

Art Therapy & Student Stress

IDST 490

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Abstract

From the mid-1940s to the 1950s, a group of women created and founded the theory of art therapy, a concept where the arts, between various mediums or materials, met with therapy to create both therapeutic and palliative effects. This independent study aimed to determine the effectiveness of using an art-related intervention as a form of treatment for stressed-out college freshmen and sophomores. There were both treatment and control groups, where college freshmen and sophomores were eligible for participation. Participants signed up for hour-long “intervention sessions”, randomly assigned to work with clay or watch a calming video instead. Participants completed a survey analyzing their level of stress at the present moment, both at the beginning and at the end of the intervention. Following this, participants participated in “focus groups”, which are used to collect opinions and feedback, either talking about the artwork or the video. Results found that there is a difference between participating in an art intervention and watching a video. Creating art was more effective in relieving academic stress.

Keywords: art therapy, college stress, students

Introduction

As students enter college, they face many different types of decisions. Some of these decisions include their choice of major, social judgments, and extracurricular involvement. When students make their choices, they may experience academic stress. For example, deciding if college is truly the right choice for them. One of the most common areas that students feel stressed about is academics. Because college courses require students to be more proactive and independent in their studying and learning habits, students may become more stressed. Academic stress levels may differ depending on the class year because of the different experiences that each level may have to make. For example, college freshmen just entered college and may not be used to the fast-paced environment that college has, and may have to make up new habits to properly adjust and earn good grades. However, college students, no matter if they are freshmen or sophomores, may face different stress levels during college. The current exploratory student examines the effects that either an art intervention or an alternative assignment as it relates to college underclassmen's academic stress levels.

Literature Review

Theory and History of Art Therapy

Over the years, the concept and theories surrounding art therapy have shifted and changed over time. Beginning around the year 1752, the first psychiatric mental hospitals were introduced to treat those with mental illnesses. In her master's thesis, Natalie Wallace (2014) writes about the evolution of treating mental illness, stating that the rise of moral treatment began in the late 17th century. At the time, a Frenchman named Philippe Pinel started this process, first by giving patients access to several things, including books and music, as well as talking with

them to find out why they were struggling, and this allowed improvements (Wallace, 2014). His work in introducing a specific psychological treatment made him a prominent figure in the psychiatry field, especially in France. In the beginning, psychiatric mental hospitals were seen as revolutionary systems, and physicians treated patients. Pinel expressed and highly emphasized that the physician must help get the patient engaged in treatment, as well as understand the natural history of the illness a patient may have and based on that knowledge, make a case history (Harris, 2006). Other forms of creative expression such as reading and writing were used as tools of psychiatry in the 1700s. Before this, however, individuals who had a history of mental illness were put in jails and not cared for by their own families. Beginning in the 18th century, the introduction of moral treatment began to circulate in the Americas, at least until the start of the Civil War. Later, certain medicines were prescribed and more treatments were discovered, one being electroshock therapy. These continued up into the 19th century when more recent types of treatment were introduced to patients, including a client-centered approach, group therapy, family therapy, etc (Wallace, 2014). Nowadays, the same approach is used, but it varies depending on the client.

Continuing into the mid-19th century, a London native named Adrian Hill was among one of the first few people to coin the term “art therapy”, when he saw the advantages drawing had on the healing process while he was hospitalized for tuberculosis. The idea of art therapy continued, where Margaret Naumberg, among four other women, also made contributions to recognizing art therapy. Influenced by Sigmund Freud’s work, she used his theory of the unconscious being more important than the conscious to highlight that people could express their unconscious thoughts by creating art. The overall mechanism of art therapy works because it allows a sense of peace to distract the mind and bring forth what might be making a patient

anxious. Naumberg is thought to be the primary person responsible for creating theories and practices for art therapy; beginning in the 1930s (“Art Therapy in the 1900s”, 2023). She held a belief that a sense of healing could be reached when using a sense of symbolic expression (i.e., the art being created at the moment), as well as cognitive and verbal instructions in a session. This could bring about the beginning of finding a sense of peace (“Art Therapy”, 2009).

The official definition of art therapy is to address issues such as mental health, by using “art materials and the creative process to explore emotions, reduce anxiety, increase self-esteem, and resolve other psychological conflicts.” According to the American Art Therapy Association, art therapy is an effective treatment for people, because making art while undergoing therapy can be a way to get a sense of personal insight about oneself in addition to healing (Mitchell, 2013). The idea is that healing via a means of using certain mediums attuned to what one prefers can bring about good results and one can learn more about themselves in ways one might not have known were possible.

Art therapy has several mechanisms that are critical for it to be effective in treating patients. Some mechanisms may include the overall relationship between the therapist and client and art-making in general (creation, observation, meaning behind it, etc) which can help lead to change and proper insight. In their study, Bosgraaf and colleagues did a study analyzing specific mechanisms of change, and they found eight subcategories; some being “art therapy as a way of becoming aware of oneself” and “art therapy as an integrative activation of the brain through experience.” 411 participants participated and were children or adolescents ages 2 to 20 years old. Similarly to this current study, they also used treatment and control groups but instead looked at the means and forms of expression, behaviors in therapists, and mechanisms. They found, amongst the subcategories, that the most-reported ones were that of art therapy as a form

of expression to reveal what is inside”; “art therapy as a form of exploration,” and “art therapy as an easily/safe accessible intervention.” Overall the mechanisms surrounding art therapy are seen in interventions of the therapist’s behavior, and it mostly highlights the beginnings of impact and enabling change and insight in a patient (Bosgraaf et al., 2020).

To practice art therapy, one doesn’t necessarily need an art background; there just has to be a willingness to experiment and explore. Of course, one may prefer different types of materials, whether that be related to using a computer program such as TinkerCAD for creating 3D art or AdobeBridge can be used to edit and preview photography. Despite this, a master's degree is required as well as a credential known as an ATR, which means that one is registered and qualified to do art therapy. In addition to how therapists and counselors assess many different patients, every approach to reaching the beginning of healing varies. Art therapists do not technically interpret one’s art, but mostly the goal of the matter is to find a sense of personal meaning (Mitchell, 2013).

Understanding how academics have an impact on mental health or other related matters in college students is important because it highlights a large number of possible concerns within the college environment. These concerns can range from many factors, whether that be mental, physical, or emotional. As a result of stress, college students often struggle with different obstacles when it comes to just starting and figuring out what they truly wish to do as a career. By exploring the impact that art therapy has, the general population can better understand why it can be another possible tool in the toolbox to relieve pressures off students’ shoulders.

College Stress

Previous studies have found that college students are often stressed, particularly at the beginning of their college career (Abbot, 2022; Care, 2019). For example, Abbot (2022)

analyzed statistics surrounding college freshmen and stress. According to the American College Health Association, around 45% of college students stated they have felt high levels of stress, while 12.7% of students felt greater accounts of stress while at school (Abbot, 2022). However, the levels of anxiety and stress vary depending on what year students are in. For example, freshmen and sophomores must make choices relating to their major and learn to manage time efficiently, while juniors and seniors may be thinking about life post-undergraduate; whether that be entering the workforce, or attending graduate school, amongst other things. In particular, college freshmen have a different type of stress. Perhaps it is their first time living away from home, so at least 69% of students experience a sense of homesickness, coupled with little to no connections or friends, which can affect mental health and academic performance. In addition, many students can have issues sleeping. According to a study conducted in 2017 on college freshmen, anxiety levels would rise and surmount, especially during final exams (Abbot, 2022). A study conducted by Lee and colleagues (2021) analyzed the use of mental health services during the COVID-19 pandemic. They found that more than 75% of their participants, were in moderate to severe levels of stress. However, they also found that many of their participants did not utilize mental health resources, both on and off-campus (Lee et al., 2021). In addition to these other strains that can lead to anxiety and stress, it is also perfectly normal to worry, given that freshmen are moving from a high school mindset to a college mindset, and some may even find the transition to be difficult (Care, 2019).

Another thing to consider when relating to stress among college freshmen and sophomores is the greater likelihood of dropping out or transferring. Gholami and Tracter wrote an article on the idea that dropping out and transferring explains a lot of the return to college later in life. In one particular part of the study, they analyzed students at two-year colleges and

four-year colleges. Results found that “the lower a student’s belief is about her academic ability, the higher the chance of her dropping out.” In addition, they found that sometimes, maybe the time isn’t right for them to attend a four-year college, and thus do community college.

Oftentimes, it is ultimately the problem of expenses and then simply transfer with accumulated credits Overall, the idea is that there are a lot of factors to consider when it comes to academic stress (Gholami & Trachter, 2022). Some students may find that college was never for them, so they may decide it is not worth sacrificing mental health for academics. Others found it to be difficult, especially in the unexpected. According to an article written by Michael T. Nietzel for *Forbes* magazine, almost 100,000 students transferred during the 2021-22 academic school year. Before that, in the first year of the pandemic, transfers were up to 200,000, and in the academic year before the COVID-19 pandemic, nearly 2.2 million chose to transfer (Nietzel, 2022).

Another article written by Dr. Imed Bouchrika states that at least 30% of the total dropout rate consists of college freshmen. In 2019, half of Americans between the ages of 25-30 only had “some college credit” but not a complete degree (Bouchrika, 2022). Even so, some students feel that they need more time to figure out what they want to do, so may take a year off to find out what it is they want to do. This is especially true for high school and college seniors, as sometimes maybe college or graduate school is not in their best interest or they have financial issues, high expectations, etc. but it all comes down to a person as to who they are and want more than anything. A gap year can have both positive and negative effects, with some seeing it as the opportunity to figure things out, and others finding it more negative. Some students choose to never go to college at all simply because of the cost it takes to attend. In a recent study consisting of over 1,500 students between the ages of 18-30, 38% of students chose not to attend college due to the surmounting costs of college, 27% thought college would be too stressful,

26% believed entering the workforce was more important, and finally, 25% did not have much certainty in what they wanted to pursue as a career (Weissman, 2022). Overall, any person has the freedom to choose whether or not they should attend college, although the benefits of doing so can open the door to many job opportunities and a sense of living a life of significance.

Art Therapy as an Effective Intervention for Stress

As stated previously, many art therapists find different approaches to assessing patients in helping them find a sense of healing. So perhaps 3D art would not work for someone who finds it better to paint in 2D contexts. The many aspects relating to art therapy are endless, as the mediums or materials used can vary. Many of these revolve around the usual drawing, painting, and sculpting, but can also incorporate other senses of art, such as moving around. Dancing, acting, writing, or taking photos can be considered as well (Nash, 2022). The idea of dancing and acting can relate to drama or play therapy, and photography can be considered “phototherapy”. A person practicing play therapy could do several things, whether that be working backstage, performing, directing, etc., but overall, can embody the wants and desires of a character that they may relate to. Overall, a sense of purpose is given, and people can find meaning in what is right for them.

Art therapy has had positive effects on some people. Blomdahl and colleagues (2016) and Carbrey (2019) were among some contributors in talking about the positive aspects that came from art therapy in their respective studies. Blomdahl and colleagues’ study analyzed what art therapy experts thought were the main aspects of art therapy for patients with depression as well as talked about the good things that came with it. Positive outcomes of art therapy continued in the long term, where patients improved their well-being, and either adjusted or changed their daily routines. In addition, they found that activity performance improved and that working with

art can help integrate difficult emotions by putting it in a piece of art, in the hopes that it would increase the coping and healing process. In creating art, patients have the opportunity to understand themselves better, reflect on past experiences, and find a sense of purpose via means of self-exploration and the use of symbols in the art creation process (Blomdahl et al., 2016). To add to the positive side, Carbrey highlights the importance of releasing repressed emotions, specifically if a patient had been a survivor of some sort of past trauma. She also spoke about it being effective for people who suffered from personality disorders, and insights came from a wide number of things, including feeling without words and experiencing instead of avoiding (Carbrey, 2019).

However, despite there being positive outcomes, there is also a negative side to the process. While art therapy is by no means meant to be harmful, some feel it to not be beneficial. In a study, several participants found the experience to be fake, others found it self-indulgent, and others just simply didn't like it. The more pressing matters that could result from art therapy were more anxiety and more emotions that continued to still be unresolved. However, these findings were only seen across only two studies involving patients who were diagnosed with cancer (Uttley et al., 2015). Another thing is that art therapy is not for everyone. While there isn't necessarily a requirement to be a professional artist, some people find themselves to not be creative or artistic enough to begin the process of using it as a therapeutic process. Art therapy may or may not be effective for everyone with different variations of mental health (Cherry, 2022). In the same way that a psychiatrist may be prescribing medication, sometimes it is not as effective as stated, and this is an indication that there must be another solution to the problem.

The effectiveness of art therapy has different perspectives. In a study conducted by Regev and Cohen-Yatziv (2018), they analyzed the effectiveness of art therapy using adult clients. In

their analysis of previous literature, they found that there was only one control group as well as only one randomized group. The researchers aimed to define what was “effective” and why people viewed it differently. The other aspect they noted was that the field of art therapy is still fairly young, and while it developed in the 17th century, it wasn’t until the 1950s that it was officially recognized and practiced more. Art therapy has also had problems with what is defined as effective; in their study, Regev and Cohen-Yatziv described it from another source as it being “the attribute of an intervention or maneuver that results in better than harm to those to whom it is offered” (Hill et al., 1979). To continue, their meta-analysis found that some studies on clients who were suffering from psychosomatic disorders, eating disorders, personal crises, and such were not as effective, as there weren’t enough studies to prove it being effective, at least for those types of disorders. As a general therapeutic intervention, they stated, was not going to be as effective just in a single session. The problems surrounding art therapy are that it is not going to be as effective for some people, such as those who may be suffering from schizophrenia and dementia (Regev & Cohen-Yatziv, 2018).

To that end, art therapy is generally misunderstood. Contrary to what some people may think, art therapy is not just simply “drawing your feelings”, as professionals are trained to help guide people toward the light at the end of a dark tunnel. To debunk some of the misconceptions and myths surrounding art therapy, Deepti Guruprasad (2020), highlights some major reactions that come about when talking about art therapy to those who are not as familiar with it. Some myths include that art therapy is like an art class, making art to feel good, the practice is only for children, and that art therapy cannot help with every mental health issue. Gurusprasad talks about how it is not like an art class, the idea is to make a representation of something, and there is no right or wrong way to approach it. Art therapy has a lot of applications, art can be used *as*

therapy, or there can be art *in* therapy; art therapy can be applied across all age groups, as anyone from young children to the elderly can participate and benefit from it; and finally, art therapy can help those dealing with a wide range of mental health issues, but in addition to that, those who are licensed art therapists can work in a variety of settings, like hospitals, private practices, and schools (Guruprasad, 2020).

Gaps in Literature

Previous studies have analyzed children, adult clients, and college students (Abbot, 2022; Bosgraaf et al., 2020; Care, 2019; Regev & Cohen-Yatziv, 2018). In addition, some sources have briefly touched upon the actual effectiveness of *why* art therapy works or doesn't (Cherry, 2022; Regev & Cohen-Yatziv, 2018). One source used a form of the GAD-7, or the Generalized Anxiety Disorder scale (Lee et al., 2021). While the current study does indeed analyze college students, there is a more narrowed-down focus on freshmen and sophomore students. The effectiveness of art therapy is discussed with participants, and there is a different form of stress scale. The current study provides more information on the *how* and *why* of art therapy and why it can be an effective therapeutic tool to use. While this study analyzes students at the height of a stressful event, such as exams, it can also hopefully be applied to many other aspects of life, and not just academics.

Current Study

The current study analyzes whether or not an art form of intervention (whether that be creating something out of clay or watching a calming but interesting nature documentary) is capable of reducing college students' stress, especially during exams. To address this, the researcher asked the following question: Does an art intervention help alleviate or have therapeutic aspects on college freshmen and sophomores? Based on previous literature, the

researcher hypothesized that there is a significant difference in stress levels before and after an art intervention.

Methods

Participants

The current exploratory study's sample included 17 college students; 11 freshmen, and 6 sophomores. More than half of the participants identified themselves as White / Caucasian (76%), with the remainder of participants identifying themselves as being Black / African-American (12%), Hispanic or Latino (6%), and Asian / Pacific Islander (6%). A majority of participants were aged 19 (59%), with the others stating they were 18 or 20 years of age (41%). Majors or intended majors consisted of a wide variety across the board, including communication, musical theater, criminology, environmental studies, and even an intended double major. Freshmen and sophomores were analyzed due to the higher likelihood of dropout rates and higher stress levels particularly when they have only just come to college and are not used to the fast-paced environment.

Procedures

The researcher purposefully scheduled the interventions to occur simultaneously during midterm exams week at a small liberal arts university in Southeast Virginia. Participants were recruited using a flier the researcher created or were used as an opportunity to gain extra credit for classes that the researcher's advisor taught. In addition, participants were given the chance to win a \$10 gift card to Starbucks for their participation. The participants were divided into two different groups; either the treatment or the control. The treatment group was involved in a 45-minute long creative arts expression session, whereas the control group was involved in a 45-minute long relaxing nature documentary.

Before participating in either one of the two interventions, participants were asked to take an intervention survey through Google Forms analyzing their current level of stress at that very moment. Following the specific intervention, participants were given a post-intervention survey, again through Google Forms, consisting of the same questions from the intervention survey, but analyzing the after-effects of their current stress level following the intervention. The researcher wanted to analyze if participants' stress levels changed because of either an art intervention or watching a documentary.

The researcher collected the data in two different parts. Part 1 consisted of either a creative expression intervention, where participants either worked with clay after being given a prompt or watched a Planet Earth nature documentary. They were also informed that participation was voluntary and that all responses would be kept confidential and used for scholarly purposes. Each participant was allowed to not participate. Questions were based on the Likert scale from responses to "A lot" to "Never". Questions included the prompt: "As of right now, at this very moment, have you felt..." and was followed by feelings, such as "Strained", "Confident", and "Swamped by your responsibilities." The "Confident" question out of the 22 was pulled from the dataset due to it having a more positive connotation, as compared to the others which were more negatively connotated.

Part 2 of the study consisted of focus groups; where participants were invited back to answer questions related to the intervention. Before engaging in a discussion that lasted up to half an hour, participants filled out a Google Forms survey relating to demographics (including their year in college, race, age, major or intended major, parents' estimated annual income, and relationship status). The focus groups consisted of the researcher putting together a brief slideshow showing their clay creation and asking question prompts about academic stress. The

participants who participated in the creative expression intervention (that is, working with clay) were invited back, and participants who watched the nature documentary were not asked to participate but were instead asked to complete the demographic survey.

The researcher ultimately was using these procedures to collect quantitative and qualitative data, as described below. The quantitative side approached the statistical significance of the data, as well as comparing pre-intervention and post-intervention survey averages, finding a test difference, and running tests in IBM SPSS. The qualitative side approached the focus groups and looked more extensively at transcripts of the recordings that were completed a month after the interventions were given. The researcher read through the transcripts to find keywords highlighting feelings of anxiety, calmness, etc. Based on these findings, or codings, the researcher then ran a thematic analysis to create a written context and give a sense of conclusion as to how and why the focus groups were necessary for this exploratory study.

Quantitative Data

When putting together all the data, the researcher changed all the responses that participants gave in the pre and post-intervention survey to a numerical context, to make it easier to find averages. This was to make it easier for the statistics software IBM SPSS to interpret because it would not easily interpret words. If a participant responded with “A lot”, it was changed to 5, “Very often” was changed to 4, and so on. When the researcher changed their responses, the data was then calculated to become a total; which would ultimately be divided by 22, which was the number of questions that the survey asked. The researcher ultimately chose to include a question that had a more positive effect, which was “Confident”. Participants’ responses were originally collected in Google Sheets, and after the numerical conversions, were changed into a Microsoft Excel sheet. Because the researcher had two intervention surveys, there

had to be two averages to consider. The researcher had to create two new variables, one titled “PreTestAvg” and the other “PostTestAvg”. With these two new variables, the researcher could examine the differences between what happened to participants’ stress levels. However, the researcher had to categorize the treatment and control groups. So the control group was intentionally given 1 and the treatment was given 2 for their coded groups. These numbers had no impact on the data as they were only used to separate possible issues if the data had been analyzed altogether.

After the creation of the two new variables, as well as the categorization of groups, the researcher then conducted the following tests. The first was a Frequencies test, where the researcher also had to make a third new variable called “TestDiff”, but the more important test was an independent sample t-test (See Table 1 for the full graph). The researcher also conducted a Cronbach’s alpha reliability test for the survey, because a majority of the questions the researcher asked participants were pulled from tests that were not likely assessed for reliability. Despite this, the researcher found that this version is a reliable measure ($\alpha = 0.949$) by running a reliability analysis through IBM SPSS.

Qualitative Data

The purpose of running qualitative data analysis was to provide context for the quantitative data. The researcher conducted 30-minute focus groups for both of the treatment groups. The researcher gave participants the chance to talk about their thoughts and feelings regarding the creative experiences as a way to destress. The researcher used guided questions to start the conversation, and the participants were able to reflect on the experience. The focus groups were recorded using VoiceNotes on the researcher’s mobile phone and then put through Otter.ai to transcribe.

The data were analyzed by coding. The researcher first highlighted specific keywords relating to the therapeutic aspect that the art intervention had on participants. After finding them, the researcher categorized these quotes under particular themes. For example, if someone talked about an event in their childhood, it was put under the category of “childhood nostalgia”. The themes that emerged from the transcripts included *stressors*, the *effect of the medium*, and *being in the moment*. Overall, the reason for running a thematic analysis was to further elaborate on the participants’ perspectives and insights of the creative intervention.

Measures

Academic Stress

Participants were assessed using general questions about stress levels. Examples of questions started with questions relating to the current stress level / how often they felt that way. This is how they were formatted, “As of right now, at this very moment, have you felt... [Strained?]” and ended with prompts such as: “Overextended?”, “Confident?” and more. Participants were asked to indicate how much they agreed or disagreed on a 5-point Likert scale ranging from 5 = “A lot” up to 1 = “Never”. Participants were asked about their levels of stress at that very present moment. The participants were also asked basic demographic questions, including class year, race, and age.

To summarize, the methods and procedures utilized in this exploratory study were to evaluate the effects that art therapy can have on stress. The quantitative part of the study was to evaluate the survey responses from the pre and post-interventions for indications of the efficacy of the intervention. The qualitative part of the study was to use thematic analysis to provide better context for the quantitative part. This mixed-methods approach should provide a clearer understanding of the effectiveness of art therapy.

Results / Discussion

This is an exploratory study analyzing the effectiveness that art therapy can have on the stress levels of college underclassmen. To find effects, the researcher conducted intervention groups and later, focus groups. The intervention groups were categorized as being either treatment or control, where the treatment group would participate in a creative-arts expression and the control group would watch a nature documentary. A stress survey (pre-intervention) was administered before the intervention, and the same stress survey (post-intervention) was given after the intervention. The goal of the surveys was to measure the change in stress. Focus groups were conducted about a month after the interventions.

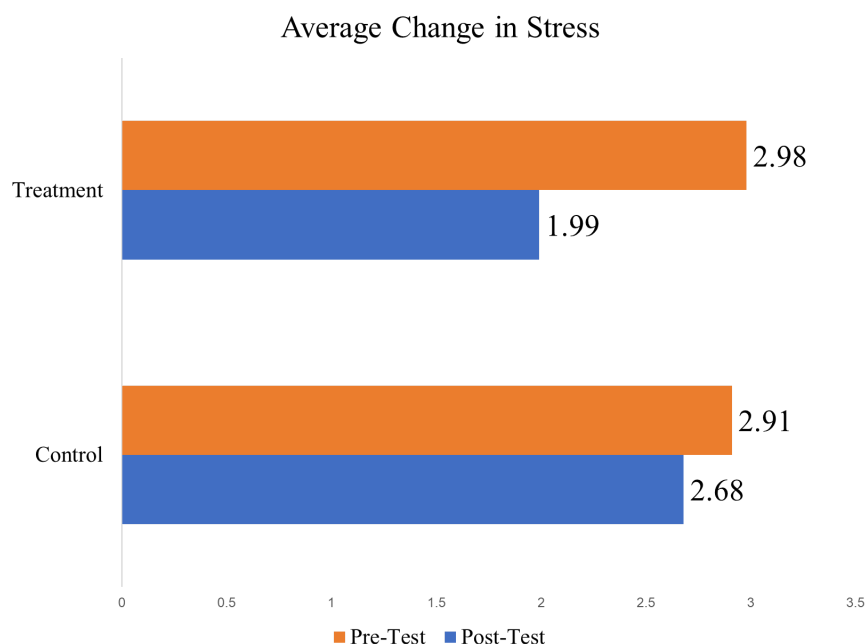
Elements of the quantitative part of the study consisted of the pre and post-intervention surveys, significance, and the consistency of the survey instrument, otherwise known as Cronbach's alpha. There were 22 questions in the survey. The Likert scale of 1 through 5, where 1 was "Never" and 5 was "A lot" was used to measure levels of stress. The lower the score, the less stressed participants generally felt about a particular question. The higher the score, the more stressed participants felt. For example, "As of right now, at this very moment, do you feel... [Strained?]", an indicator answer of 3 means that they feel this way "Sometimes".

There were 17 total participants. Eleven participants were in the treatment group, where they worked with clay, and the six remaining participants were in the control group, where they instead watched a nature documentary. The pre-treatment survey was administered before the participants worked with clay. In the treatment group, the prompt was as follows: "Focus on a happy memory as you're working with the clay." They worked with clay for about 40 to 45 minutes, and once completed, described what they created. Following this, the researcher gave them the post-treatment survey. A month after the treatment intervention, participants were

involved in focus groups that reflected on the role that creative arts expression had on academic stress.

In the control group, participants took the pre-intervention survey before watching the documentary. After watching the full documentary of about 50 minutes, the participants took the post-control survey. The control group was not involved in focus groups.

The researcher calculated an average stress score for the pre-intervention surveys for both the treatment group and the control group. The average stress score for the pre-treatment survey was, based on Likert scores, 2.98 out of 5. The average stress score for the post-treatment was 1.99 out of 5. The difference between the pre-treatment and post-treatment surveys is a 0.99 reduction, suggesting that creative arts expression is effective in relieving academic stress.



Variances between specific questions were calculated. The researcher compared the pre-intervention averages and post-intervention averages. First, all of the scores were added in a row and then divided by 22, since there were 22 questions. Averages were calculated by creating new variables in IBM SPSS (“PreTestAvg” and “PostTestAvg”). From there, it was easy to find responses that either increased, decreased, or stayed the same. Some questions that exhibited the overall trend (nearly a 1-point reduction between the pre and post-intervention surveys) included

“Strained?”, “Not enough time?”, and “That there wasn't enough time to get to everything?”.

Other questions that did not exhibit the overall trend (no significant reduction) included “Like your life was out of control?” and “Like there was too much to do, too little time?”

For the treatment surveys, individual categories were calculated for both the treatment and control surveys. Twelve of the twenty-one questions indicated at least a 0.7-point decrease in stress, suggesting that many participants' stress levels decreased following the treatment. Questions that had a 1-point decrease included *Strained*, *That the odds were against you*, and *Powerless*. Questions that remained neutral or the same included *Things were piling up*, *Carrying a heavy load*, *A lot on your mind*, and *There was no escape*. The only question that did not follow the trend was *No sense of getting ahead*. For the control surveys, the same was done as it was for the treatment surveys. The responses for the control group indicated that there was either no change or the participants were leaving the control session more stressed. While there were variances in the pre and post-treatment surveys, the overall effect across all questions on the Likert scale dropped by 0.99, suggesting that participants felt less stressed following the treatment session. In comparison, the control group indicated an increase in stress across many of the pre and post-control survey questions. The overall effect was that watching a nature documentary decreased stress levels only by 0.23, suggesting that an art intervention is more effective in reducing academic stress.

The overall purpose of the focus groups was to gather both qualitative data and insights from the participants who did the art treatment in a structured and moderated group discussion. It also provided the researcher a chance to get a better contextualization of why art therapy is effective. Certain quotes or sayings were taken to better show that art therapy has therapeutic effects on academic stress. The researcher coded or grouped together certain sections of the

recordings to emphasize why art therapy works. The most notable categories that came up in the thematic analysis were feelings of calmness, nostalgia, and a sense of creativity. The number of results found that there was a positive effect on academic stress.

Calmness was one particular theme that was associated with the focus groups. One participant stated:

“...for me, it was just relaxing. It was fun to like, I don't know, I paid attention to like, sort of small detail and whatnot. But I wasn't trying to like I said to make it like a massive work of art. But it was just relaxing to like kind of go in into like head empty and like, not have any pressure.”

Another participant stated:

"I think the best one for me was just to slow down. Like I was saying, it was also kind of stressful to like, fit that into my schedule and be like, alright, well, I have like 10 of these assignments to do, but I'm about to go play with clay for an hour; [which] isn't the best use of my time, but maybe it'll be good. And then once I got there, I really enjoyed it. So it was actually nice to be like, forced to take the time to just gather my mind."

The theme of calmness links participants' overall feelings toward the art intervention as not being a chore or just another thing on their schedule, but something that they were not expecting to be fun. Everyone is so busy a lot of the time, particularly in college, and getting an hour to just slow down and relax is one way that participants can really learn to enjoy their time where they're at, instead of just waiting for the next good thing that will happen. Overall, participants were just permitted to unpack their pent-up emotions and let some of them out by making art.

Nostalgia was another prominent theme that came out of the focus groups. One participant stated:

“I think the best one for me was just to slow down. Like I was saying, it was also kind of stressful to like, fit that into my schedule and be like, alright, well, I have like 10 of these assignments to do, but I'm about to go play with clay for an hour. isn't the best use of my time, but maybe it'll be good. And then once I got there, I really enjoyed it. So it was actually nice to be like, forced to take the time to just gather my mind.”

Another participant stated:

“I feel like it also is kinda like, like, almost like good childhood memories. Because like the last time that I like played with like, that type of stuff was like, either in like art class in elementary school or something.”

The theme of nostalgia is linked to participants’ feelings regarding their childhood. Our experiences as children are important for our overall well-being and development into adolescence and adulthood. Whether that be playing with toys, talking with our friends, or just about anything, some of us yearn for that sense of the past. A lot of the time, this was before we began understanding how the world really works and how it is not necessarily “happiness and rainbows” all the time, and that it’s perfectly okay to be sad sometimes. Time seemed to move much slower, and now, college academics make us so busy to realize that time is passing. The concept of someone’s “inner child” picks up on parts of us that were hidden away, addressing needs that may have been unmet as children. When we begin healing with our inner child, this helps create a deeper sense of compassion for oneself and one is more in tune with their mental health.

Finally, the freedom to create was the final theme to come out of the focus groups. One participant stated:

"For me, it was just relaxing. It was fun to like, I don't know, I paid attention to like, sort of small detail and whatnot. But I wasn't trying to like I said to make it like a massive work of art. But it was just relaxing to like kind of go in into like head empty and like, not have any pressure."

Another participant stated:

“Mine was more so like it wasn’t any specific memory. I just did like flowers and like the sunshine because when we did it, I was kinda in a seasonal slump. And so like when I was thinking happy, I was like, ‘Please just like warm’, and like, you know, things were like growing. So I did something related to that.”

The final theme of creating is also very critical. The reason is that oftentimes, students contribute to homework assignments, papers, tests, and exams, and are often given a numerical grade for their work. In the art intervention, the researcher purposefully gave a prompt to have them think of some happy memory, but there were no parameters as to what to create. This was because oftentimes, art is a subjective matter, and people may interpret it differently. There was overall, no right or wrong answer in creating whatever participants wished. One participant, as stated above, created clay versions of flowers and the sun because she was thinking of the warmer weather. Another participant created a mini clay version of a baseball field, to highlight his creativity in thinking about the time he hit his first home run. In creating these, the researcher gave “structure” to the art-making process, but gave participants the freedom to create whatever they wanted. Being creative is a gift, whether it be to help view and solve problems more efficiently. It also allows people to really think about and connect similar ideas. The same can occur when using art as a therapeutic measure.

The results from the treatment surveys and focus groups suggest that art therapy is an effective measure for reducing academic stress. The pre-treatment survey indicated that participants came in more stressed, and following their participation in the art intervention, the post-treatment survey left them feeling less stressed. Results from the control surveys suggest that watching a documentary instead of doing an art intervention is not as effective. On a 5-point Likert scale, there was a 0.99 drop in stress levels in the treatment groups and a 0.23 drop in the control group. The researcher utilized the focus groups for the treatment groups to gain insight, suggesting that the art therapy session produced feelings of calmness, feelings of nostalgia, and feelings of freedom to create something with clay. There was no right or wrong answer in

approaching the prompt. Taken together, both qualitative and quantitative measures suggest that art therapy is an effective way to treat academic stress.

Limitations and Future Research

Although the current study had some strengths, it also had some limitations. First, all participants in the sample came from a small Southeast liberal arts university, so as a result, the study had a rather weak external validity. Future research can increase external validity by conducting the study at other universities and institutions to be more generalized to the population. In addition, the sample size included 17 participants, which is much smaller than most studies.

Secondly, there were several threats to internal validity. One threat included the selection effect, where the researcher intentionally targeted participants who were either freshmen or sophomores. This can be addressed in future research to diversify and generalize to the public properly. In addition, the current study faced threats of demand characteristics, where the participants may have changed their responses in the survey to go with the researcher's expectations. Furthermore, the current study had effects related to history, as the researcher intentionally scheduled the interventions to take place during the week of midterms. Finally, there could have been designing confounds, as there may have been other variables other than school that cause stress, such as relationship status, parents' annual income, etc.

Further research on this topic could address not just undergraduate college students, but also high school, graduate, doctoral, and just about any students. While this study focused on academic stress, other aspects that could be addressed are other stressors that were not directly focused on. Examples include students' social and personal lives, as well as family dynamics, whether a student is an only child or one of many.

Conclusion

In conclusion, the results of this exploratory study suggest that a creative arts intervention can have a positive impact on reducing symptoms of academic stress in college students.

Although more research is needed to fully understand the long-term effects of art therapy, the findings of this study support the use of an art intervention as an approach to treating academic stress. Teachers, professors, and school officials need to consider incorporating some sort of art therapy session into their institutions to support the well-being of their students. By taking a more comprehensive approach, we can work towards a more collaborative effort in making students more resilient and accustomed to academics in higher education.

Table 1

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
TestDiff	Equal variances assumed	2.004	.180	-2.248	13	.043	-.76768	.34145	-1.50534	-.03001
	Equal variances not assumed			-2.510	12.810	.026	-.76768	.30584	-1.42941	-.10595

Table 2

Group Statistics					
	Coded Group	N	Mean	Std. Deviation	Std. Error Mean
TestDiff	1	6	.2273	.42737	.17447
	2	9	.9949	.75359	.25120

Table 3

Statistics		
TestDiff		
N	Valid	15
	Missing	0
Mean		-.6879

Table 4

		TestDiff		
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-.23	1	6.7	6.7
	-.14	1	6.7	13.3
	.05	1	6.7	20.0
	.09	1	6.7	26.7
	.14	1	6.7	33.3
	.41	1	6.7	40.0
	.50	2	13.3	53.3
	.73	1	6.7	60.0
	.77	1	6.7	66.7
	.82	1	6.7	73.3
	1.05	1	6.7	80.0
	1.55	1	6.7	86.7
	1.68	1	6.7	93.3
	2.41	1	6.7	100.0
	Total	15	100.0	

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About

Claire Potchatek is a recent graduate of Christopher Newport University. She majored in Interdisciplinary Studies combining Psychology and Fine Arts and was also a Business Administration minor. She was part of the Honors Program, having been admitted the second semester of her freshman year. Outside of academics, she was a member of the Campus Activities Board (CAB), which put on free events for students by students, served with Residence Life as a Front Desk Assistant for two and as a Resident Assistant for her last years. Following graduation, she hopes to take a gap year and figure out what she wants to do, whether that be to continue in graduate school for either art therapy, business, or higher education.