high school, and emails will be sent to the student's school email addresses. Once 124 students have been

recruited, they will be randomly separated into a control and experimental group. The experimental group will participate in school-based art therapy, taught by an art therapist. Different forms of art activities such as drawing, painting, and coloring will be available to the students to provide a range of options for them to fully express themselves. Weekly one hour sessions will be held for eight weeks. The control group will not participate in these sessions. The independent variable in this study is the art therapy sessions. The dependent variable is the student's depression and overall well-being scores.

The convenience sample size will consist of 124 depressed high school students from Terra Linda High School. The study population will consist of high school students aged 12 to 18 with depression or depressive symptoms. Exclusion criteria will include students who regularly partake in art therapy.

The Scale of Positive and Negative Experience (SPANE) will be used to measure their subjective well-being, and the Beck's Depression Inventory-II (BDI-II) will be used to measure their depression. SPANE is a self-reported 12-item rating inventory that asks the subject to rate how frequently they experience various feelings. Examples of such feelings include "pleasant", "good", "bad", "joyful" and "angry". Rating for each feeling is as follows: 1 = very rarely or never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = very often or always. SPANE has been evaluated for reliability and convergent validity (Diener, 2009). BDI-II is a self-reported 21-item rating inventory that measures characteristics and symptoms of depression. An example of one unit on this scale focuses on sadness. Rating is as follows: 0 = I do not feel sad, 1 = I feel sad much of the time, 2 = I am sad all the time, and 3 = I am so sad or unhappy that I can't stand it (Beck, 1996). The BDI-II shows evidence of convergent validity and adequate reliability

(Toledano-Toledano, 2018). Both questionnaires will be completed before the art therapy program starts (pre-test), and after completing all eight sessions (post-test) to be used as data.

Data Analysis

Descriptive statistics will be used to look at the participant's depression and subjective well-being scores. Pre-test scores will be compared to post-test scores. Data from the experimental group will be compared to the control group to assess the effectiveness of the school-based art therapy intervention. A t-test will be utilized to analyze the differences between the two groups, and to ultimately determine if the hypothesis has been supported. For this study, a p-value of $p < 0.05$, will mean the scores between the groups will be significantly different from each other, and such differences did not occur by chance.

Limitations

Eight weeks may not be enough time for the students to establish trust with the art therapist. This can prevent students from feeling comfortable sharing their true feelings and opinions about the art therapy sessions. Also, eight weeks of intervention may not be enough to see long-term benefits in the students. Lastly, students may withdraw from the program. This will affect the data and results of the study if this instance occurs.

Ethical Considerations

IRB pending approval. All participants will receive a written informed consent prior to starting the study. Participants under the age of 18 require a parent or guardian signature. Students are able to withdraw from the study at any time. All collected data will be protected and personal names of the participants will not be used to ensure confidentiality.

Conclusion

The goal of this proposed research was to explore the use of a non-traditional treatment on a vulnerable population. Art therapy is not commonly used on depressed adolescents. However, researchers have demonstrated the benefits of art therapy on adolescents undergoing mental and emotional barriers. More specifically, art therapy in a school setting can assist students in need. Using the research studies, it was learned that schools are important environments for identifying risk in students. Early detection is key in this population group, as adolescents with depression can carry such challenges into their adulthood, ultimately affecting their life in the long run. In future studies, the availability and accessibility of art therapy should be analyzed in order to research how art therapy can be effectively carried out in schools. Nurses can provide guidance to adolescents during this time period to assist with their growth. Furthermore, nurses can play an important role in advocating for the inclusion of art therapy in high schools to provide further support to improve an adolescent's current state.

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Appendix A

Literature Review Table

Authors/Citation	Purpose/Objective of Study	Sample-Population of interest, sample size	Study Design	Study Methods	Major Findings	Strengths
<p>Shorey, S., Ng, E.D. and Wong, C.H.J. (2022), Global prevalence of depression and elevated depressive symptoms among adolescents: A systematic review and meta-analysis. <i>Br J Clin Psychol</i>, 61: 287-305. https://doi-org.dominican.idm.oclc.org/10.1111/bjc.12333</p>	<p>To examine the global prevalence of major depressive disorders, dysthymia, and elevated depressive symptoms among adolescents.</p>	<p>Adolescents aged between 10 and 19. 72 studies were used for this meta-analysis. Studies had sample sizes ranging from 88 to 95,856 participants. 11 of the studies focused on clinical depression (MDD and dysthymia). 61 studies focused on elevated depressive symptoms. Studies were mostly published in Asia, followed by Europe, Africa, North America, Middle East, Oceania, and South America.</p>	<p>All articles are quantitative. Cohort, case-control, and cross-sectional study designs were included.</p>	<p>A systematic review and meta-analysis was conducted. Six databases were used to find studies. Two reviewers independently screened the eligibility and quality of each study. A third reviewer was involved if there were any discrepancies.</p>	<p>Female adolescents have a higher prevalence of elevated depressive symptoms than male adolescents. Adolescents from the Middle East, Asia, and African regions have a higher prevalence of elevated depressive symptoms. 34% of adolescents globalled (aged 10-19), are at risk of developing clinical depression.</p>	<p>The studies that were in the meta-analysis only <u>depressed adolescents</u>. prevents overgeneralization. my targeted population. Depression was the main being focused on, and it is the focal age group.</p>

<p>Kim, S., Kim, G., & Ki, J. (2014). Effects of group art therapy combined with breath meditation on the subjective well-being of depressed and anxious adolescents. <i>The Arts in Psychotherapy</i>, 41(5), 519–526. https://doi.org/10.1016/j.aip.2014.10.002</p>	<p>To investigate the effects of group art therapy, including breath meditation on depressed and anxious adolescents.</p>	<p>24 first-grade high school male students (aged 15-16) in South Korea who scored more points in depression and anxiety on the Beck’s depression inventory and anxiety test.</p>	<p>Cross Sectional Study</p>	<p>The study tool utilized was the subjective well-being scale of Han. ANOVA was used to analyze the effect of subjective well-being. The students were separated into 3 groups. Group 1: group art therapy combined with breath meditation. Group 2: group art therapy. Group 3: a control group. Group art therapy with breath meditation was implemented for 80 minute sessions held once to twice a week, for a total of 13 sessions. A pre-test, post-test, and follow up test was conducted to gain insight from the participants.</p>	<p>Post-test and follow-up test showed higher scores in group 1 than in group 2. And higher scores in group 2 compared to the control group (higher scores meant a more positive subjective well-being). Overall, groups 1 and 2 had significantly higher scores in post-test and follow-up test than the control group.</p>	<p>Article contains much subjective and objective data about the participants' reaction to the therapy.</p>
<p>Jang, H., & Choi, S. (2012). Increasing ego-resilience using clay with low SES (Social Economic Status) adolescents in group art therapy. <i>The Arts in Psychotherapy</i>, 39(4), 245–250. https://doi.org/10.1016/j.aip.2012.04.001</p>	<p>To examine the effects clay-based group art therapy has on the ego-resilience of low socioeconomic status adolescents.</p>	<p>16 adolescents in an educational welfare program in a province in South Korea. 8 males and 8 females.</p>	<p>quantitative study design</p>	<p>Ego resilience scale was used to measure the results. A high score on the scale means high ego-resilience. The participants were split into 2 groups, an experimental group and a control group. 18 weekly 80 min sessions in a middle school educational welfare room.</p>	<p>Clay-based group art therapy had positive effects on ego-resilience of low SES adolescents. The mean scores of the experimental group increased from 3.01 at pretest, to 3.72 at posttest. But, the mean score of the follow-up test was 3.38. The mean scores of the control group decreased from 3.09 at pretest to 2.81 at posttest, and to 2.64 at the follow-up test.</p>	<p>A lot of observation comments were made about each session as the sessions progressed.</p>

<p>Harpazi S, Regev D, Snir S and Raubach-Kaspy R (2020) Perceptions of Art Therapy in Adolescent Clients Treated Within the School System. <i>Front. Psychol.</i> 11:518304. doi: 10.3389/fpsyg.2020.518304</p>	<p>To explore the issue of adolescents' perceptions of art therapy in school, from their point of view as clients.</p>	<p>12 adolescent clients aged 14-18. 8 girls and 4 boys. They all had taken art therapy sessions in a school setting for more than a year by themselves, or in groups. The participants were enrolled in 6 different schools from different areas in Israel. 3 from a regular educational setting, 5 in a regular educational school for at-risk youth, 2 in special education classes within a regular school framework, and 2 from a special education school.</p>	<p>Qualitative study design</p>	<p>The methodology and data analysis were conducted according to the principles of Consensual Qualitative Research (CQR). Interviews are examined by at least three judges. They have to make an agreement regarding the main ideas from the interviews for data analysis. Researchers used interviews to gain perspective from the adolescents about their experience with art therapy.</p>	<p>A few participants stated that art therapy was an hour of talking or fun without any mention of therapy. Some stated they did not have clear expectations. Some had goals they set for themselves in therapy, while others struggled to describe their goals. All participants were satisfied with the art therapy room and the equipment available. All felt comfortable about being in art therapy at school. Most participants described art therapy as helping them reduce their emotional burden. It decreased feelings of loneliness. Art therapy is a solid source of support that can be used in schools as it allows an increase in self-confidence. All participants described art therapy to contribute to the effectiveness of their coping abilities.</p>	<p>This article contains information about adolescents who partake in art therapy for a year. This allows the participants to be very familiar with what they're discussing in their interviews.</p>
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<p>Gürcan, M., & Atay Turan, S. (2021). The effectiveness of mandala drawing in reducing psychological symptoms, anxiety and depression in hospitalised adolescents with cancer: A randomised controlled trial. <i>European Journal of Cancer Care</i>, 30(6). https://doi.org/10.1111/ecc.13491</p>	<p>To evaluate the effectiveness of mandala drawing on anxiety, depression, and psychological symptoms in hospitalized adolescents with cancer.</p>	<p>60 hospitalized adolescents ages 12-17 in hematology and oncology clinics in Turkey. All participants were diagnosed with pediatric cancer, were receiving cancer treatment, and can write, speak, and understand Turkish.</p>	<p>Quantitative study design</p>	<p>A randomized controlled trial design with repeated measures was conducted.</p>	<p>Mandala activity improved the severity of psychological symptoms in hospitalized adolescents with cancer.</p>	<p>The study includes more people. results are easily interpreted using only 2</p>
<p>Kim, S.-Y., Lee, Y.-O., Lee, S.-Y., Kim, M. S., & Choi, H. (2022). Art therapy for immigrant Korean youth: Indications of outcomes, acceptability and satisfaction. <i>International Journal of Art Therapy</i>, 27(3), 121–129. https://doi.org/10.1080/17454832.2022.2066144</p>	<p>To determine indications of psychological outcomes, acceptability, and satisfaction of art therapy among Korean immigrant youth.</p>	<p>25 immigrant youths aged 15-25 who attend alternative schools in the Republic of Korea. 7 participants were lost during the follow-up stage due to returning to their home countries, or transferring to other schools.</p>	<p>Quasi-experimental design</p>	<p>Group art therapy was provided once a week for five weeks. Each session was 90 minutes long. 2 qualified art therapists conducted the sessions. Pre-tests, post-tests, and follow-ups were conducted as a paper and pencil interview.</p>	<p>Participant’s depression severity decreased significantly after art therapy. Follow-up results: effects of art therapy were maintained. Anxiety severity did not change significantly after art therapy. Stress was reduced significantly, but the follow-up revealed that this effect was not sustained. 79.2% of the participants found it useful and 78.2% found it enjoyable.</p>	<p>Multiple scales were used to measure anxiety, stress, satisfaction levels, acceptance of the subjects. Follow-ups were included.</p>

