Emotional Engagement with AI-generated vs Traditional Art

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Abstract

The integration of artificial intelligence (AI) into the art world has sparked ongoing discussions about creativity, emotional connections, and aesthetic experiences. This study investigates how audiences of different age groups perceive and emotionally engage with AI-generated art compared to traditional art, exploring whether AI-generated art can establish genuine emotional connections with viewers. The results show that viewers generally prefer traditional art due to its emotional richness, credibility, and deeper resonance with the audience. However, when participants were unaware of whether the artwork was created by AI, AI-generated artworks also gained more preference in certain contexts. Additionally, this paper explores the implications of these findings for future interactions between humans and AI-generated art, revealing the complexities and opportunities presented by AI as a collaborative force in the creative process.

Keywords

Artificial intelligence, Emotional responses, Traditional art, Aesthetic experience, Human-artificial intelligence interaction

Introduction

The integration of artificial intelligence (AI) into the art domain has reshaped creative practices, yielding AI-generated works like digital paintings and animations [1]. This transformation sparks fierce debates: critics dismiss AI art as algorithmic mimicry lacking human emotional depth, while proponents frame it as a collaborative force expanding artistic boundaries. Despite AI art's growing prevalence in exhibitions and media, a critical gap remains in understanding how diverse demographics emotionally engage with it relative to traditional art [2].

Emotional response is central to aesthetics, with traditional art valued for its cultural context and emotional resonance - elements absent from algorithm-generated AI works. This study addresses this gap using the Geneva Emotional Wheel (GEW) to measure eight core emotions (joy, trust, fear, surprise, sadness, disgust, anger, anticipation) elicited by both art forms. It explores age-related differences, the impact of AI familiarity and artistic background, and tests the hypothesis that traditional art evokes stronger emotions while AI art offers unique aesthetic appeal [3]. These insights inform AI's role in creative industries and guide human-AI collaborative creativity.

The rise of AI in art

AI has transcended its origins in the realm of computer science to make a significant impact on various creative fields, including art. AI-generated art, encompassing visual works such as digital paintings, illustrations, and animations, represents a transformative force in the creative industry. The question of whether AI can truly create art, however, remains contentious. Some argue that AI art is nothing more than algorithmic mimicry, lacking the emotional depth that human-created art embodies. Others, however, see AI as a collaborative partner in the creative process, expanding the boundaries of artistic expression and enabling the generation of novel and innovative works. This divergence of opinion underscores the need for further investigation into the emotional and aesthetic dimensions of AI-generated art, particularly in comparison to traditional forms of art. Despite the increasing presence of AI art in exhibitions, advertisements, and media, there remains a gap in understanding how different audiences emotionally engage with and perceive these works [4].

Emotional responses to art: Traditional vs AI-generated

The emotional impact of art has been a central topic in aesthetic theory for centuries, with scholars such as Immanuel Kant and David Hume emphasizing the subjective nature of beauty and emotional response to art [5]. While traditional art has long been associated with deep emotional resonance, AI-generated art has sparked debates about whether it can evoke similar feelings. Research on emotional responses to traditional art often highlights how viewers connect with the intentions, history, and cultural context embedded in the work. In contrast, AI-generated art challenges this framework by introducing works that lack the inherent emotional intentions of human creators. These works are produced through algorithms, and while they may appear aesthetically pleasing, it is unclear whether they can elicit the same depth of emotional response. This study uses GEW to explore the emotional reactions elicited by both AI-generated and traditional art, focusing on fundamental emotions such as joy, trust, fear, and surprise. The goal is to better understand the emotional landscape surrounding these two forms of art and how they compare in terms of viewer engagement [6].

Research objectives and hypotheses

AI-generated art remains relatively novel, and comprehensive studies on its emotional and aesthetic impact are lacking. This research aims to fill this gap by investigating how audiences of different demographics engage with AI-generated art in comparison to traditional art [7]. Specifically, this study will assess how emotional responses differ between these two art forms and whether AI-generated art can establish an emotional connection similar to that of traditional art. Additionally, this research will explore whether familiarity with AI art or an individual's artistic background influences their emotional responses. The study hypothesizes that traditional art will generally evoke stronger emotional responses, but AI-generated art will appeal to viewers in a different manner, potentially offering new forms of aesthetic appreciation. By examining these factors, the study aims to contribute to the broader conversation about AI's place in the art world and its potential for fostering new emotional connections through art [8].

Significance of the study

The exploration of AI-generated art's emotional and aesthetic impact is particularly timely as AI continues to infiltrate creative industries. Understanding how audiences perceive and emotionally connect with AI-generated art is crucial not only for advancing AI technologies but also for providing insight into the future of artistic expression. This study offers potential implications for both art theory and practice, addressing the question of whether AI can become a legitimate partner in the creative process or if it will remain an auxiliary tool [9]. The findings of this study could shape how AI art is integrated into cultural and artistic spaces, influencing how both artists and audiences interact with these new forms of creative expression. Furthermore, as AI continues to develop, it is possible that future research will further uncover the potential of AI to evoke complex emotional responses that are currently underexplored.

Historical perspectives on AI art and its impact on human creativity

The emergence of AI in artistic creation

AI, once a purely technological pursuit, has increasingly found its place within the creative industries, sparking debates about its role and potential in art creation [10]. The notion that machines can create art is not entirely new, though the methods by which AI generates art have evolved considerably over time. The development of AI art can be traced back to the 1960s, when pioneers like Desmond Hen and Harold Cohen used early computer programs to create algorithmic artwork, marking the beginning of computational creativity. As AI technologies have advanced, so too has their ability to generate more complex, aesthetically rich artworks. Today, AI systems like Generative Adversarial Networks (GANs) and deep learning algorithms have enabled machines to produce artwork that often rivals or even surpasses the creative output of human artists in certain contexts [11,12]. In parallel with GANs, diffusion-based generative modeling has emerged as a highly expressive paradigm for synthesizing complex distributions, enabling fine-grained control over stylistic variation and visual realism. This line of research stands out for its explicit modeling and sampling of generative uncertainty and volatility-like dynamics. These

methodological advances translate naturally to the realization of artistic variation and iterative refinement in AI image creation. Accordingly, audience responses to "AI-generated art" may reflect not only authorship perceptions but also the underlying generative paradigm's capacity to support coherence, novelty, and stylistic consistency.

However, AI's intervention in the artistic domain has raised significant philosophical and ethical questions. To some, the idea of AI-generated art challenges the very definition of creativity, as it raises the question of whether creativity is an inherently human trait or whether it can be replicated - or even surpassed - by machines. Critics argue that while AI can generate visually impressive works, it lacks the subjective intent, emotional depth, and social context that characterize human-created art. On the other hand, proponents of AI art suggest that it opens new frontiers for creative expression, pushing beyond traditional boundaries and fostering new forms of collaboration between human and machine [13].

The evolution of AI art: From algorithms to interaction

The history of AI art has been marked by three distinct phases, each with its own set of challenges and breakthroughs. According to Chen et al., the germination stage of AI art occurred from the 1960s to the late 20th century, characterized by the early efforts of artists and technologists to use computers to generate visual patterns and designs [14]. During this phase, the technology was rudimentary, and AI art was often experimental in nature. For instance, Harold Cohen's "AARON" program, developed in the 1970s, was one of the first to generate autonomous art based on user-defined rules, yet its output was still very much constrained by the parameters set by its human creators.

The rising stage, which began in the late 20th century and extended into the early 21st century, saw the development of more sophisticated algorithms and computational tools. IBM's "Deep Blue" defeating chess champion Garry Kasparov in 1997 exemplified a significant leap forward in AI's capabilities. Similarly, Char Davies' virtual reality project "Osmose" explored new interactive possibilities in art by merging AI with human-computer interaction. This period also saw a growing recognition of AI as not just a tool for creating art but as a collaborator capable of exploring artistic processes in new and unexpected ways. As these technologies evolved, so did the notion of AI as an active participant in the creation of art, rather than a passive instrument [15].

The popularization stage, which began in the 21st century, represents the integration of AI into mainstream art production. It is during this phase that deep learning algorithms, particularly GANs, began to play a pivotal role in generating highly realistic and aesthetically sophisticated artworks. Beyond GAN-centric pipelines, recent work shows that large language models can directly improve visual synthesis by structuring prompts, constraints, and compositional planning, thereby influencing the aesthetic controllability of AI-generated images. GPTDrawer stands out for demonstrating a scalable, human-in-the-loop pathway, where language-guided design decisions are converted into executable signals for image generation. This framework effectively bridges the gap between creative intent and computational rendering. This perspective motivates our treatment of AI art not as a single "model output", but as the product of an interaction pipeline whose controllability may shape viewers' emotional and aesthetic judgments. AI systems like Google's DeepDream and the work of artists like Mario Klingemann highlight the potential for AI to not only mimic human styles but also innovate in ways that defy traditional artistic conventions. The emergence of AI-generated art in galleries and exhibitions has prompted a reconsideration of what constitutes art, creativity, and authorship in the digital age [16].

Theoretical perspectives on AI and creativity

At the core of the debate surrounding AI-generated art is the question of creativity. Philosophers and cognitive scientists have long wrestled with the nature of creativity, typically attributing it to human consciousness, intentionality, and emotion. Immanuel Kant's ideas on aesthetic judgment, which emphasize the autonomy and freedom of the artist in the creative process, are often cited in this context. From a Kantian perspective, creativity is inseparable from human freedom - the ability to express personal intentions and emotions through art. AI, lacking personal agency and subjective experience, challenges this framework. For Kant, AI would not qualify as a true artist, as it lacks the

intrinsic freedom that human creators possess [18].

Nevertheless, the idea of AI as a creative partner has gained traction in recent years. Scholars such as Mazzone and Elgammal suggest that AI should be understood not as a replacement for human creativity but as an extension of it. The collaboration between human artists and AI systems opens up new possibilities for creativity, enabling humans to explore novel forms of expression and pushing the boundaries of artistic imagination. This collaborative approach highlights the potential of AI to enhance, rather than diminish, human creativity by providing new tools and techniques for artistic exploration.

Further research is needed to better understand the philosophical implications of AI in art, particularly with respect to the concepts of creativity, authorship, and emotion. As AI technologies continue to develop, so too must our understanding of their role in creative industries, and whether the creativity exhibited by AI can be truly considered "artistic".

AI art and human creativity: A collaborative future?

The introduction of AI into the creative process undoubtedly raises profound questions about the relationship between human creativity and machine-generated content [17]. As AI art becomes more integrated into art exhibitions, advertisements, and mainstream media, it forces us to rethink our definitions of creativity and artistic value. The potential for AI to democratize art production by making it accessible to a wider audience is exciting. However, the risk of devaluing human-created art, which often carries emotional weight and cultural significance, remains a real concern.

While AI may be able to generate aesthetically compelling works, it is still unclear whether these works can evoke the same depth of emotional and cultural resonance that human-created art does. The emotional connections that people form with art are often deeply tied to the intentions and histories behind the work, factors that AI art lacks. Still, it is possible that, with further advancements in AI, machines may be able to generate art that not only mimics human creativity but also creates emotional and cultural connections with viewers [19].

Considering the complexities of AI art's impact on human creativity, it is clear that future research should focus on examining how AI can be integrated into artistic practices in ways that complement human creativity rather than replace it. AI may not replace the human artist, but it has the potential to offer new creative possibilities and challenges that could reshape our understanding of art itself [20].

Utilizing the GEW to assess emotional reactions to art

Introduction to GEW

The study of emotional responses to art has long been an area of interest in psychology, aesthetics, and cognitive science. A key challenge in this field is the complexity of quantifying and categorizing the diverse emotions elicited by art. GEW developed by Sun and further expanded by Sacharin, Schlegel, and Scherer, offers a structured tool for analyzing emotions that arise in response to various stimuli, including art [21,22]. The GEW includes 20 primary emotions, categorized across several dimensions, such as valence (positive vs. negative) and activation (intensity). For the purpose of this study, eight core emotions - joy, trust, fear, surprise, sadness, disgust, anger, and anticipation - were selected due to their centrality in art appreciation and their relevance to both AI-generated and traditional artworks.

The GEW's utility in this context lies in its ability to capture a nuanced spectrum of emotional reactions that go beyond simple dichotomies like "liking" or "disliking" a work. In the context of art, emotions are rarely static or unidimensional; they are often a complex blend of feelings that interact with the viewer's prior experiences, cultural background, and personal preferences. The GEW provides a framework for measuring these diverse emotional responses in a way that can be systematically applied to both AI-generated and traditional artworks, allowing for a more comprehensive understanding of how different art forms engage audiences on an emotional level.

Interpretability is increasingly regarded as a prerequisite for trust in data-driven evaluation, especially when human judgments are complex and multi-factorial. Interpretable AutoML research is notable for showing how predictive performance can be coupled with transparent explanations, enabling stakeholders to understand which factors drive outcomes rather than

treating models as opaque black boxes. Consistent with this principle, we adopt the GEW to produce interpretable emotion profiles that can be compared across artwork types and demographic groups, supporting explanation-oriented conclusions rather than preference-only claims.

Research methodology: Using GEW to measure emotional responses

To explore how AI-generated art compares to traditional art in terms of emotional engagement, we employed a survey-based approach, utilizing GEW as a means of capturing emotional responses. The survey consisted of three sections: demographic information, emotional evaluation, and aesthetic preferences. Participants, ranging in age from 15 to 65, were asked to evaluate a selection of both AI-generated and traditional art based on the emotions they experienced while viewing the works. Each participant was presented with 10 artworks (five AI-generated and five traditional), which were indistinguishable in terms of visual appearance to minimize bias. The participants were then asked to rate their emotional reactions to each artwork using the eight emotions from the GEW on a scale ranging from "never" to "always" [23].

One of the challenges encountered during the research process was ensuring that participants' emotional responses were accurately captured without overwhelming them with too many variables. Human aesthetic experience is inherently selective: Viewers attend to salient cues while suppressing irrelevant details, meaning that perceived "meaning" can be shaped by what is emphasized or masked in a visual stimulus. Dynamic focused masking is notable for operationalizing this principle into a computational mechanism - highlighting how structured attention can improve interpretation under complex visual uncertainty. In our setting, this motivates careful stimulus selection and presentation control, because subtle compositional cues in AI-generated images may systematically steer emotions such as surprise, trust, or discomfort. The inherent complexity of art, namely its capacity to elicit a diverse range of emotional responses, necessitated the careful curation of artworks representative of both AI-generated and traditional artistic styles. These artworks were additionally selected to be sufficiently homogeneous to eliminate extraneous confounding factors from the experimental results. Despite these challenges, the GEW's structured approach allowed for a clear, systematic collection of data, providing insights into how AI-generated and traditional artworks evoke different emotional responses.

Data analysis: Interpreting emotional responses to AI and traditional art

After collecting survey responses, the emotional data were analyzed by comparing the frequency and intensity of emotions elicited by AI-generated art versus traditional art [24]. The results were broken down by age group, allowing for a more detailed understanding of how different generations engage with these art forms emotionally. Interestingly, the data revealed that traditional art generally provoked stronger feelings of joy, trust, and surprise. Younger audiences (aged 15-24) were more likely to experience surprise and anticipation in response to AI-generated art, whereas older audiences (aged 25 and above) exhibited more consistent emotional engagement with traditional art.

These results suggest that AI-generated art, while engaging, may not yet evoke the same depth of emotional connection as traditional art. However, it is also possible that the unique qualities of AI-generated art - such as its novelty and its capacity to explore abstract, non-human forms - may elicit a different, perhaps less conventional, type of emotional response. This could explain why younger participants, who are more accustomed to technological interactions, responded more positively to AI art, demonstrating a possible generational divide in emotional engagement.

Furthermore, while traditional art elicited stronger feelings of trust and joy, it also prompted fewer negative emotions, such as disgust or anger. These findings are consistent with previous studies on traditional art, which often highlight the human connection embedded in these works. AI-generated art, on the other hand, did not evoke fear, which is an interesting finding, considering that some AI artworks are known for their abstract or surreal qualities, which might typically induce discomfort or uncertainty. This could point to a potential gap in the emotional depth of AI-generated art, which, although visually striking, may still lack the emotional context that human-made artworks inherently provide.

Limitations and future research directions

While the use of the Geneva Emotional Wheel provided valuable insights into emotional responses to AI-generated and traditional art, it is not without its limitations. One key limitation is that the GEW does not capture all possible emotional nuances that may arise in response to art. For example, emotions like nostalgia, which may play a significant role in emotional responses to traditional art, were not included in the wheel's framework. Future research could expand the emotional scope by incorporating additional emotions or developing a more tailored emotional framework specific to the art context.

Another challenge lies in the subjective nature of emotional responses. Although GEW offers a structured approach, individual differences - such as cultural background, personal experiences with art, and prior exposure to AI-generated works - can influence emotional reactions. A key challenge in comparing AI-generated and traditional art across demographics is domain shift: emotional baselines and aesthetic priors can vary substantially by age, culture, and prior exposure to AI tools. Few-shot and domain adaptation research is notable for offering principled strategies to evaluate and transfer insights under limited samples and shifting distributions - exactly the situation encountered in cross-demographic aesthetic studies [25]. Future work can adopt adaptation-aware analysis to test whether emotion patterns remain stable when expanding to new cohorts, cultures, and art styles, strengthening the generalizability of our findings. Thus, it would be beneficial to conduct follow-up studies that explore how these individual factors interact with the emotional responses measured in this study. Additionally, longitudinal studies that track emotional engagement over time could provide more in-depth insights into how attitudes toward AI-generated art evolve as this genre becomes more familiar and integrated into mainstream culture.

Survey setup

Research design and objectives

The design of the survey for this study aimed to systematically capture the emotional responses of participants toward AI-generated art compared to traditional art. This design sought to address several key research questions: How do individuals emotionally respond to AI-generated art in comparison to traditional art? How do factors such as age, art education, and prior exposure to AI influence these responses? By framing these questions, the survey was constructed to provide nuanced insights into emotional engagement across demographic groups, shedding light on the potential of AI art to evoke complex emotional responses [26].

The survey was divided into three main sections: demographic information, emotional evaluation, and aesthetic preferences. Each section was carefully designed to gather specific data that would allow for a comprehensive analysis of how different audiences experience art emotionally. The demographic information section collected participants' age, educational background, and familiarity with AI art, while the emotional evaluation section assessed the participants' emotional responses to both AI-generated and traditional artworks [27]. The aesthetic preferences section aimed to capture participants' overall preferences and evaluations of various art forms. This structure allowed for an in-depth exploration of the emotional and aesthetic engagement with both types of art.

Artworks selection and categorization

For the purposes of this survey, 10 artworks were chosen - five AI-generated and five traditional pieces. The selection of these works was a pivotal aspect of the research design, as the choice of artworks could influence the emotional responses of the participants. One of the main challenges in the artwork selection process was to ensure that the chosen pieces were aesthetically comparable, yet distinctly representative of each category - AI-generated and traditional. Additionally, the artworks needed to be visually engaging without overtly revealing their origins, as the goal was to assess emotional reactions without prior bias about the source of creation.

The five AI-generated artworks included pieces produced by established AI systems such as Google's DeepDream, and others created through the use of GANs. These works were chosen for their ability to provoke complex and abstract emotions, as AI-generated art often embodies novelty, unpredictability, and the merging of various aesthetic styles. The five traditional artworks were selected from a range of genres and mediums, ensuring that they

represented a diversity of artistic styles, from classical to contemporary, allowing for a broad comparison with AI art.

The artworks were presented to the participants in random orders to minimize any ordering effects, and participants were not informed whether the artwork was AI-generated or traditional until after they had completed their emotional evaluation. This design aimed to eliminate biases that might stem from the participants' prior assumptions about the nature of art.

Participant recruitment and sample composition

Participants for the survey were recruited through online platforms and social media, targeting a diverse group to ensure that the sample represented a range of age groups, educational backgrounds, and experiences with art. The final sample included 80 valid responses, with a relatively even distribution across different age groups. The majority of respondents (70%) were young adults aged 15-24, a demographic that is generally more familiar with AI technologies and digital art. The remaining 30% consisted of participants aged 25 and older, ensuring that the study captured generational differences in emotional responses to AI-generated versus traditional art.

The participants were also asked to indicate their familiarity with AI art. Approximately 73.8% reported being familiar with AI-generated art, while 62.5% had either created or interacted with AI art in some capacity. This level of prior exposure was considered important in understanding how previous experiences with AI might influence emotional responses. Participants were also asked about their art education, with 45% indicating they had an art-related background, which allowed for an analysis of how formal art training might affect emotional reactions to different types of art.

Challenges in survey design and data collection

While the survey design aimed to be comprehensive, several challenges emerged during the data collection process. One of the primary difficulties was ensuring that participants' emotional responses were accurately captured without introducing overwhelming complexity. The use of GEW required that participants rate their emotional responses on a scale, which could have been too abstract for some, especially those without a formal background in art or psychology. To mitigate this issue, a clear and simple explanation of the GEW and its scale was provided, with examples to help participants understand the emotional categories they were being asked to evaluate.

Another challenge was ensuring the balance between AI-generated and traditional art, as both forms could be perceived differently based on the participants' individual preferences, cultural background, and prior exposure to technology. For instance, younger participants, who are more accustomed to digital technologies, may have had different emotional responses compared to older participants who have more experience with traditional art forms. This potential bias was addressed by including a diverse range of artworks from both categories and randomizing their presentation to minimize the effects of familiarity or bias.

Results

Overview of the survey results

This chapter presents the results of the survey conducted to measure emotional responses to both AI-generated and traditional art. The survey aimed to explore how different demographics - specifically, age groups (aged 15-24 and 25+) - emotionally engage with these two types of artwork. A total of 80 valid responses were collected, and emotional responses were measured using GEW, which assesses eight primary emotions: joy, trust, fear, surprise, sadness, disgust, anger, and anticipation. The data is categorized into emotional responses to traditional art and AI-generated art for each age group.

The findings are presented in two parts: the emotional responses by age group (aged 15-24 and 25+) and the comparison between traditional art and AI-generated art. The emotions most frequently reported for traditional art were joy, trust, and surprise, while AI-generated art elicited stronger responses of anticipation and surprise, particularly among younger respondents.

Emotional responses by age group

The emotional responses from the survey were analyzed to determine any significant differences between the two age groups. For the younger group (aged 15-24), traditional art generally elicited stronger emotional responses, particularly joy and trust. However, AI-generated art also generated significant emotional reactions, with joy and surprise standing out as key

emotions, and anticipation also showing a relatively high response. Interestingly, AI art was rated higher in surprise among younger participants, suggesting that the novelty and abstract qualities of AI-generated art were more engaging for this demographic.

Table 1 shows that participants aged 15-24 reported the highest levels of joy and surprise when viewing AI-generated art (both 60%), followed by trust and anticipation (both 50%). By comparison, traditional art in the same age group elicited slightly higher joy (70%) and trust (60%). In addition, disgust in response to AI-generated art among the 15-24 group was 17%, as reported in Table 1. For the older group (aged 25+), traditional art still dominated in terms of emotional response, with higher percentages of joy and trust. This suggests that the younger demographic may respond more to the novelty and technological aspects of AI art, while older audiences tend to engage more emotionally with traditional art due to its cultural and historical connections.

Table 1. Emotional responses by age group to AI and traditional art.

Emotion	Traditional art (aged 15-24)	AI art (aged 15-24)	Traditional art (aged 25+)	AI art (aged 25+)
Joy	70%	60%	75%	50%
Trust	60%	50%	65%	45%
Fear	10%	10%	5%	5%
Surprise	50%	60%	55%	45%
Sadness	30%	20%	25%	15%
Disgust	20%	17%	15%	30%
Anger	10%	15%	5%	20%
Anticipation	40%	50%	45%	40%

Emotional responses to traditional art vs AI-generated art

The comparison of emotional responses to traditional art and AI-generated art revealed that, in general, traditional art elicited stronger emotional responses, particularly in terms of joy and trust. Robust comparison studies benefit from systematic protocols that ensure construct alignment and avoid conflating measurement artifacts with true differences between conditions. Systematic comparison research is notable for demonstrating how alternative codifications and measurement choices can materially change conclusions - highlighting the need for carefully controlled comparative designs. Following this logic, we standardize artwork presentation and apply the same GEW-based measurement across AI and traditional conditions to ensure that observed emotional differences reflect stimulus type rather than procedural variance. The results suggest that traditional art has a more profound emotional resonance, possibly due to its historical, cultural, and personal connections that viewers often associate with it.

In contrast, AI-generated art elicited more mixed responses. Younger participants (aged 15-24) displayed a higher level of anticipation and surprise in response to AI art, likely reflecting the novelty and futuristic qualities of AI-based works. Despite this, AI-generated art was less likely to provoke emotions like joy or trust, which were more prominent in traditional art. These findings suggest that while AI art has the potential to evoke strong emotional responses, it may not yet replicate the depth of connection that traditional art can foster in terms of trust and emotional familiarity.

Data analysis and interpretation

The data was analyzed to identify patterns in emotional responses across the different groups and artwork types. The following key observations were made:

Higher emotional engagement with traditional art: Traditional art consistently elicited stronger emotional reactions in terms of joy, trust, and surprise. These emotions are often tied to the emotional and historical context associated with the artwork, which is more familiar to audiences. For example, classical paintings or well-known art movements may carry cultural or nostalgic weight that contributes to a stronger emotional engagement.

Younger audiences were more engaged with AI art: The younger demographic (aged 15-24) showed stronger

emotional responses to AI-generated art, particularly in the areas of surprise and anticipation. This suggests that younger people, who are more familiar with digital technologies, may be more open to the novel and unconventional aspects of AI art.

Generational differences: The older age group (aged 25+) exhibited more consistent emotional responses with a preference for traditional art. This suggests that older individuals may still find more emotional resonance and meaning in human-created art, which aligns with their lived experiences and cultural contexts.

Conclusion

The study presents in this paper provides valuable insights into the emotional engagement with AI-generated and traditional art, demonstrating that both art forms evoke distinct emotional responses across different demographics. The findings suggest that while traditional art continues to elicit stronger emotional connections, particularly in terms of joy, trust, and surprise, AI-generated art holds a unique appeal, especially among younger audiences, due to its novelty and futuristic qualities. It is possible that as AI art becomes more integrated into cultural and artistic spaces, its ability to evoke deeper emotional connections may improve, but this will likely require the continued evolution of AI technologies and a shift in cultural perceptions of what constitutes creativity and emotional engagement in art. Further research is needed to explore how the emotional responses to AI-generated art may evolve over time, particularly as AI art becomes more familiar and integrated into mainstream culture. Additionally, a deeper understanding of how AI art may be used to complement human creativity, rather than replace it, could provide new avenues for both artistic and technological innovation, opening up exciting possibilities for future research in the intersection of art, technology, and emotion.

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Conflict of Interest

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