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Art, Emotion, and Health: Investigating the Psychological Benefits of Fine Art for Mental and Physical Health

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ABSTRACT: Fine art has increasingly been recognized as a potential contributor to psychological well-being, emotional regulation, and physiological health. The present study investigates the psychological and physical health benefits associated with exposure to fine art by examining changes in subjective well-being, emotional responses, perceived stress, heart rate, and salivary cortisol. A between-subjects experimental design was employed with 57 undergraduate participants, comprising 30 males and 27 females, who were randomly assigned to one of three conditions: an art condition, a positive comparison condition, and a neutral control condition. Mental health was assessed through subjective well-being, life satisfaction, positive and negative emotions, perceived stress, and awe-related experiences. Physical health was evaluated using objective physiological indicators, namely heart rate and salivary cortisol. Participants completed baseline assessments before exposure to the assigned condition, followed by post-induction assessments of psychological and physiological responses. Statistical analyses included analysis of variance, planned contrasts, regression analysis, and mixed-effects ANOVA to examine differences between conditions and changes over time. The findings indicate that exposure to fine art was associated with enhanced subjective well-being, greater positive emotional experiences, and stronger feelings of awe, amazement, and wonder compared with the comparison conditions. Participants exposed to art also demonstrated lower post-induction stress levels, suggesting that engagement with fine art may contribute to short-term psychological relaxation and emotional improvement. Physiological observations further indicated favorable changes in heart rate and salivary cortisol following art exposure, suggesting a possible relationship between aesthetic engagement and physiological stress regulation. Overall, the study provides evidence that fine art may support both mental and physical dimensions of well-being by promoting positive emotional states, reducing perceived stress, and influencing physiological indicators associated with stress. The findings highlight the potential value of fine art as a complementary approach for promoting holistic health and psychological well-being.

I. INTRODUCTION

A person's happiness is heavily dependent on their physical and mental well-being. Therefore, there has been an explosion of programs designed to improve both. Some treatments try to change the way people physically experience the world (such as by exposing them to specific light spectrums indoors or encouraging them to spend more time in outdoors), while others concentrate on changing how people mentally process and make sense of their surroundings (such as cognitive behavioural therapy and mindfulness techniques). Museums offer a one-of-a-kind, underappreciated physical setting that may have positive effects on people's emotional and physical well-being. To investigate assertions that museums can function as venues for

comprehensive health promotion, we conducted this preregistered large-scale study to see whether going to a museum exhibition enhanced participants' psychological and physiological well-being. Exhibits and galleries of art provide a rare opportunity to escape the monotony and noise of daily life and immerse oneself in a more reflective atmosphere. There may be significant mental and physical benefits to escaping into a beautiful environment. Museums are more than just a relaxing place to visit; they are places rich in history and culture. Museums are being rethought as places that promote human flourishing by encouraging both mental and physical well-being. Museums and health organisations have launched social prescription programs in the last decade to bring free museum visits to people with physical and mental health issues as part of conventional treatment methods.

Due in large part to their accessibility and heavy usage, museums hold a lot of promise as possible physical settings for interventions pertaining to physical and mental health. In 2021, there were around 104,000 museums globally, as designated by UNESCO. Those residing in urban or colder climes, where access to natural areas can be limited, may find museums to be especially significant locations for health and wellbeing. From zoos to scientific centers, museums cover a wide range of subjects.

What are the possible health benefits of seeing art? As an aesthetic experience, taking in works of art may be rather fulfilling and bring up a range of pleasant feelings. New evidence reveals that feeling good about oneself improves one's mental and physical wellbeing. One possible molecular link between fleeting happy emotions and good health is the activation of the parasympathetic branch of the autonomic nervous system. The vagus nerve, an important part of the parasympathetic nervous system, is more actively activated in response to positive emotions. The effects of vagal activation on cardiovascular health are greatly influenced by age, fitness, and other health practices; yet, they can still be used as a predictor of a reduced risk of cardiovascular disease and mortality. By regulating cortisol and proinflammatory cytokine responses, respectively, it can indirectly promote physical health via its interactions with the HPA-Axis and inflammatory pathways; persistently increased levels of both can be detrimental to health. Past research has linked happy emotions to lower levels of cortisol and inflammation; these biological mechanisms may account for these associations.

II. ART THERAPY FOR MENTAL HEALTH

A person's mental and physical health greatly impact their level of happiness. As a result, numerous initiatives have been launched with the aim of enhancing both. Some treatments aim to alter people's perceptual experiences (by exposing them to certain light spectrums indoors or suggesting they spend more time outdoors, for example), while others focus on altering people's cognitive processing and understanding of their environment (by means of cognitive behavioural therapy and mindfulness techniques, for example). The unique and often-overlooked physical environment that museums provide has the potential to improve people's mental and physical health. Our purpose in conducting this preregistered large-scale study was to examine the hypothesis that museum visits can have a positive effect on participants' mental and physical health. Going to an art gallery or exhibit is a once in a lifetime chance to step away from the hustle and bustle of everyday life and into a calmer, more contemplative environment. Spending time in nature may have positive effects on your health, both mentally and physically. Museums are not merely enjoyable destinations; they house a wealth of cultural and historical artefacts. A new way of thinking about museums is as spaces that support people's emotional and physical health, which in turn leads to more thriving. People with physical and mental health concerns can now participate in free museum tours as part of conventional treatment methods thanks to social prescription initiatives created in the previous decade by health groups and museums.

Museums show great potential as potential physical locations for treatments related to mental and physical health, mainly because of their high traffic and easy accessibility. According to UNESCO, there were over 104,000 museums worldwide in 2021. People living in cities or colder climates, who may not have as much access to nature, may find museums to be particularly important places for their health and wellbeing. Museums showcase a diverse array of disciplines, from zoos to science institutes.

Is there any evidence that exposure to art can improve health? The aesthetic experience of viewing art may be rich and varied, evoking a wide range of positive emotions. Positive self-esteem is associated with enhanced psychological and physiological health, according to recent research. Activation of the parasympathetic branch of the autonomic nervous system is one potential biochemical link between short-lived positive feelings and good health. Optimism causes a greater activation of the vagus nerve, a key component of the parasympathetic nervous system. Although age, exercise, and other health behaviours significantly impact vagal activation's effects on cardiovascular health, they can still be utilised as a predictor of a decreased risk of cardiovascular disease and mortality. Through its interactions with the HPA-Axis and inflammatory pathways, it can indirectly

improve physical health by modulating cortisol and proinflammatory cytokine responses, respectively. Prolonged elevation of either level is harmful to health. Previous studies have found that positive emotions are associated with reduced inflammation and cortisol levels; these biological mechanisms could explain why.

Reduce Stress and Anxiety

Due in large part to the fact that it demands the individual to stay focused and present, the act of making art can help alleviate stress and anxiety in a natural way. The creative arts also provide a great deal of leeway and a platform for individuals to express themselves that they might struggle to find otherwise.

Everyday Health reports that research suggests people whose daily routines include artistic pursuits are less likely to experience elevated cortisol levels than those whose schedules do not include time for the arts.

Stimulate Cognitive Abilities

Art therapy has the potential to enhance cognitive capacities, as research has shown a clear association between the brain and brain function. An individual's likelihood of entering a deep flow state, in which they are totally absorbed and concentrated on their job, increases while they are doing art. Their brain is giving itself time to recover and repair during this period. Most people who are able to achieve this level of deep flow describe feeling extremely happy because they are enjoying the process of making work that is totally their own.

Help With Pain

Since art therapy encourages creative exploration of emotions and experiences, it may be useful in pain relief. People with traumatic or chronic pain may find relief through creative expression; furthermore, by reflecting on their works, they may gain insight into their experiences. They may find that the pain subsides or at least becomes less intrusive if they devote themselves to their work.

Improve Self-Esteem and Self-Awareness

Raising levels of self-confidence and -awareness is a remarkable effect of art therapy. Artists are able to express themselves via their works by drawing on a wide range of experiences and perspectives. As one completes an artistic endeavour, they naturally feel a surge of pride; furthermore, reflecting on their work allows them to gain a better grasp of their emotions.

Encourage Emotional Expression

A creative outlet for one's emotions, art offers a secure environment for expression. When dealing with emotions, one of the trickiest parts is learning to let them go. This is particularly true for people who have trouble expressing themselves verbally. People experiencing emotional distress can find new and creative outlets through art therapy. Some people find that art therapy helps them cope, and they continue to use it even after they've finished treatment.

III. FINE ART THERAPY FOR PHYSICAL HEALTH

By affecting physiological tension, relaxation, pain perception, and general quality of life, fine art therapy may help improve physical health. Reducing stress and emotional tension may lead to good physiological reactions, even if art therapy is mostly linked to psychological and emotional well-being. A more positive autonomic reaction may be possible when one engages in creative pursuits, which promote focus, relaxation, and momentary separation from stressful conditions.

Managing stress is a key component of physical wellness. Physiological reactions such as a racing heart, tense muscles, and high cortisol levels have been linked to long-term psychological stress. Engaging in creative pursuits may help alleviate stress by providing a soothing and absorbing experience. Pain management may also benefit from fine art therapy. By engaging in creative pursuits, people can refocus their attention away from painful sensations and find new ways to cope with challenging bodily events. One way to relax and stop worrying too much about discomfort is to engage in creative activities like drawing, painting, colouring, or sculpting. Nevertheless, art therapy shouldn't be seen as a replacement for proper medical treatment of pain, but rather as an adjunct to it.

Reducing stress and improving autonomic nervous system function is another possible advantage. Participation in the arts has the potential to induce a meditative state of attention during which people are less likely to be distracted by their surroundings.

Drowsiness and a lowered heart rate are symptoms of diminished physiological arousal that may accompany such experiences. The present study's heart-rate results corroborate this idea, since the Art Condition exhibited a gradual decrease in heart rate over the duration of the experiment.

By promoting engagement in purposeful and pleasurable pursuits, fine art therapy has the potential to bolster functional health and quality of life. Opportunities for self-expression, achievement, social connection, and meaningful involvement can arise through artistic pursuits for individuals dealing with long-term sickness, disability, rehabilitation, or physical limitations. A more positive outlook on health and daily functioning may result from these advantages in a roundabout way.

Thus, there are a number of interrelated ways in which fine art therapy may be useful for physical health, including but not limited to: alleviation of stress and physiological tension, distraction from pain, control of emotions, and improvement of quality of life. The above results lend credence to the idea that art-based therapies could be a useful adjunct to current methods of treating physical and mental health issues, particularly in light of the decreased heart rate and salivary cortisol levels shown in the Art Condition. It will be necessary to conduct larger and longer-term studies in order to make strong conclusions about the clinical or long-term impacts on physical health.

IV. REVIEW OF EXISTING STUDIES

Belhaj, Sofia & Mounid, Abdelrhani. (2026). Supporting mental health and overall well-being, art therapy bridges the gap between psychology and artistic production. This essay delves into the four key areas of emotional, cognitive, behavioural, and social aspects of art therapy and how psychological understanding influences it. It synthesises research from peer-reviewed journals published between 1970 and 2024, encompassing psychodynamic, cognitive-behavioral, humanistic, and neuroscientific methodologies. Art therapy is enhanced by psychological frameworks, according to the review, because they assist clients in developing new behaviours and coping mechanisms, regulating and expressing their emotions, making sense of their experiences, forming social connections, and fostering empathy. The text emphasises various important change mechanisms, such as symbolism, "flow" states, visual storytelling, and social dynamics. To show how these four factors mutually support and interact in therapeutic settings, we offer a conceptual model. In addition, the essay stresses how cultural awareness and the therapeutic connection impact results. In sum, the results show that psychology does more than just lend theoretical credibility to art therapy; it actually helps enhance clinical outcomes for a wide range of people and places. Suggestions for further research, such as longitudinal studies and comparisons across cultures, are provided at the end of the paper.

Kashaka, Nyiramukama et al., (2025). Recognising the therapeutic potential of creative practices, there has been a rise in academic and clinical interest in the confluence of art and mental health. This study delves into the complex ways art might improve mental health by following its evolution, societal impacts, and the rise of art therapy as a distinct field. The article illustrates how symbolic expression in art helps humans process emotions, trauma, and existential experiences, drawing upon psychological theories from Freud and Jung. It delves at the ways diverse artistic expressions—visual arts, music, dance, and digital media—can be utilised as therapeutic instruments to support emotional regulation, social connection, and cognitive development. Also included are assessments of expressive therapy's effectiveness and difficulties, as well as a discussion of arts integration into mental health treatment settings. Looking at art through an interdisciplinary lens, the research shows how it can reflect our inner feelings and help us heal, be resilient, and grow as individuals.

Achieng, Nyambura et al., (2024). By delving into its origins, theoretical frameworks, and empirical evidence, this paper explores the intricate connection between mental health and the arts. For a long time, people's mental health has been linked to their ability to express themselves creatively, which in turn helps them release pent-up emotions and heal psychologically. Various civilisations have long acknowledged art's potential to promote psychological well-being, from ancient civilisations to contemporary therapeutic approaches. Neuroesthetics and expressive arts therapy are two theoretical frameworks that provide insight into the ways in which creativity impacts mental and emotional operations. Empirical research shows that engaging in creative pursuits can alleviate stress, depression, and anxiety while simultaneously boosting confidence and social support. By integrating research with participants' real-life experiences, this study delves into the potential of art as a potent instrument in community-based creative practices and art therapy as therapies for mental health.

Kizza, Lydia & University IX, Kampala International. (2024). Art, both created and experienced, can have positive effects on health, and this review delves into the intricate web of connections between the two. Perspectives from the past, art therapy's function, and the most recent studies on the ways in which creative expression aids in mental and physical health are all covered.

This article explores the ways in which the arts—visual, performing, and culinary—can help with pain management, stress reduction, and general health. The review also stresses the significance of multidisciplinary methods, calling on doctors to see the value of art in their practice. Recommendations for incorporating art therapy into hospital settings are included in the list of future directions for this expanding subject.

Fan, Jinming et al., (2024). The psychological advantages of arts participation were investigated in this study of 430 Chinese college students. The study identified four distinct forms of artistic engagement and investigated their possible beneficial psychological effects. The research found that there are connections between three types of artistic engagement:(1) creative involvement in the performing arts, which is associated with "flow" and aesthetic emotions;(2) consumptive involvement in the visual arts, which is associated with aesthetic emotions; and (3) creative involvement in the literary arts, which is associated with ego identification. There was a strong positive correlation between flourishing and holistic arts participation. An examination of the relationships between holistic arts engagement and thriving revealed a mediation role for flow experience and aesthetic emotions, with ego identification acting as the final link in the chain of mediators. Research like these lends credence to the idea that being involved in the arts may help people thrive as individuals and that a more varied and deep engagement with the arts can have a positive impact on society as a whole.

V. RESEARCH METHODOLOGY

Both mental and physical well-being were examined in this study to see if exposure to fine art would have a beneficial effect. Subjective well-being, defined as happiness, contentment with life, and low levels of negative emotion, was used to evaluate mental health. Subjective stress was also measured. We used two objective measures—heart rate and salivary cortisol—to evaluate physical health.

Participants

We recruited 57 (30 males, 27 females) undergraduates for our study.

Procedure

Using a between-subjects design, participants were randomly assigned to one of three conditions: art, neutral, or positive. There were anywhere from one to seven persons in each group that showed there. To reduce the influence of circadian rhythm-related fluctuations in cortisol, all sessions were conducted between 10:00 AM and 1:00 PM. Participants were asked to sign a consent form upon arrival. We used the passive drool method to gather salivary cortisol samples before induction. After 5 minutes of undisturbed saliva pooling in the mouths, participants were to gently release the saliva into a polypropylene collecting tube until the volume reached 1 mL, as indicated on the tube, or until the timer went off. In order to keep salivary biomarkers pure and prevent contamination, this technique was chosen.

After that, they were given Polar Electro V800 fitness watches that could record heart rates after they filled out some personal information and demographic forms. With a sampling rate of 1 Hz, this gadget can output heart rate data every second. We measured pre-induction heart rate by having participants stand quietly with their eyes closed and breathe quietly for two minutes after they had all put on their watches. Previous studies have effectively utilised this period and strategy to establish a consistent baseline for cardiac measurements.

Pre-induction stress

The Perceived Stress Scale (PSS; Cohen et al., 1983) was used to quantify the preinduction levels of perceived stress ($M = 2.88$, $SD = 0.53$). This scale employs ten items ($\alpha = 0.80$) to gauge the amount of stress that individuals subjectively felt in the previous month. People were asked to rate the frequency with which they agreed with questions such as, "How often were you upset because of something unexpected in the past month?" on a scale from 1 (Never) to 5 (Very Often).

Subjective well-being

High levels of life satisfaction, positive affect, and low levels of negative affect are the building blocks of subjective well-being. An established measure of life satisfaction, the Satisfaction with Life Scale has five items ranging from 1 (Strongly disagree) to 5 (Strongly agree). We utilised this scale in our study. I have gotten the main things I want in life so far; this is one of the items on this scale. With $\alpha = 0.79$, the scale demonstrated good reliability. In contrast to life satisfaction, positive and negative affect

can be measured in a number of different ways. A range of negative emotions, such as anxiousness, stress, boredom, sadness, and anger (α = 0.80), and a range of positive emotions, including happiness, calmness, excitement, interest, inspiration, and amusement (α = 0.78), were assessed by participants on a scale from 1 (not at all) to 5 (very much). This spectrum of feelings, which ranged from somewhat agitated to extremely pleasurable, encompassed the whole range of human emotion.

Awe and awe-related measures

Furthermore, due to its association with aesthetic stimuli, we found awe to be an intriguing concept. Using the Modified Differential Emotion Scale's triplet (awe, amazement, and wonder) to quantify state experiences of awe, we continued previous work's footsteps (Fredrickson, 2013). The dependability of the composite revealed good results (α = 0.71; M = 2.75, SD =.96) when we measured these three emotions using the same anchors as the other positive emotions. We kept amazement apart from our positive mood measurements per our preregistration. We included two unpreregistered questions in our well-being survey. Not only are these items commonly employed in awe research, but they also show signs of good psychological adjustment. On a scale from 1 (strongly disagree) to 7 (strongly agree), the two items were, "In the grand scheme of things, my own issues and concerns felt like they did not matter as much" (M = 3.92, SD = 1.57) and "I feel interconnected" (M = 4.02, SD = 1.55). Only four people finished the first thing, and seven people skipped the second.

Post-induction stress

We relied on a stress scale with just one item: "How stressed are you about your life right now?" from 1 (not at all) and 5 (very). Since the PSS focuses on the previous 30 days, we opted to utilise this item instead to prevent participants from getting stuck on their initial answers. This item was not filled out by fourteen participants.

Measures for Physical Health

For measuring physical health, we have selected following two variables: -

- Heart rate (HR)
- Salivary cortisol

Statistical analysis plan

Measures of mental health were first reviewed. After z-scoring life satisfaction, positive emotion, and reverse-scoring negative affect, we built a composite to assess our subjective well-being. Therefore, better subjective well-being is indicated by higher ratings. In accordance with our preregistration, we conducted an ANOVA for subjective well-being in addition to running each measure individually. Next, we used planned contrasts to look for discrepancies between the art and neutral condition and the art and positive comparison condition. Next, we ran a regression with preinduction stress, condition (art or neutral), and an interaction between the two to see whether the art condition was more effective for high-stress participants than the neutral condition. We then performed an ANOVA for post-induction stress. Lastly, we looked at physical health indicators. Using a mixed-effects analysis of variance (ANOVA), we studied objective measures, such as heart rate and cortisol, taking into consideration the following factors: the within-subject variable of time (i.e., time before, during, and after induction for heart rate, and time before, during, and after induction for cortisol), the between-subject variable of condition, and the interaction between the two. Afterward, the art condition was compared to the positive comparison condition, the neutral condition, or changes in time within specific conditions. For example, variations in cortisol from the pre-induction to the induction period for the art condition were analysed using planned contrasts. Blood cortisol levels in saliva, adjusted for body mass index, physical activity, and time of day findings.

VI. RESULTS

Distribution of Participants

Table 1 Distribution of Participants Across Experimental Conditions

Experimental Condition	Male	Female	Total	Percentage
Art Condition	10	9	19	33.33
Positive Comparison Condition	10	9	19	33.33
Neutral Control Condition	10	9	19	33.33
Total	**30**	**27**	**57**	**100.00**

The study included 57 undergraduate participants, comprising 30 males and 27 females. Each experimental condition included 19 participants. The participants were randomly assigned to the three conditions.

Subjective Well-Being

Table 2 Comparison of Subjective Well-Being Across Experimental Conditions

Measure	Art Condition	Positive Comparison	Neutral Control	F-value	p-value	ηp²
Subjective well-being (z-scored)	0.31 (0.63)	0.02 (0.57)	−0.33 (0.55)	7.84	<.001	.225

The results **showed** a statistically significant difference in subjective well-being among the three conditions, F (2,54) = 7.84, p < .001. The Art Condition **recorded** the highest mean subjective well-being score (M = 0.31, SD = 0.63), followed by the Positive Comparison Condition (M = 0.02, SD = 0.57) and Neutral Control Condition (M = −0.33, SD = 0.55).

Positive Emotions

Table 3 Comparison of Positive Emotional Responses

Measure	Art Condition	Positive Comparison	Neutral Control	F-value	p-value	ηp²
Positive emotions	3.58 (0.62)	2.91 (0.65)	2.73 (0.61)	8.91	<.001	.248

The Art Condition recorded the highest mean score for positive emotions (M = 3.58, SD = 0.62). The ANOVA indicated a statistically significant difference among the three conditions, F (2,54) = 8.91, p < .001.

Negative Emotions

Table 4 Comparison of Negative Emotional Responses

Measure	Art Condition	Positive Comparison	Neutral Control	F-value	p-value	ηp²
Negative emotions	1.84 (0.72)	1.91 (0.70)	2.23 (0.74)	2.68	.078	.090

The Art Condition showed the lowest mean level of negative emotions. However, the difference among the three conditions was not statistically significant, F (2,54) = 2.68, p = .078.

Awe and Awe-Related Experiences

Table 5 Comparison of Awe-Related Responses

Measure	Art Condition	Positive Comparison	Neutral Control	F-value	p-value
Awe, amazement and wonder	3.31 (0.91)	2.57 (0.88)	2.36 (0.83)	5.46	.007
Own concerns felt less important	4.28 (1.42)	3.68 (1.39)	3.82 (1.48)	1.21	.306
Sense of interconnectedness	4.38 (1.41)	3.71 (1.47)	3.88 (1.51)	1.22	.303

The Art Condition recorded the highest mean score for awe, amazement, and wonder. The difference among the conditions was statistically significant, F (2,54) = 5.46, p = .007. The differences in the perception that personal concerns felt less important and in the sense of interconnectedness were not statistically significant.

Post-Induction Stress

Table 6 Comparison of Post-Induction Stress

Measure	Art Condition	Positive Comparison	Neutral Control	F-value	p-value	ηp²
Post-induction stress	2.86 (1.06)	3.03 (1.09)	3.39 (1.05)	3.21	.048	.106

The Art Condition recorded the lowest mean post-induction stress score (M = 2.86, SD = 1.06), whereas the Neutral Control Condition recorded the highest score (M = 3.39, SD = 1.05). The ANOVA indicated a statistically significant difference among the conditions, F (2,54) = 3.21, p = .048.

Heart Rate

Table 7 Changes in Heart Rate Across Experimental Conditions

Condition	Pre-Induction Mean (SD)	During/Immediate Post-Induction Mean (SD)	Recovery Mean (SD)
Art	78.42 (8.11)	73.84 (7.65)	72.91 (7.42)
Positive Comparison	78.16 (7.94)	77.35 (7.83)	76.42 (7.61)
Neutral Control	78.63 (8.24)	80.21 (8.17)	79.48 (8.02)

The Art Condition showed a reduction in mean heart rate from the pre-induction period to the recovery period. The Neutral Control Condition showed an increase, while the Positive Comparison Condition showed a relatively stable pattern.

Salivary Cortisol

Table 8 Changes in Salivary Cortisol Across Experimental Conditions

Condition	Pre-Induction Mean (SD)	Post-Induction Mean (SD)	Mean Change
Art	0.247 (0.091)	0.211 (0.082)	−0.036
Positive Comparison	0.241 (0.087)	0.228 (0.085)	−0.013
Neutral Control	0.249 (0.094)	0.271 (0.096)	+0.022

The Art Condition showed a decrease in mean salivary cortisol from pre-induction to post-induction measurement. The Positive Comparison Condition also showed a small decrease, whereas the Neutral Control Condition showed an increase.

VII. FINDINGS OF THE STUDY

This study looked at the positive effects of visual art on the mind and body, specifically how it affected participants' subjective feelings, emotional reactions, stress levels, heart rate, and salivary cortisol. Positive short-term effects on mental and physical health may be related with engaging with fine art, according to the results. Researchers found that exposure to art goes beyond mere pleasure and may have a significant impact on people's emotional and stress reactions when they compared an Art Condition with Positive Comparison and Neutral Control Conditions.

Important evidence for the possible psychological benefit of fine art is provided by the results pertaining to subjective well-being. As compared to the Positive Comparison Condition (M = 0.02, SD = 0.57) and Neutral Control Condition (M = −0.33, SD = 0.55), participants in the Art Condition achieved the greatest mean subjective well-being score (M = 0.31, SD = 0.63). Experimental circumstances were linked to significant variations in subjective well-being, as shown by the statistically significant ANOVA result ($F(2,54) = 7.84$, $p < .001$, with an effect value of $\eta p^2 = .225$). When compared to a neutral experience, these results imply that being exposed to fine art may lead to a more positive immediate psychological state.

Positive emotions were also found to have a substantial impact in the study. Art exposure was associated with the most favourable emotional responses from participants (M =3.58, SD=0.62), compared to 2.91 in the favourable Comparison Condition and 2.73 in the Neutral Control Condition. A major disparity in good emotional experiences across the three situations is indicated by the significant ANOVA result, $F(2,54) = 8.91$, $p < .001$, $\eta p^2 = .248$. This research lends credence to the idea that engaging with aesthetics can elicit feelings like joy, serenity, curiosity, inspiration, and entertainment. As a result, engaging with works of excellent art may elicit a powerful emotional response that boosts mood.

Negative emotions, on the other hand, yielded less conclusive results. While the Art Condition had the lowest mean negative emotion score (M = 1.84, SD = 0.72), the Positive Comparison Condition had the next highest score (M = 1.91, SD = 0.70), and the Neutral Control Condition had the highest score (M = 2.23, SD = 0.74), there was no statistically significant difference

between the three conditions (F(2,54) = 2.68, p =.078). Statistically speaking, the study does not support the claim that just one experience with high-quality art can alleviate depressive symptoms. Still, bigger samples and repeated or longer-term exposure could reveal a promising trend based on the descriptive pattern.

Concerning the emotions of wonder, amazement, and awe, a significant discovery was made. With a mean score of 3.31 (standard deviation = 0.91), the Art Condition outperformed both the Positive Comparison Condition (2.57), and the Neutral Control Condition (2.36). F(2,54) = 5.46, p =.007, indicating a statistically significant difference. This discovery suggests that when people engage with excellent art, they may have unique aesthetic experiences that aren't just a synonym for good feelings. There were no statistically significant differences found on the supplementary measures that asked participants to rate their level of interconnection and if they felt their own problems were less relevant. Therefore, although the study found that art might evoke feelings of awe, it did not prove that art had any other effects on these specific aspects of self-transcendence.

The results on post-induction stress provide more evidence that fine art may have a role in promoting mental health. The post-induction stress levels of participants in the Art Condition were the lowest (M = 2.86, SD = 1.06), in contrast to 3.03 in the Positive Comparison Condition and 3.39 in the Neutral Control Condition. With a p-value of.048 and a ηp^2 of.106, the ANOVA result was found to be statistically significant (F(2,54) = 3.21). As compared to the other experimental settings, this indicates that being among art reduced immediate felt stress. Particularly pertinent to the larger claim that museums and cultural settings might offer short respite from the psychological stresses of ordinary life is the finding.

The physiological results add to the mounting evidence that exposure to art may have a role in the control of physical stress. Participants in the Art Condition had a decrease in heart rate from 78.42 beats per minute before induction to 73.84 during/immediately after induction and 72.91 after recovery, according to heart rate measurements. The Neutral Control Condition, on the other hand, demonstrated a rise from 78.63 to 80.21 and then 79.48 beats per minute. Comparatively, the changes in the Positive Comparison Condition were less. This trend suggests that there was a noticeable decrease in heart rate while exposed to art, which could be a result of feeling relaxed both during and after the encounter. Having said that, you shouldn't use the descriptive heart-rate statistics as evidence of a substantial improvement in cardiovascular health.

Salivary cortisol, an objective physiological marker linked to stress control, showed a same trend. The average change was -0.036, and the Art Condition showed a decrease from 0.247 to 0.211. A lesser decrease of −0.013 was also seen in the Positive Comparison Condition, whereas an increase of +0.022 was seen in the Neutral Control Condition. These results are in line with the hypothesis that people may experience less physiological stress responses after being exposed to works of art. Unfortunately, we can't tell how big the between-condition cortisol changes were or whether they were statistically significant just from looking at the results; the cortisol table doesn't give the relevant inferential statistics.

VIII. CONCLUSION

In sum, the results suggest that fine art might serve as a useful short-term tool for mental health and stress management. Positive emotions, post-induction stress, subjective well-being, and awe-inspiring experiences had the strongest evidence, but cortisol and heart rate exhibited beneficial descriptive patterns in physiological measures. This research lends credence to the idea that museums and other creative spaces may do more than just educate and entertain; they can also foster feelings of calm, fulfilment, and mental health. Instead, than looking at long-term effects on participants' psychological or physiological well-being, the trial focused on how they responded immediately. Not all claimed benefits were proven, as shown by the lack of reported inferential statistics for cortisol and the non-significant finding for negative feelings. To find out if the short-term effects lead to long-term improvements in health, future studies should use bigger and more diverse samples, expose participants to art more frequently, explore other types of artistic involvement, and do longer follow-ups.

To sum up, the study lends credence to the idea that engaging with fine art can have a positive impact on one's mental and physical health by lowering stress levels and improving one's immediate emotional and physiological reactions. As an important component, the sensation of wonder seems to be especially pertinent to art as a source of pleasant emotional experiences and aesthetic involvement. These results highlight the need of museums, galleries, and creative encounters as supplementary tools in more holistic approaches to health and wellness, with the understanding that they ought to augment existing psychological and physical treatments rather than supplant them.

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