

Assessment of Academic Art Stakeholders' Stance Toward Artificial Intelligence: A Study From Lebanon

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Abstract

The impact of artificial intelligence (AI) is felt across all areas, including the art field and its perspectives, especially in academia. Using a quantitative approach, the study collects primary data through a survey given to academics, artist-academics, and professional art experts to evaluate their views on AI's influence on the field. This paper explores how AI technologies affect artistic creation, such as producing new artworks, enhancing traditional techniques, ethical issues, and stakeholders' opinions. The statistical findings give a distinct insight into AI's capacity to expand artistic limits, presenting various perspectives on the technology's role in enhancing rather than substituting human creativity. Data analysis is conducted using IBM SPSS version 27. The findings show that while AI offers innovative tools for creativity, it also prompts a reevaluation of concepts like authorship, originality, and the core of creativity. This research contributes to the ongoing conversation about the relationship between art and technology by highlighting AI's role in shaping art creation and interpretation in today's world.

Keywords: impact, human perception, academic, art stakeholders, art, AI, Lebanon

1. Introduction

"Digitization, artificial intelligence (AI), the Internet of Things (IoT), big data, and cloud computing have become the keywords of this round of industrial revolution (IR)" (Xu and Ye, 2021, p. 1). However, technological progress faces skepticism from people who fear losing their comfort zones and opportunities for sustainable jobs. For example, as the Lewiston-Porter Central School District (n.d.) notes, "the IR, marked by major machine inventions and later automation, created inequality between machine-owning factory owners and the workers operating the machines". Moreover, British historian and researcher Maxine Berg (2014) argues that the shift in the factory sector caused by technological advancements forced craftsmen to either change their jobs or join the shrinking group of those specialized in craft and handmade works, as they couldn't compete with cheaper and faster production methods. Over the past decade, a new industrial revolution (IR) has emerged, driven by rapid technological breakthroughs and innovation. Xu & Ye (2021, p. 1) and Dmitriev and Hejase (2023, p. 47) note that this new phase is characterized by digitization, artificial intelligence (AI), cloud computing, big data, and the Internet of Things (IoT). As a result, modern Metaverse technologies are increasingly influencing audio-visual arts and artworks, leading to the creation of generative AI art. According to El Takach et al. (2022), Oye & Peace (2022), and OnFinance AI (2024), a new transformation has developed, echoing what happened after the previous industrial revolution. Furthermore, Davenport and Mittal (2022) highlight that new generative AI algorithms used in content design and creation platforms are now more accessible to the public than ever before. Consequently, current craftsmen face the same challenges faced by artisans of the past century, as such technological changes threaten the very existence of many artists. Anderson and Rainie (2018) stress the importance of understanding what this kind of transformation could mean.

This study aims to assess the academic art stakeholders' stance toward the introduction of AI algorithms and models in the art industry to answer the following research questions:

Question 1: How do academic art stakeholders perceive AI's influence on the arts?

Question 2: How does the role of current artists change with these technologies?

Question 3: Does using AI to create designs and artworks raise ethical concerns?

Question 4: What type of academic art stakeholders' adaptation is needed to face AI technologies integration and remain competitive in the job market?

This is split into five parts. The initial part offers a foundational overview of the topic, while the latter discusses the historical evolution of labor, technology, and employment. The third part outlines the subjects and methods of the research, the fourth part presents the results and discussion, and the fifth part wraps up with a summary and recommendations from the study

2. Literature Review

2.1 Chronological Sequence of Events of Transformation

Throughout history, humanity has experienced major changes in survival methods, often driven by craftsmanship and human ingenuity, with periodic bursts of technological innovation. Before the Industrial Revolution, manpower was a crucial resource for productivity in agriculture, construction, and warfare. A common factor across these areas was craftsmanship and invention. For example, Federer (2000) states that "More than three hundred years before the first Industrial Revolution (IR), the printing press was invented by Johannes Gutenberg and relieved man of the function of writing" (p. 270). The printing press sped up printing and boosted productivity. However, this advancement lessened the unique spirit of ancient writing methods and led to standardization among writers, unifying their works (McLuhan, 2012, p. 154). Each innovation directly led to the decline of what came before it (Benjamin, 1969, p. 3).

The rise of mechanical methods and machines in the 18th century signified a pivotal moment in the history of human productivity, signifying a shift from agricultural to industrial output and resulting in collaborative work rather than a solitary work setting (Hejase et al., 2012). This transformation was embraced by many due to its advantages, as productivity steadily increased (Berg, 2014). Machines execute complex and exacting tasks more swiftly and effectively than the conventional artisan (Hejase, 1999). Nevertheless, because of the significant rise in supply surpassing demand, an overwhelming "consumerism tendency" emerged, leading to the acquisition of unnecessary items. Rabouh (2020), referencing Martin Heidegger (philosopher from Germany), states, "The human relationship with manufactured products in the context of consumerism perception has lost its human essence" (p. 273). The demand for material goods, which now lack genuine human significance outside the personal knowledge and experiences of their creators, has shifted to fulfilling the desires of consumer culture and nothing else. Consequently, genuineness is diminished. Benjamin (1969) asserts that "ideas like creativity and genius, lasting value and mystery became obsolete" (p. 2).

In this context, McGregor (1960, p. 211; 1980) noted that this change resembled a "machine uprising against humanity," as the significant number of clones created by industrial machines, lacking any artistic vision, has led to a decline in craftsmen's skills, whose presence has diminished over the years.

Humanity was amplified by industrial goods, and with each new phase, the standardized production models grew alongside them. Referring to Jean-Jacques Rousseau (the philosopher), Himyar (2017) contends that "most of what the machine has done is merely copying and duplicating products intended for mass consumption only, while the individual's spiritual and creative development no longer has any actual existence" (p. 285). That is, all that the IR has accomplished is substituting the human with the machine to strip away his/her human identity. Okasha and Al-Hudayri (2019) illuminate René Descartes, the pioneer of contemporary philosophy, who established a rational framework that harmonized the contributions of humans and mechanical machines to society by characterizing the machine as "an extension of human existence that remains both a natural and artificial being" (p. 486). Okasha and Al-Hudayri add, "Descartes considered that the craft is one of the obstacles facing progress and development, as it depends only on individual skills and personal experience rather than science and general knowledge."

Managing highly sophisticated automated systems has become more challenging than before, and the risk of misuse has increased compared to simpler tools. "Can we acknowledge the dominance of the machine over its creator after the Deep Blue computer triumphed over Garry Kasparov in a chess match?" (IBM, n.d.). Kasparov provided an answer to this question many years later, as noted by Kinni (2017), stating, "While the idea of machines taking the place of people receives much of the focus and anxiety, the idea of people collaborating with machines should be welcomed as a means of enhancing various outcomes" (para 5). Conversely, Telivuo (2024) argues based on the modern French thinker Henri Bergson that "Mechanical devices are incapable of learning, adapting, and interacting with their surroundings like humans do. Mechanical processes alone cannot fully explain reality and perception, as life includes non-mechanical aspects such as awareness, emotion, and creativity, which are difficult to grasp" (p. 30).

2.2 Empowering Art With AI

The advancements observed in the initial thirty years of the twentieth century regarding the automated reproduction of artworks pose a significant challenge to science, threatening the artwork's integrity and uniqueness. This reproduction phenomenon has dual aspects, according to Walter Benjamin, who points out that “the concept of art before mechanical reproduction was unique and respected because of its aura derived from its originality and its material and cultural context, even if it is reproduced. The mechanical production of a work of art (reproduction) may make it lose its originality and uniqueness” (Benjamin, 1969, p. 4).

The previously mentioned factors did not impede the ongoing practice of art reproduction, particularly as reproduction methods have transitioned from traditional mechanical processes to the digital electronic mediums prevalent today, evolving into what is now referred to as digital art. Triggering fundamental changes that fueled intense discussions regarding the future of art and gloomy suggestions about its demise or conclusion. Hegel (1975) publicly stated that “Art, considered in its highest vocation, is and remains for us a thing of the past. Thereby, it has lost for us genuine truth and life and has been transferred into our ideas instead of maintaining its earlier necessity in reality and occupying its higher place” (p. 11).

2.2.1 Algorithms and Art

Anyoha (2017) asserts that the idea of robots with AI was introduced to society through science fiction in the early 20th century. By the 1950s, numerous scientists, mathematicians, and philosophers had evolved with the idea of AI deeply ingrained in their culture; Alan Turing (British mathematician), focused on intelligent machines, whose efforts were notably influenced by brain nerve cells, recognized for their capacity to gather and evaluate information, subsequently making decisions based on it (Turing, 1950). Today, as Taye (2023) posits, “Deep learning (DL) enables machines to train artificial neurons while processing vast amounts of data, learning autonomously, and generating flawless patterns and artistic outputs that are hard to differentiate from human creations.” Also, Butrym (2023) suggests that “AI and DL have initiated a technological revolution that has transformed the world. Transformative changes arising from the connection between deep learning and artistic creation have captured the attention of researchers and artists alike. A significant influence has been exerted on the production and understanding of visual art” (para 1-3).

Artists acquired their artistic know-how through engaging with and learning from the creations of their predecessors, who also inspired them, following similar styles or creating new ones. However, according to Vallance (2022), “some argue that using AI is different from simply finding inspiration from the work of other artists because it directly steals their human essence” (para 14). Ernst (2023) notes that opinions on this topic vary, yet many artists firmly oppose the notion of AI assuming their creative roles. “Artists view AI instead as a scientific tool for creating art and discovering new possibilities” (Vallance, 2022, para 6). In addition, Carré and Schmide (2020) believe that “generative intelligence is a technical tool and a source of inspiration at the same time” (p. 34).

When artists produce work, they express their emotions to the audience through their distinctive style, infusing the piece with the feelings and ideas they have at that time. AI algorithms and models solely learn and reproduce images from an arbitrary database; in other words, AI does not comprehend the meaning of the image or the intention behind its creation. Therefore, one might wonder whether the strong algorithms of AI and the artistic creations they could produce qualify as art. Gros (2019) contends that “AI contributions are based on the greatest degree of human input to art creation. However, the outcomes can be written off as non-artists since they cannot generate art, regardless of how intricate or opaque their creative process may be” (pp. 47-48). Gros adds, “One simple fact is that even the most advanced AI application in fine arts does not have forethought and will” (p. 48). Based on the above and ascertaining what researchers have discussed, Mineo (2023) provides an excellent recount of art, artwork, visual graphics, music, animation, and so on by interviewing several academic stakeholders from Harvard University, i.e., instructors and professional artists. Table 1 presents how human artists view and interact with AI.

Table 1. Human Artists and AI

Harvard Art Faculty	The Human-side	AI-side	Can't be Produced by AI	Threats
Film Animator (Teaches Art, Film, & Visual Art)	<ul style="list-style-type: none"> * Enjoys repetition of hand drawings (using a digital tablet) * Has access to the unconscious, intentional side of the Creative Process 	An excellent imitator of commercial genres with easily recognizable styles	Can't attain consciousness & independence of thoughts	May replace routine visual art makers
Architect & Urban Planner	<ul style="list-style-type: none"> * Able to produce richer & more nuanced work * Able to sort many variables to add insight and soul * Ability to react in the moment 	<ul style="list-style-type: none"> * AI has an extraordinary capacity to analyze * If asked the right questions, provides the right answers * Creates good graphic presentations 	Can't have a spur of creativity to enhance designs	Threatens the creativity and independence of creative works
Musician & Composer	<ul style="list-style-type: none"> * Adds surprise, emotion, and even silence in music * Add unique features in music in the moment of composition 	<ul style="list-style-type: none"> * AI imitates known works * Does not democratize music (relative to unknown musicians) 	Can't have a spur of creativity to enhance emotion and depth in music	Threatens the positive disposition to the art itself
Mixed-media Artist	<ul style="list-style-type: none"> * Ascribes to art * Can add provocation (innovation) * In control of technology 	* Intrigues Agency of AI	* Does not offer algorithms that democratize the field	Threatens mixed-media artists' jobs
Novelist & Short-Story Writer	<ul style="list-style-type: none"> * Unique way of looking at the world (personality) * Has linguistic originality * Produces inimitable details based on individual experiences 	An excellent imitator of commercial genres with easily recognizable styles	<ul style="list-style-type: none"> * Can't attain consciousness & independence of thoughts * Can't produce work with emotion and spirit 	Threatens the democratization of work

Source: Extracted and modified from Mineo (2023) by the authors.

2.2.2 Impact of Artificial Intelligence on Artists and Creators

Based on the findings of numerous research studies, one could inquire: Will AI take the place of existing artists and creators? Do the creations produced by AI align with genuine feelings and emotions when compared to the timeless works that shaped the history of art?

Novelist and short-story writer Daphne Kalotay, interviewed by Mineo (2023), posits that "AI is an excellent imitator and rapid learner and can effortlessly compose powerful creations in familiar styles, and with language innovation if encouraged, but — I believe — will be without genuine insight and experience. The highest risk is faced by commercial genres featuring distinctive styles and themes" (para 5). Also, Saxophonist, percussionist, and composer Yosvany Terry interviewed by Mineo (2023) said, "It's crucial to embrace AI enthusiastically to explore its potential benefits for us and collaborate with it in imaginative ways. Every new technology is initially perceived as a challenge to the existing order, similar to how radio was regarded upon its debut. Opposition to those innovations has always existed. I believe AI is not distinct; however, we should keep in mind that all these advancements are crafted by humans, and as people, we possess the ability to create and innovate" (para 10). Moreover, Independent animator Ruth Stella Lingford, senior lecturer on Art, Film, and Visual Studies, declares

that “Generally speaking, AI does threaten jobs in the animation industry. I’m told that it is already being used in some large studios. But it will also be a collaborator” (Mineo, 2023). However, she adds, “In my practice, the act of repeatedly drawing by hand (I use a digital tablet) allows me to tap into a more instinctive, unintentional aspect of the creative process, which I believe enhances the depth and complexity of the work. While it might be considered unrealistic to describe AI as creative or imaginative, the blending of images from various origins, with significant randomness, closely resembles certain features of the creative process” Mineo, 2023, para 15-16).

The primary worry linked to Artwork produced by AI is that it might greatly diminish job opportunities for contemporary artists in areas like communication arts, animation, and graphic design. Oosthuizen (2022) claims that the 4th IR embraced a strictly scientific and mathematical perspective, depending significantly on digital technology that operates via industrial machines (robot-powered autonomous production techniques) and vast smart computers (AI, IoT, Algorithms, etc.) while consequently neglecting traditional artistic craftsmanship. Thanks to AI, creating stunning artistic designs that could take a professional artist days to make is now achievable. This is achieved by creating descriptive texts, in any language, for concepts imagined by anyone globally, regardless of whether they have limbs or experience a neurological condition that hampers their drawing skills, solely due to their access to the Internet.

However, the concern persists since it must be emphasized that if the development of this technology mirrors the trajectory of post-industrial automation, it could greatly diminish the worth of contemporary artists and lead to substantial job losses in an industry characterized by needing a profoundly human touch. In contrast, Campitiello (2023), quotes Scott Belsky, Adobe’s Chief Product Officer and Executive Vice President of Creative Cloud, who offers optimistic perspectives on the topic claiming that “This technology renders creativity widely accessible and cultivates personal artistic confidence; incorporating this technology into artists’ tools offers the possibility of providing them an advantage for a breakthrough; and AI will not supplant creatives in their domains since it cannot replicate a human eye for aesthetics” (para 7-8, 13). Consequently, the above-mentioned perceptions suggest that “all aspects, from storyboards to collages to the development of advertisements and graphic films, will be significantly altered compared to the past, potentially leading to major challenges for individual artists who have honed their skills over many years” (Rammal et al., 2025). Yet, conversely, it can be argued that it will certainly create an equal opportunity for individuals who see art as unattainable.

2.3 The Future of Art

Mixed-media artist Matt Saunders, a Harvard University professor in the Department of Art, Film, and Visual Studies asserts, “In response to the inquiry about whether AI poses a threat or serves as a collaborator, I could say that every emerging technology disrupts norms and provides not just new opportunities but also a different form of material intelligence. I am confident that numerous artists will find the “agency” of AI fascinating and will look for ways to engage or partner with it. Numerous individuals already are. We ought to appreciate being challenged and shaken out of our routines and beliefs!” (Mineo, 2023, para 21). Moreover, the realm of AI is undergoing a transformative change, as the rise of AI agents marks a substantial advancement in the abilities of autonomous systems. Srivatsa (2025) contends that “These advanced agents are transforming our comprehension of AI’s potential, merging superior decision-making skills with exceptional flexibility and intentional initiative” (para 1). The aforementioned is a futuristic outlook toward AI Agency; however, today, man-machine collaborations are becoming more salient. For example, the Interaction Design Foundation (2023) articulates how AI creates art: “AI art emerges from algorithms, data, and the limitless possibilities of machine learning. The process usually starts with a collection of input data, such as photographs, paintings, or illustrations, which the AI utilizes to understand styles, textures, and compositions. After training, the AI can independently create new images or respond to specific prompts or parameters given by a human artist” (para 7). When the algorithm performs well, the end-user must once again assess and determine its effectiveness, making further modifications until the output is suitable for presentation, indicating that human involvement is essential to guide and oversee the process, similar to the winning painting at the Colorado State Fair’s annual art contest (Roose, 2022). Ultimately, permitting AI to assist art stakeholders in processing, analyzing, and assessing the vast quantities of data that constitute today’s world might inspire them to dedicate more time to higher human competencies, i.e., to think more creatively, to make better decisions, and to be smarter problem-solvers (Stubbings, 2017, 2018).

2.4 Stakeholder Theory

Freeman (1984) contends that organizations must consider the interests and impacts of all groups affected by their operations, not just shareholders, but employees, customers, suppliers, communities, governments, and others. In the context of artificial intelligence (AI), stakeholder theory becomes increasingly relevant as AI technologies

permeate all sectors of society. Stakeholder perceptions of AI, in this case, the students', instructors', teaching artists, and professionals' perceptions, can inform ethical design, responsible deployment, and policy governance.

The AI image is shaped by its multifaceted implications, ranging from economic disruption to ethical concerns. Stakeholders such as those mentioned earlier may view AI as a threat to jobs through automation or a threat to the authenticity of artistic work, while university leaders may see it as a tool for harnessing productivity and innovation. According to Brynjolfsson and McAfee's (2014) view of automation, it is transforming the nature of work, creating fear among stakeholders about being replaced and skills becoming outdated. A stakeholder approach would require institutions to invest in upskilling initiatives and deliver inclusive economic benefits.

As for students, their sentiment about AI relies on data privacy, algorithmic fairness, and transparency. For instance, artwork generated by AI scandals and biased algorithms has eroded confidence in AI systems (O'Neil, 2016). Stakeholder theory would imply that companies developing AI must collaborate with artwork consumers and activist organizations to ensure that there is ethical use, mitigate privacy concerns, and incorporate feedback into design processes. Transparency and communication can generate a more positive and informed public opinion. The European Union's AI Act, for example, illustrates stakeholder engagement in classifying AI systems by level of risk and mandating stricter compliance for high-risk applications (European Commission, 2021). Stakeholder theory makes the case for the argument that public policy needs to be guided by a dialogue among several voices—tech creators, civil society, and marginalized groups—to craft inclusive, equilibrium regulations.

Developers and technology companies, as stakeholders and drivers of AI development, must balance innovation and responsibility. Stakeholder theory criticizes the traditional paradigm of profit-making by emphasizing long-term value creation and ethical commitment. The inclusion of stakeholder interests in AI design processes, such as through participatory design and impact analysis, can allow developers to anticipate and avert negative effects.

Also, academic communities and civil society groups are mediators who bring to the limelight underrepresented stakeholder voices, for example, those of minority groups that may be negatively impacted by discriminatory AI tools. Their impact on public opinion and policy also reflects the reach of stakeholder theory being exercised.

In conclusion, stakeholder theory provides a holistic perspective for assessing and guiding the development and perception of AI. By adopting multidimensional inputs, institutions can better anticipate societal impacts, build trust, and ensure equitable outcomes. As AI technology continues to evolve, its future adoption and success will increasingly depend on how well stakeholder concerns are recognized and addressed.

2.5 Hypotheses Formulation

Question 1: How do academic art stakeholders perceive AI's influence on the arts?

Hypothesis 1:

H01 Utilizing AI technologies in artistic projects or practices within stakeholders' fields will not help them generate superior creative works

Ha1 Utilizing AI technologies in artistic projects or practices within stakeholders' fields helps them generate superior creative works

Question 2: How does the role of current artists change with these technologies?

Hypothesis 2:

H02 AI technology empowers stakeholders' imagination to produce more creative works, and will not enhance their artistic expression in their fields

Ha2 AI technology empowers stakeholders' imagination to produce more creative works and enhances their artistic expression in their fields

Hypothesis 3:

H03 AI technology empowers stakeholders' imagination to produce more creative works, and will not generate faster artistic project results or practices within the stakeholders' fields

Ha3 AI technology empowers stakeholders' imagination to produce more creative works and generates faster artistic project results or practices within the stakeholders' field

Hypothesis 4:

H04 AI technology empowers stakeholders' imagination to produce more creative works, and does not increase higher hierarchies of creativity and innovation

Ha4 AI technology empowers stakeholders' imagination to produce more creative works and increases higher hierarchy of creativity and innovation

Question 3: Does using AI to create designs and artworks raise ethical concerns?

Hypothesis 5:

H05 AI in creating designs and artworks within stakeholders' fields does not increase copyright and ownership challenges

Ha5 AI in creating designs and artworks within stakeholders' fields increases copyright and ownership challenges

Hypothesis 6:

H06 AI in creating designs and artworks within the stakeholders' field does not lead to Bias and fairness issues

Ha6 AI in creating designs and artworks within the stakeholders' field leads to Bias and fairness issues

Question 4: What type of academic art stakeholders' adaptation is needed to face AI technologies integration and remain competitive in the job market?

Hypothesis 7:

H07 The integration of AI in Artistic fields increases uncertainty and does not shift job roles and responsibilities

Ha7 The integration of AI in Artistic fields increases uncertainty and shifts job roles and responsibilities

3. Research Methodology

This study is quantitative, exploratory, positivist, and uses deductive reasoning. Hejase & Hejase (2013) posit that "Positivism is whereby researchers stay unbiased and not influence the research subject" (p. 77). Also, this research relies on descriptive and inferential analyses based on a survey with a selected, convenient sample of academic stakeholders, including undergraduate and graduate students, instructors, and expert artists who are directly involved in the fields of arts, creation, and design.

3.1 Sampling and Sample Size

A total of sixty persons responded to the survey. The count of students, teachers, teaching artists, and professionals is roughly one thousand individuals.

The survey was conducted through a focused online survey platform, "SurveyMonkey." Leveraging reliability error estimates from Hardwick's (2022), the authors utilized a comparable method employed by several research groups, including Younis et al. (2021), Nasser et al. (2022), Masoudi and Hejase (2023), Rammal et al. (2024), Hejase et al. (2023a, b), and Chehimi and Hejase (2024), involving a comprehensive population of one thousand persons. In a situation where the population is approximately 1000, Table 2 shows that the sample size would be 60 (with 95% confidence) and an expected reliability error of roughly 11.5%. Consequently, the sample size of 60 in this research yields an adequate reliability error of roughly $\pm 11.5\%$, meaning, in 88.5 out of 100 repeated surveys, the outcomes will not vary by more than 11.5%. This level of reliability would be suitable for this type of exploratory research (Hejase, El Dirani, Haidar, et al., 2024; Hejase et al., 2024).

Table 2. Statistical reliability versus sample size at 95% confidence

Sample Size	Population				
	100	500	1000	5000	10000
30	$\pm 14.7\%$	$\pm 17.1\%$	$\pm 17.3\%$	$\pm 17.6\%$	$\pm 17.7\%$
50	$\pm 9.7\%$	$\pm 13.1\%$	$\pm 13.5\%$	$\pm 13.8\%$	$\pm 13.9\%$
75	$\pm 5.6\%$	$\pm 10.4\%$	$\pm 10.9\%$	$\pm 11.3\%$	$\pm 11.4\%$
100		$\pm 8.8\%$	$\pm 9.3\%$	$\pm 9.7\%$	$\pm 9.8\%$

Source: Modified from Hardwick's (2022) Research.

Note: 50/50% proportion characteristics

3.2 Questionnaire Design

The structured survey consists of six sections. Section one, with three questions tests familiarity with AI, section two with seven questions, tests AI's role in shaping the artwork's future, section three with five questions tests respondents' perceptions about AI, section four with five questions tests ethical concerns, and section five with

seven questions tests impact of AI on the artistic fields. Finally, section six collects demographic data of respondents with four questions covering age, gender, academic status, and the type of university the respondents are affiliated with. All questions follow a five-level Likert scale design, except the demographic questions, which are dyadic and multiple choice.

3.3 Data Analysis

Hejase & Hejase (2011) assert that assigning a purpose to data creates valuable insights. Additionally, descriptive statistics utilize straightforward, explanatory figures or visuals to help interpret a dataset (Hejase & Hejase, 2013, p. 272). The assessment of the primary data, including demographic data, employed IBM's SPSS v.27.0 "Statistical Product and Service Solutions" software. Numerically, organizing responses enabled the computation of frequencies and percentages to define the sample of respondents. Furthermore, inferential analysis was performed employing t-tests, factor analysis, and regression analysis

4. Results and Discussion

4.1 Demographics

Findings indicate that 20% of the participants were men, while 80% were women. The age component consists of five (5) categories. 48.5% of the participants were aged 22 to 26 years, 28.3% were under 21, 13.3% were between 32 and 36, 8.3% were from 37 to 41, and 1.7% were over 52. Additionally, 68.3% obtained their Bachelor's degree, 11.7% received their Master's degree, 10% were artists, 6.7% were doctoral educators, and 3.3% held professional roles. Additionally, 76.7% of the participants were linked to a private university, 16.7% were associated with a public university, and 6.7% attended both types.

4.2 Knowledge about Artificial Intelligence (AI) in the Artistic Field

The following responses are summarized symbolically in the grid below. EF: Extremely Familiar [5]; VF: Very Familiar [4]; MF: Moderately Familiar [3], SF: Somewhat Familiar [2], and NFAA: Not Familiar at All [1].

Table 3. Knowledge about AI in the Artistic Field

No. 1	Statement	EF	VF	MF	SF	NFAA	Mean	Std. Dev.
1	I am familiar with using Artificial Intelligence in artistic fields.	30.0	00.0	13.3	46.7	10.00	2.93	1.448
2	I witnessed AI technologies in artistic projects or practices in my field	43.33	10.00	8.34	33.3	5.00	3.53	1.455
3	I utilized AI technologies in artistic projects or practices within my field	31.67	6.67	13.33	28.33	20.00	3.02	1.568

Respondents in Table 3 indicate that 60% have moderate familiarity with the use of AI in artistic fields (mean = 2.93, std. dev. = 1.448); however, 53.33% reported witnessing AI technology usage in artistic projects or practices (mean = 3.53, and std. dev. = 1.455). Additionally, respondents were divided, with 38.34% highly familiar with AI technology usage and 41.66% moderately familiar. Overall, Table 1 suggests that respondents need more awareness and training in the use of AI technology in their artistic projects and practices.

Responses for Tables 4 to 7 were initially distributed as SA: Strongly Agree [5]; A: Agree [4]; I: Indifferent [3], D: Disagree [2], and SD: Strongly Disagree [1]. However, to simplify the interpretation of the results, four choices were grouped in pairs; SA and A to represent 'Agreement' and SD and D to represent 'Disagreement', facilitating the interpretation of the results.

4.3 AI's Role in Shaping the Future of Artistic Fields

Table 4. AI's Role in Shaping the Future of Artistic Fields

No.	Statement	A	I	D	Mean	Std. Dev.
6	AI will help me generate superior creative works	63.34	18.33	18.33	3.57	1.079
7	AI technologies will generate faster artistic project results or practices within my field	81.67	13.33	5.00	4.08	0.926
8	AI technologies will eliminate the human touch to my artistic projects or practices within my field	40.00	28.33	31.67	3.13	1.255
9	AI technologies will empower my imagination to produce more creative works in my field	70.00	16.67	13.33	3.82	1.066
10	AI will enhance my artistic expression in my field	63.33	23.33	13.34	3.67	0.968
11	AI will improve the efficiency of my creative works	65.00	28.33	6.67	3.78	0.904
12	AI technologies will add more innovation to my artistic works	66.67	20.00	13.34	3.72	0.976

The salient result in Table 4 is that 81.67% (mean = 4.0, std. dev. =0.926) of the respondents agree that AI technologies will increase projects' efficiency by generating faster results. This result is supported by Rammal et al. (2025) and Messer (2024). Messer posits that "Generative AI can swiftly create layouts and potential realizations of an image, and the outcomes from the tool can act as a foundation for the artist's painting, greatly diminishing the effort and time needed" (p. 3). Next, five statements illustrate respondents' stance toward AI impact including generating superior creative works (63.34% agreement), empowering stakeholders' imagination to produce more creative works (70% agreement), enhancing artistic expression (63.33% agreement), improving the efficiency of creative works (65% agreement), and adding more innovation to artistic works (66.67% agreement). Respondents were moderate in describing AI's role in shaping the future of artistic fields.

4.4 Perception of AI's Impact on Artistic Expression

Table 5. Perception of AI's Impact on Artistic Expression

No.	Statement	A	I	D	Mean	Std. Dev.
14	I believe AI can enhance artistic expression across various fields	71.67	20.00	8.34	3.87	0.929
15	AI technologies can evoke emotions in my AI-generated designs as compared with my creative designs	38.33	21.67	40.00	3.12	1.223
16	AI technologies can convey meaningful messages in my AI-generated designs as compared with my creative designs	41.67	28.33	30.00	3.27	1.103
17	AI-generated designs are machine-created works only	43.33	40.00	16.67	3.48	1.066
18	AI-generated designs will lead to dead art	38.33	35.00	26.67	3.30	1.109

Table 5 illustrates that 71.67% of the respondents agree that AI can enhance artistic expression across various fields in the arts (mean = 3.87, std. dev. = 0.929). This result is acknowledged by many researchers who delved into investigating how AI technology impacts the arts and artistic works (Mineo, 2023; Messer, 2024; Rammal et al., 2025). However, the respondents showed high uncertainty in their responses to the remaining statements. The statements stressed a comparison between AI-generated designs and human designs (respondents' designs). The sensitive issue was whether AI technology designs express human art authenticity. The results of the four statements expressed indifference or a lower degree of agreement (an average indifference of 31.25%, an average mean of 3.29, and an average standard deviation of 1.125). These results were congruent with those results, in the context of Lebanon, from Rammal et al. (2025) and from Mineo's (2023) results, in the context of the USA, qualitative research.

4.5 Concerns and Ethical Considerations

Table 6. Concerns and Ethical Considerations

No.	Statement	A	I	D	Mean	Std. Dev.
AI in creating designs and artworks within my field:						
20	Leads to Bias and fairness issues	55.00	43.33	1.67	3.62	0.666
21	Encourages plagiarism	76.67	15.00	8.33	3.90	0.838
22	Leads to a loss of human touch	73.33	15.00	11.67	3.90	1.003
23	Increases copyright and ownership challenges	83.33	15.00	1.67	4.12	0.715
24	Leads to unfair competition	85.00	11.67	3.33	4.27	0.800

Table 6 provides strong evidence of how much respondents are concerned about ethical and legal issues related to AI creating designs and artistic works, including bias and fairness (55% agreement), plagiarism encouragement (76.67% agreement), and copyright and ownership challenges (83.33% agreement). Other researchers have expressed similar concerns (Kelly, 2022; Chi, 2024; Garcia, 2024; Rammal et al., 2025). Additionally, respondents were skeptical about AI-generated art causing the loss of human touch (73.33% agreement) and unfair competition (85% agreement). These concerns are also reflected in Mineo's (2023) interviews with various art-related experts, who noted that AI's use in artwork generation cannot replicate human consciousness or independent thought, and stated "AI can't attain consciousness & independence of thoughts; can't have spurs of creativity to enhance emotion and depth in music and art designs; does not offer algorithms that democratize the field; can't attain consciousness & independence of thoughts; and can't produce work with emotion and spirit."

4.6 Impact of AI on the Labor Market of Artistic Fields

Table 7. Impact of AI on the Labor Market of Artistic Fields

No.	Statement	A	I	D	Mean	Std. Dev.
29	Integration of AI in artistic fields increases job opportunities	35.00	28.33	36.67	3.02	1.112
30	Integration of AI in artistic fields shifts job roles and responsibilities	81.67	13.33	5.00	3.95	0.790
31	Integration of AI in artistic fields increases higher hierarchies of creativity and innovation	55.00	35.00	10.00	3.63	0.901
32	Integration of AI in artistic fields leads to similar job opportunities without AI applications	35.00	30.00	35.00	2.98	1.127
33	Integration of AI in artistic fields increases uncertainty	71.67	20.00	8.33	3.88	0.885
34	AI replaces laborious tasks or tasks that are rewarding for humans in artistic fields	71.67	21.67	6.67	3.90	0.858

Table 7 demonstrates that respondents were somehow confused given the outcomes of the statement “Integration of AI in artistic fields increases job opportunities,” since opinions were distributed almost equally between agreement (35%), indifference (28.33%), and disagreement (36.67%). This result fits the moderate level of awareness and knowledge assessed in Table 1. A similar case is also seen with the statement “Integration of AI in artistic fields leads to similar job opportunities without AI applications,” where responses were distributed about equally between agreement (35%), indifference (30%), and disagreement (35%). These two statements urge the respondents to seek further training and educational awareness. The statement “Integration of AI in artistic fields increases higher hierarchies of creativity and innovation” was moderately supported by respondents; however, the indifference level was high at 35% which insinuates not having full knowledge about the statement. Finally, the last three statements stress shifts in job roles and responsibilities (81.67% agreement), increment in uncertainty (71.67%), and the replacement of laborious tasks or tasks that are rewarding for humans in artistic fields (71.67%). Respondents’ certainty was high. These outcomes are clear provided the respondents know that technology is an enabler, that is, AI increases the efficiency of conducting tasks, shifts roles and responsibilities from running repetitive tasks, and demands awareness and new skill training, which, if these do not exist, increases the level of uncertainty. These three statements support the positivity of using AI technology as a tool to improve artwork.

4.7 Reliability and Validity

The Internal Reliability of the 26-item scale is assessed using the Cronbach’s Alpha method. Table 13 shows that the 26-item scale produced a Cronbach’s Alpha of 0.708, while the values for item removals varied from 0.680 to 0.724, fitting into the “Good” range of 0.7 - 0.8 (Hejase & Hejase, 2013, p. 570; Burns, R., & Burns, R., 2008, p. 481). This illustrates a robust correlation and verifies that the selected questions are suitable for the questionnaire (Chehimi et al., 2019, p. 1915).

For validation purposes, the items in the instrument were submitted to four university experts. They examined the questionnaire and recommended a few changes that were implemented before administering it to the respondents.

Table 8. Reliability Statistics

Overall Cronbach's Alpha	N of Items
0.708	26

4.8 Regression Analysis

The next step is to perform causal research to assess the relationships between selected variables to test the formulated hypotheses. Tables 9 and 10 illustrate that there are four regression models resulting from using the ‘Stepwise’ approach with different cycles of calculations, whereby non-statistically significant explanatory variables were removed. The resultant regression models are suitable for the available data with Coefficients of Determination (models 1, 2, and 3 with moderate Adj.R² and model 4 with weak Adj.R² coefficient); nonetheless, the models are also qualitatively acceptable given a significant probability of $p < \alpha = 0.05$. ANOVA testing (refer to Table 8) shows adequate F-values (Sig $P < \alpha = 5\%$), confirming that the resulting regression equations are more accurate than what would occur by random chance. Moreover, all four models have standardized Betas that are statistically significant with p-values $< 5\%$. Additionally, all VIFs are less than 2, presented in Table 10, indicating the absence of multicollinearity (Chehimi et al., 2019, p. 1911; Younis et al., 2021, p. 26; Hashem et al., 2022, p. 33), and all the explanatory variables are suitable for establishing a causal link through regression analysis. These updated models indicate that the corresponding explanatory factors account for 49.3% (model 1), 59% (model 2), 52.1% (model 3), and 24.6% (model 4) of the variation in the dependent variables. The Durbin-Watson statistic for these models varies from 1.804 to 2.389, with values between 0 and 4. A value near 2.0 means no detection of autocorrelation in the sample (Al Sayed et al., 2022; Chehimi et al., 2024; Hejase et al., 2024), and each explanatory variable is suitable for establishing a causal link through regression analysis. These updated models indicate that the corresponding explanatory factors account for 49.3% (model 1), 59% (model 2), 52.1% (model 3), and 24.6% (model 4) of the variation in the dependent variables.

Table 9. Regression Summary

Model	Dependent Variable	Independent Variables	R	R ²	Adjusted R ²	Durbin-Watson	Sig.
1 (4 Cycles)	I utilized AI technologies in artistic projects or practices within my field	* I witnessed AI technologies in artistic projects or practices within my field * Role: AI will help me generate superior creative works * I am familiar with using Artificial Intelligence in Artistic fields * Ethics: AI in creating designs and artworks within my field leads to a loss of human touch	0.726	0.527	0.493	1.920	0.014
2 (4 Cycles)	Role: AI technologies will empower my imagination to produce more creative works in my field	* Role: AI will enhance my Artistic expression in my field * Impact on Labor Market: The Integration of AI in Artistic fields increases higher hierarchies of creativity and innovation * Perception: AI-generated designs will lead to dead art * Role: AI technologies will generate faster Artistic project results or practices within my field	0.786	0.617	0.590	1.877	0.048
3 (6 Cycles)	Ethics: AI in creating designs and artworks within my field encourages plagiarism	* Ethics: AI in creating designs and artworks within my field increases copyright and ownership challenges * Perception: AI-generated designs will lead to dead art * Ethics: AI in creating designs and artworks within my field leads to Bias and fairness issues * Impact on Labor Market: AI replaces laborious tasks or tasks that are rewarding for humans in Artistic fields	0.744	0.554	0.521	2.389	0.008
4 (2 Cycles)	Impact on the Labor Market: The Integration of AI in Artistic fields increases uncertainty	* Impact on Labor Market: The Integration of AI in Artistic fields shifts job roles and responsibilities; * Ethics: AI in creating designs and artworks within my field increases copyright and ownership challenges	0.521	0.271	0.246	1.804	0.026

Table 10. Regression Coefficients

Model	Dependent Variable	Independent Variables	Standardized Beta	t	Sig.	Tolerance	VIF
1 (4 Cycles) ANOVA F=15.349 (p< 0.001)	I utilized AI technologies in artistic projects or practices within my field	* I witnessed AI technologies in artistic projects or practices within my field	0.271	2.632	0.011	0.808	1.237
		*Role: AI will help me generate superior creative works	0.335	3.542	0.001	0.961	1.040
		* I am familiar with using Artificial Intelligence in Artistic fields	0.323	3.264	0.002	0.880	1.137
		* Ethics: AI in creating designs and artworks within my field leads to a loss of human touch	- 0.244	-2.527	0.014	0.925	1.081
2 (4 Cycles) ANOVA F=22.186 (p< 0.000)	Role: AI technologies will empower my imagination to produce more creative works in my field	* Role: AI will enhance my Artistic expression in my field	0.480	5.202	0.000	0.816	1.226
		* Impact on Labor Market: The Integration of AI in Artistic fields increases higher hierarchies of creativity and innovation	0.358	3.910	0.000	0.830	1.205
		* Perception: AI-generated designs will lead to dead art	0.211	2.501	0.015	0.976	1.024
		* Role: AI technologies will generate faster Artistic project results or practices within my field	0.176	2.025	0.048	0.921	1.086
3 (6 Cycles) ANOVA F=17.062 (p< 0.000)	Ethics: AI in creating designs and artworks within my field encourages plagiarism	* Ethics: AI in creating designs and artworks within my field increases copyright and ownership challenges	0.443	4.689	0.000	0.911	1.098
		* Perception: AI-generated designs will lead to dead art	0.357	3.745	0.000	0.893	1.120
		* Ethics: AI in creating designs and artworks within my field leads to Bias and fairness issues	0.351	3.736	0.000	0.918	1.090
		* Impact on Labor Market: AI replaces laborious tasks or tasks that are rewarding for humans in Artistic fields	- 0.262	-2.763	0.008	0.902	1.109
4 (1 Cycle) ANOVA F=10.605 (p< 0.000)	Impact on Labor Market: The Integration of AI in Artistic fields increases the uncertainty	* Impact on Labor Market: The Integration of AI in Artistic fields shifts job roles and responsibilities;	0.434	3.827	0.000	0.995	1.005
		* Ethics: AI in creating designs and artworks within my field increases copyright and ownership challenges	0.259	2.286	0.026	0.995	1.005

Note: Variance Inflation Factors (VIFs); Tolerance = (1/VIF).

4.9 Hypotheses Testing

Question 1: How do academic art stakeholders perceive AI's influence on the arts?

Hypothesis 1:

H01 Utilizing AI technologies in artistic projects or practices within stakeholders' fields will not help them generate superior creative works

Ha1 Utilizing AI technologies in artistic projects or practices within stakeholders' fields helps them generate superior creative works

Model 1:

[I utilized AI technologies in artistic projects or practices within my field] =

0.271 [I witnessed AI technologies in artistic projects or practices within my field]

+ 0.335 [AI will help me generate superior creative works]

+ 0.323 [I am familiar with using Artificial Intelligence in Artistic fields]

- 0.244 [AI in creating designs and artworks within my field leads to a loss of human touch]

Model 1 supports the analysis of hypothesis 1. For stakeholders to offer a true perception of AI's influence, they must be users of this technology. Model 1 indicates that there are four explanatory variables affecting the dependent variable, "I utilized AI technologies in artistic projects or practices within my field." Witnessing the applications of AI technology is statistically significant and positive (Beta=0.271, $p = 0.011 < 5\%$), implying that when end-users are familiar with AI technology, they will utilize it in their projects and work. The second term corresponds to hypothesis 1, indicating that perceiving AI technologies as helpful in generating superior creative works will enhance their utilization. This relationship is statistically significant and positive (Beta = 0.335, $p = 0.001 < 1\%$). Therefore, the null hypothesis 1 (H01) is rejected, and the alternative hypothesis (Ha1) is accepted. The next two explanatory variables are also statistically significant, with Betas of 0.323 and -0.244, and p-values of 0.002 & 0.014 < 5%. Familiarity with AI utilization and the belief that AI does not lead to a loss of the human touch support the utilization of AI in the field.

Question 2: How does the role of current artists change with these technologies?

Hypothesis 2:

H02 AI technology empowers stakeholders' imagination to produce more creative works, and will not enhance their artistic expression in their fields

Ha2 AI technology empowers stakeholders' imagination to produce more creative works and enhances their artistic expression in their fields

Hypothesis 3:

H03 AI technology empowers stakeholders' imagination to produce more creative works, and will not generate faster artistic project results or practices within the stakeholders' fields

Ha3 AI technology empowers stakeholders' imagination to produce more creative works and generates faster artistic project results or practices within the stakeholders' field

Hypothesis 4:

H04 AI technology empowers stakeholders' imagination to produce more creative works, and does not increase higher hierarchies of creativity and innovation

Ha4 AI technology empowers stakeholders' imagination to produce more creative works and increases higher hierarchy of creativity and innovation

Model 2:

[Role: AI technologies will empower my imagination to produce more creative works in my field] =

+ 0.480[Role: AI will enhance my Artistic expression in my field]

+ 0.358[Impact on Labor Market: The Integration of AI in Artistic fields increases higher hierarchies of creativity and innovation]

+ 0.211[Perception: AI-generated designs will lead to dead art]

+ 0.176[Role: AI technologies will generate faster Artistic project results or practices within my field]

Model 2 supports the analysis of hypotheses 2, 3, and 4. Stakeholders recognize that technology also enables art stakeholders by providing opportunities for greater creativity; however, hypothesis 2 focuses more on enhancing human expression in generated artworks using AI technologies. Examining model 2, the relationship between these two dimensions is statistically significant and positive ($\text{Beta} = 0.480$, $p = 0.000$ $p = 0.001 < 1\%$). Therefore, null hypothesis 2 (H02) is rejected, and the alternative hypothesis (Ha2) is accepted. As art stakeholders find that they can incorporate human expression in their artistic works through AI technology, they will experience greater empowerment. Furthermore, null hypotheses 3 (H03) and 4 (H04) are rejected ($\text{Beta}3 = 0.176$ and $\text{Beta}4 = 0.358$ with $p3 = 0.048$ and $p4 = 0.000 < 5\%$), leading to the acceptance of the alternative hypotheses. When stakeholders observe that AI technologies yield faster results in artistic projects or practices within their fields and that the integration of AI in the artistic domain enhances higher levels of creativity and innovation, they will agree that more AI technologies will empower their imagination to produce more creative works in their disciplines. A significant outcome of this is improved job opportunities. However, model 2 shows that if the stakeholders' awareness is high about AI-generated designs leading to dead art, then AI technologies will empower stakeholders' imagination to produce more creative works in their fields. This is statistically supported ($\text{Beta} = 0.176$, $p = 0.048 < 5\%$).

Question 3: Does using AI to create designs and artworks raise ethical concerns?

Hypothesis 5:

H05 AI in creating designs and artworks within stakeholders' fields does not increase copyright and ownership challenges

Ha5 AI in creating designs and artworks within stakeholders' fields increases copyright and ownership challenges

Hypothesis 6:

H06 AI in creating designs and artworks within the stakeholders' field does not lead to Bias and fairness issues

Ha6 AI in creating designs and artworks within the stakeholders' field leads to Bias and fairness issues

Model 3:

[Ethics: AI in creating designs and artworks within my field encourages plagiarism] =
 + 0.443[Ethics: AI in creating designs and artworks within my field increases copyright and ownership challenges]
 +0.357[Perception: AI-generated designs will lead to dead art]
 +0.351[Ethics: AI in creating designs and artworks within my field leads to Bias and fairness issues]
 - 0.262[Impact on Labor Market: AI replaces laborious tasks or tasks that are rewarding for humans in Artistic fields]

Model 3 supports the analysis of hypotheses 5 and 6. Stakeholders' concerns about AI being used in creating designs and artworks, encouraging plagiarism, will be higher when there is a rise in copyright and ownership violations, as well as Bias and fairness issues. This outcome is statistically significant and positive ($\text{Beta}5 = 0.443$ and $\text{Beta}6 = 0.351$ with $p5 = 0.000$ & $p6 = 0.000 < 1\%$). Therefore, null hypotheses 5 and 6 are rejected, and the alternative hypotheses are accepted. Moreover, two more relationships are also confirmed, namely, the higher the stakeholders' awareness that AI-generated designs will lead to dead art, the higher the awareness that the use of AI in creating designs and artworks within their fields encourages plagiarism ($\text{Beta} = 0.357$, $p = 0.000 < 1\%$). Also, the higher the negation of the fact that AI replaces laborious tasks or tasks that are rewarding for humans in Artistic fields, the higher the awareness that the use of AI in creating designs and artworks within their fields encourages plagiarism ($\text{Beta} = -0.262$, $p = 0.008 < 1\%$).

Question 4: What type of academic art stakeholders' adaptation is needed to face AI technologies integration and remain competitive in the job market?

Hypothesis 7:

H07 The integration of AI in Artistic fields increases uncertainty and does not shift job roles and responsibilities

Ha7 The integration of AI in Artistic fields increases uncertainty and shifts job roles and responsibilities

Model 4:

[Impact on Labor Market: Integration of AI in Artistic Fields Increases Uncertainty] =
 + 0.434[Impact on Labor Market: The Integration of AI in Artistic fields shifts job roles and responsibilities]
 + 0.259[Ethics: AI in creating designs and artworks within my field increases copyright and ownership challenges]

The first part of Model 4 helps explain the rejection of the null hypothesis 7 (H07). The result shows that the higher the integration of AI in Artistic fields shifting job roles and responsibilities, the higher the uncertainty ($\text{Beta}_7 = 0.434$, $p_7 = 0.000 < 1\%$). Therefore, accepting the alternate hypothesis 7 (Ha7). In addition, results show that the higher the agreement with AI in creating designs and artworks within the stakeholders' fields, increasing copyright and ownership challenges, the higher the integration of AI in Artistic fields, shifting job roles and responsibilities ($\text{Beta} = 0.259$, $p = 0.026 < 5\%$).

4.10 Discussion

This research aimed to explore a set of questions centered on the current challenges facing the utilization of artificial intelligence technology in the arts field. Primary data were collected from academic art stakeholders, including students, instructors, teaching artists, and professionals. An online questionnaire was administered and directed to the above-mentioned population. Sixty respondents offered their answers, constituting the basis for the analysis of four questions. However, before discussing the responses, it is necessary to assess the respondents' knowledge of AI in the artistic field.

Table 1 shows that 60% of the respondents have moderate familiarity with the use of AI in artistic fields, 53.33% reported witnessing AI technology usage in artistic projects or practices, 38.34% are highly familiar with AI technology usage, and 41.66% are moderately familiar. These results suggest that respondents need more awareness and training in the use of AI technology in their artistic projects and practices. According to Oksanen, Cvetkovic, Akin, et al. (2023), "There is a growing necessity to comprehend AI's function in the domain of visual arts (p. 1),... The practical applications of AI in the art domain are vast and encompass the creation, dissemination, and appreciation of art. We are undergoing significant societal and cultural shifts, with changes in art and creativity serving as some of the most prominent indicators of this transition" (p. 9). Moreover, Rammal, Hejase, & Al Takach (2025) concluded based on their interviewees' feedback that "Beginning with self-awareness and a readiness to embrace and incorporate AI, one should engage in self-education regarding AI's possibilities, including benefits, drawbacks, and possible applications in art, developing expertise in AI tools, and working towards acquiring experience" (p. 17).

4.10.1 Statistical Analysis Included Descriptive and Inferential Methods: Results Are Discussed Herein

Question 1: How do academic art stakeholders perceive AI's influence on the arts?

Table 4 provides a clear description of the stakeholders' perception of AI's influence on the arts. The salient result is that 81.67% of the respondents agree that AI technologies will increase a project's efficiency by generating faster results. This result is supported by Rammal et al. (2025) and Messer (2024). Messer posits that "Generative AI can swiftly create layouts and potential realizations of an image, and the outcomes from the tool can act as a foundation for the artist's painting, greatly diminishing the effort and time needed" (p. 3). Moreover, Table 4 illustrates respondents' stance toward AI impact, including generating superior creative works, empowering stakeholders' imagination to produce more creative works, enhancing artistic expression, improving the efficiency of creative works, and adding more innovation to artistic works. A total average of 65.67% characterizes the agreement levels of the above.

Many researchers support the above-mentioned results. Stubbings (2017, 2018) asserts that AI utilization could help art stakeholders with the processing, analyzing, and evaluating of massive amounts of data, therefore, encouraging creative thinking, decision-making, and problem-solving functions that are considered essential in the creativity and innovation processes, leading to more creative artworks. Oksanen, Cvetkovic, Akin, et al. (2023) posit that "The practical applications of AI in the art domain are vast and encompass the creation, dissemination, and appreciation of art" (p. 9). Furthermore, Campitiello (2023), quoting Scott Belsky, Adobe's top manager of Creative Cloud, who offers optimistic views on the topic, claims that "This technology democratizes creativity and enhances individual artistic confidence; incorporating this technology into artists' tools could provide them with an 'advantage for breakthrough'; plus, AI will not substitute creatives in their domains since it cannot replicate the human perspective on aesthetics" (para 7-8, 13).

Furthermore, hypothesis 1 indicates a positive, statistically significant relationship between perceiving AI technologies as helpful in generating superior creative works and enhancing their utilization.

Question 2: How does the role of current artists change with these technologies?

Descriptively, 71.67% of the respondents agree that AI can enhance artistic expression across various fields in the arts. This result conforms to other researchers' findings in investigating how AI technology impacts the arts and artistic works (Mineo, 2023; Messer, 2024; Rammal et al., 2025). However, the respondents showed high uncertainty (an average of 40% agreement) in their responses to the comparison between AI-generated designs and

human designs (respondents' designs). The sensitive issue was whether AI technology designs express human art authenticity. Respondents were also uncertain (with 43.33% agreement and 40% indifference) when asked if AI-generated designs are machine-creative works only. Similarly (with 38.33% agreement and 35% indifference), when asked if AI-generated designs will lead to dead art. Most probably relating to pure AI algorithms rather than human-machine collaboration. The results of the four statements expressed indifference or a lower degree of agreement (an average indifference of 31.25%, an average mean of 3.29, and an average standard deviation of 1.125). These results were congruent with those results, in the context of Lebanon, from Rammal et al. (2025) and from Mineo's (2023) results, in the context of the USA, qualitative research.

Inferentially, regression model 2 confirmed with statistical significance the three alternative hypotheses related to "AI technology empowers stakeholders' imagination to produce more creative works and will enhance their artistic expression in their fields; generates faster artistic project results or practices within the stakeholders' field; and increases higher hierarchies of creativity and innovation." Carré and Schmite (2020) contend that "generative intelligence is a technical tool and a source of inspiration at the same time" (p. 34). Also, Rammal et al.'s (2025)

Qualitative research shares their Lebanese interviewees' comments who asserted "AI facilitated and simplified many works," "AI led to a new, changed world of Art and its thinking processes," and "AI is using the human touch and creativity" (p. 9). Many researchers (Carre and Schite, 2020; Butrym, 2023; Taye, 2023) endorse the beneficial effects of this emerging AI revolution.

Question 3: Does using AI to create designs and artworks raise ethical concerns?

Table 6 elucidates the concerns and ethical considerations that the respondents have declared including "Bias and fairness issues with 55% agreement and 43.33% indifference; encouraging plagiarism with 76.67% agreement; loss of human touch with 73.33%; increase of copyright and ownership challenges 83.33% agreement; and unfair competition with 85% agreement." These concerns have been explored and discussed by many researchers (Kelly, 2022; Chi, 2024; Garcia, 2024; Rammal et al., 2025). Two universal concerns to which the respondents were skeptical were that AI-generated art leads to the loss of human touch and to unfair competition. These concerns were shared by Mineo's (2023) interviewees spanning different art-related experts who summarized AI's total use in artwork generation commenting "AI can't attain consciousness & independence of thoughts; can't have spurs of creativity to enhance emotion and depth in music and art designs; does not offer algorithms that democratize the field; can't attain consciousness & independence of thoughts; and can't produce work with emotion and spirit." Moreover, worries were raised regarding the human dimension associated with creativity, emotions, feelings, and expressions. Himyar (2017) and Gros (2019) endorsed the previously mentioned concerns. Additionally, respondents expressed concerns about job market losses for certain types of artists, fearing a distortion of competition where technology-savvy novice artists may outshine those skilled in traditional craftsmanship. Kelly (2022) and Cole (2023) tackled the worries regarding AI's creations and art, linking them to ethical dilemmas.

Inferentially, regression model 3 supports the alternative hypotheses 5 and 6. Stakeholders' concerns about AI being used in creating designs and artworks, encouraging plagiarism, will be higher when there is a rise in copyright and ownership violations, as well as Bias and fairness issues. These outcomes are statistically significant and positive (Beta5 = 0.443 and Beta6 = 0.351 with $p5 = 0.000$ & $p6 = 0.000 < 1\%$). Such results conform to the descriptive analysis above.

Question 4: What type of academic art stakeholders' adaptation is needed to face AI technologies integration and remain competitive in the job market?

Table 7 shows seven statements related to AI integration. Respondents were not much in agreement with "Integration of AI in artistic fields increases job opportunities" and "Integration of AI in artistic fields leads to similar job opportunities without AI applications," with 35% agreeing only. The third statement "Integration of AI in artistic fields increases higher hierarchies of creativity and innovation" was moderately supported by respondents (55%). Finally, the last three statements stress shifts in job roles and responsibilities (81.67% agreement), with increment in uncertainty and replacement of laborious tasks or tasks that are rewarding for humans in artistic fields (both scoring 71.67% agreement). Respondents' certainty was high. These outcomes are clear provided the respondents know that technology is an enabler, that is, AI increases the efficiency of conducting tasks, shifts roles and responsibilities from running repetitive tasks, and demands awareness and new skill training, which, if these do not exist, increases the level of uncertainty. These three statements support the positivity of using AI technology as a tool to improve artwork.

Recent research has shown that AI technology integration is fruitful. Messer (2024) asserts that "the mindful application of AI tools, which seeks to leverage the advantages of AI (e.g., perceived innovation) without

compromising authenticity. This route necessitates that artists demonstrate creative authority and integrity throughout the creation process by a) showcasing human effort and b) conveying intentions and how AI can assist in realizing the artist's vision" (p. 11). In addition, Garcia (2024) contends that "Incorporating generative AI into art represents not merely a technological progress but a profound cultural transformation, requiring us to reassess our perceptions of art and the role of the artist" (p. 1). As for the cases where respondents were skeptical, these statements indicate that most of the respondents who are students lack full knowledge about the potential of AI technology integration in artistic work, even though students use certain generative AI applications in their design assignments. Many researchers have expressed their enthusiasm about the potential of generative AI technology. For instance, Taye (2023) explains how deep learning enables machines to self-train on large datasets, leading to the creation of flawless patterns and artistic works that are hard to differentiate from those made by humans. Also, Butrym (2023) asserts that "Transformative changes arising from the connection between deep learning and artistic creation have captured the attention of researchers and artists alike. A significant influence has been exerted on the production and understanding of visual art" (para 1-3). Moreover, Fortino (2023) posits that "As artists incorporate AI into their creative process, they need to approach these challenges thoughtfully and inventively, discovering methods to utilize AI's advantages while maintaining their distinct artistic essence and emotional impact" (para 13).

Inferentially, regression model 4 supports with statistical significance that the higher the integration of AI in Artistic fields shifting job roles and responsibilities, the higher the uncertainty. Consequently, the need for training and development rises. This result mirrors that of Rammal et al. (2025), whereby 50% of their interviewees "opted for training and development (T&D), and the other 50% opted for self-development and relying on individual craftsmanship values" (p. 16). The attitude toward training and development (T&D) previously discussed is regarded as a positive stance, accepting the presence and potential of AI technologies, as highlighted by various researchers including Stubbings (2017; 2018), Xu & Ye (2021), Camitiello (2023), and Dmitriev & Hejase (2023).

5. Conclusion

This research holds merit as it contributes to existing theoretical and practical understanding by examining the influence of AI on Art through a sample of academic art participants. Moreover, this research represents the inaugural quantitative investigation into the perspectives of academic art stakeholders regarding the application of AI in Art within the Lebanese context, incorporating stakeholder theory. Results showed that there is a moderate awareness of the impact of AI on Art and artworks. Most of the participants have limited exposure to the applications of AI to generate artwork. All proposed hypotheses were statistically significant at a 1% and 5% level.

The findings of this study indicate that contemporary AI (the latest revolution) will serve as an instrument for creators, similar to the camera (previous revolutions), but it will not replace them. The classification of modern art produced by machines is entirely subjective, and its value lies in how viewers perceive it. Furthermore, the field of AI is experiencing a significant shift, with the emergence of AI agents representing a major improvement in the capabilities of autonomous systems. According to Umansky (2025), "AI agents can adapt and learn from their interactions with humans and the environment and develop creative solutions by combining knowledge from diverse fields." Srivatsa (2025) argues that "These sophisticated agents are reshaping our understanding of AI's capabilities, combining enhanced decision-making abilities with remarkable adaptability and purposeful action" (para 1). The previously mentioned presents a forward-thinking perspective on AI Agency; however, at present, human-machine partnerships are becoming increasingly prominent. Mineo (2023) reports, "Mixed-media artist Matt Saunders, a professor at Harvard University in the Department of Art, Film, and Visual Studies, argues that every new technology challenges norms and offers not only fresh opportunities but also a new kind of material intelligence. He believes that many artists will find the "agency" of AI intriguing and will seek ways to collaborate or interact with it. Many people already are. Artists value being pushed and jolted from old habits and convictions" (para 21).

In summary, it can be concluded that the application of craft techniques in artistic production will persist eternally, as they consistently possess authentic human significance. People will keep finding distinct viewpoints on art and creativity. Art made by humans will appreciate as the prevalence of machine-generated artworks rises. The value of art resides in the process of comprehension and profound involvement with the artwork.

5.1 Limitations

This research is quantitative, and while the results cannot be generalized, they hold qualitative significance. A few challenges are identified as follows:

1. Respondent Bias: Certain participants might opt not to evaluate research statements accurately and refrain from honesty. This truth becomes evident when participants stay quiet or adopt a neutral position.
2. The difficulty in attracting a bigger group of art students, fine arts professionals, and artist respondents: Having a larger group of respondents may diversify further responses and may add more insights.
3. Insufficient understanding of the details related to the topic being explored: On average, participants are not familiar with or experienced in specific research questions, such as the modern AI tools employed in the arts and artworks. For instance, students in the Arts are better skilled in using Adobe Express or Photoshop software.

5.2 Recommendations and Future Research

According to the conclusion, the recommendations listed below are proposed:

1. Engaging a broader group of art major students from various universities throughout Lebanon and inviting additional artists and professionals will enhance the research findings. This will allow for a comparative analysis of the inputs from participants.
2. Widening the data gathering to cover a larger region of Lebanon to achieve the generalization of findings.
3. Prompting HEIs to assess and improve their arts programs by integrating increased critical thinking and persuasive writing. Additionally, artists are encouraged to participate in different subfields to communicate with students.
4. Creating a seminar curriculum centered on how Metaverse technology and Generative AI affect the Arts and artworks to examine the different viewpoints emphasized in the conclusions of this research.
5. Establish a student Arts Club with a focus on enhancing the awareness and understanding of the connection between Artificial Intelligence and the Arts. Inviting professionals to run discourse analysis and technology innovations is a must.
6. Motivating researchers to expand upon the results of this study to evaluate and appreciate the influence of 'AI Agents' in the Arts

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