BUSINESS USE: IS AI SURPASSING HUMAN CREATIVITY?

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Abstract

This study aims to assess people's perceptions regarding AI-generated images compared to those made by humans. This study used quantitative research in the form of a survey to find out how much respondents prefer AI-generated images. The findings indicated that most respondents favoured artificial intelligence (AI)-generated visuals. Age and time spent online were key determinants of this choice. These discoveries have important implications for organisations and people who produce and consume visual content in their jobs. It implies that as people become familiar to them and as technology advances, AI-generated images are likely to gain popularity in the future. It also emphasises how critical it is to be aware of audience preferences and adjust to the evolving state of technology and visual media. In conclusion, this study offers insightful information about the prospective effects of AI-generated images on the creative sectors and the larger society.

Keywords: Artificial Intelligence, Artificial Intelligence Tools, AI-generated images, Human perception, Images

JEL Classification: D80, C80

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1. Introduction

Artificial Intelligence (AI) is an interdisciplinary field of computer science that focuses on the creation of intelligent machines that can perform tasks without human intervention. AI has completely changed how we interact, work, and live. Healthcare, banking, transportation, and other industries could all be drastically changed by it. Since AI is capable of creating realistic and high-quality photos, the use of AI to create photos has become increasingly popular in recent years. In this literature review, we will talk about the use of AI and its use to create images.

In the field of AI-assisted image generation and human preferences compared to human art, this research represents a pioneering effort. The study is unique and novel due to the lack of research on this topic, and the author's ability to gather evidence that was not previously available. It was investigated whether AI-generated artwork can match or perhaps surpass human-created artwork in terms of consumer choice. The purpose of the study was to provide insightful information on how AI-generated images could impact the art world. The unexpected results of the research have the potential to completely change the way we perceive and appreciate art.

2. Literature review

Artificial Intelligence (AI) has revolutionised the field of image generation, allowing for highly realistic and complex images to be created through advanced algorithms. The use of generative adversarial networks (GANs) has enabled AI to generate customisable and detailed images in real time, with applications ranging from video game design to fashion.

2.1 Conceptual and Technical Delimitations on the Use of AI for Image Generation

Several industries have made substantial use of AI to increase productivity, accuracy, and decision-making. AI is utilised in healthcare for drug discovery, individualised treatment, and early detection of disease (Topol, 2019). Artificial intelligence (AI) is used in finance to detect fraud, manage risks, and make investment decisions (Trust & Safety Financial Services & Fintech, 2022). AI is being applied in the transportation industry for autonomous vehicles, route optimisation, and traffic control.

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AI has countless potential uses, and in the upcoming years it is expected to alter several industries. Because AI can produce realistic and high-quality photographs, it has become quite popular in recent years to use AI to generate images. AI has been utilised for a variety of picture production tasks, including generative adversarial networks, style transfer, and image super-resolution (GANs). A particular type of neural network called a GAN may produce new images that are similar to a given dataset. A generator and a discriminator are the two neural networks that make up GANs. The generator is in charge of creating new images, while the discriminator is in charge of differentiating the generated images from the real ones. Image synthesis, style transfer, and image retouching are just a few of the uses of GANs. For instance, a GAN-based method for high-quality image synthesis was suggested by Karras et al. (2018).

The suggested method used a progressive growth strategy to produce high-quality photographs. Image synthesis, style transfer, and image retouching are just a few of the uses of GANs. Deep learning methods (Egger et al., 2021) such as Generative Adversarial Networks (GANs) and Variational Autoencoders (VAEs) are the most frequently utilised in recent years when it comes to the creation of images. These methods have been used in a variety of contexts, such as computer vision, graphics, and the arts. In particular, GANs have demonstrated tremendous potential for producing high-quality photos that may be used in a variety of contexts, from virtual reality to fashion. According to a study by Karras et al. (2019), the application of GANs has greatly increased the quality of generated images. The study employed a method known as StyleGAN, which enables the creation of images in high resolution with realistic elements, such as expressions on the face, hair, and clothing. The authors mention that many applications, such as video games, virtual reality, and filmmaking, might utilise the created visuals. AI-generated images have been used in scientific studies in addition to the visual arts. For instance, to assist with medical diagnosis and research, scientists have utilised GANs to produce realistic representations of cells and tissues (Gardezi et al., 2019). The employment of GANs, the scientists write, has increased diagnosis accuracy, particularly when using conventional methods proved insufficient. AI-generated images have many advantages, but there are also certain ethical issues that need to be addressed. The potential use of AI-generated images for harmful purposes, such as deep fakes, is one of the biggest worries. Deepfakes are movies or photographs that have been digitally altered with artificial intelligence (AI) to make it seem as though someone said or did something they did not. Deepfakes can be employed to spread false information or harm someone's reputation (Nguyen et al., 2022).

The practice of enhancing a picture's resolution without sacrificing its quality is known as image super-resolution. AI has been widely employed for image super-resolution, and a number of strategies, including ones based on deep learning, have been developed. For instance, Singh and Singh (2020) suggested a deep learning-based strategy for single-image super-resolution that performed better than cutting-edge techniques. Convolutional neural networks (CNNs) with residual connections and a multi-scale fusion mechanism were used in the suggested method.

The process of transferring an image's style to another image while keeping the original image's information is known as style transfer. Many methods, including neural style transfer, have been developed and are widely used in AI for style transfer. In order to extract the style and content of an image, Gatys et al. (2016) devised a neural style transfer approach that makes use of a CNN. The program then creates a brand new image by combining the looks of one image with the information of another.

2.2 Computer Vision

The field of computer vision, which was first studied in the 1960s, has advanced significantly (Zhang et al., 2021) and, in recent years, has begun to perform on par with humans in some limited visual tasks. Pose prediction, object recognition, and semantic segmentation are typical computer vision tasks. Self-driving cars, medical image analysis, consumer applications (such as Google Photos), security applications (such as surveillance, and satellite imagery analysis), industrial applications (such as spotting faulty parts in manufacturing and assembly), and other uses have been made possible by the development of computer vision technology.

The study of image recognition and classification started moving away from traditional AI techniques in the 2010s and toward ones based on machine learning, more specifically deep learning (Zhang et al., 2021). Since then, advances in the underlying technology (algorithms, computational hardware, and the use of larger datasets) have let image recognition transition from being an expensive, domain-specific technique to one that is more accessible and applicable to a wider range of fields.

Top-1 accuracy is the conventional accuracy, model prediction, and it measures in this particular case an AI system's ability to correctly classify an image, specifically whether the target label matches the single most highly probable prediction (out of all potential labels) (Zhang et al., 2021). Researchers have recently begun to concentrate on enhancing ImageNet performance by pre-training their systems on additional training data, such as images from Instagram or other social media sources. They are better equipped to utilise ImageNet data by pre-training on these datasets, which enhances performance.

This test demonstrates that more current systems produce just one error out of every ten attempts on top-1 accuracy, compared to four errors out of ten attempts in December 2012. In January 2021, the model developed by the Google Brain team scored 90.2% on top-1 accuracy (Zhang et al., 2021). According to "ImageNet" (n.d.), a sizable visual database created for use in research on visual object recognition software is called the ImageNet project. The project has evaluated more than 14 million photographs to identify the items they depict, and at least one million of the images also contain bounding boxes.

Top-5 accuracy tests if the right label appears in at least the top five predictions made by the classifier. According to this test, the error rate decreased from about 85% in 2013 to approximately 99% in 2020 (Zhang et al., 2021).

Fréchet Inception Distance (FID), a method that roughly reflects the difference between how an AI system "thinks" about a synthetic image versus a real image, is one way to gauge progress in image generation. Real images have scores of 0, while synthetic images that resemble real images have scores that are close to 0 (Zhang et al., 2021).

The next test illustrates how generative models have improved over the last two years in producing realistic synthetic images in the STL-10 dataset, which is used to gauge how well-designed systems are in producing images and learning additional details about them. Progress in the ability of generative models to produce realistic synthetic images can be observed through the Fréchet Inception Distance (FID) metric. In January 2018, the FID score was recorded at 40, indicating a noticeable difference between synthetic and real images. Fast forward to July 2020, and the FID score significantly improved to 25.4, demonstrating the remarkable advancement in generative models' capacity to closely resemble real images. This progress reflects the growing effectiveness of AI systems in generating high-quality visual content. (Zhang et al., 2021)

The National Institute of Standards and Technology's (NISTFace) Recognition Vendor Tests (FRVT) offer impartial assessments of commercially available and prototype facial recognition technology. FRVT evaluates the effectiveness of automated facial recognition systems used for a variety of civil and governmental functions (particularly in national security and law enforcement), such as the validation of visa photos, mug shots, and child abuse images (Zhang et al., 2021). The findings of the best 1:1 algorithm measured on false non-match rate (FNMR) across numerous datasets. The algorithm's failure rate when attempting to match the image with the person is known as FNMR. The most important advancements in facial recognition technology in the last four years have been in visa and mugshot-type photographs, where error rates went from about 50% to less than 1% in 2020.

The kind of AI capabilities chosen differs depending on the industry. Companies in industries were most likely to identify computer vision, robotic process automation, and other machine learning approaches as capabilities used in at least one business function in 2020. Industries frequently embrace AI features that best support their fundamental operations. Examples include automobile and assembly, consumer goods and retail, and other sectors where manufacturing and distribution play a significant role in the adoption of physical robotics and autonomous cars. Business, legal, and

professional services, financial services, healthcare, high tech, and telecom are just a few examples of industries that regularly utilise natural languages processing capabilities, such as text comprehension, speech understanding, and text production (Zhang et al., 2021). Only a small percentage of businesses acknowledge the dangers of artificial intelligence, and even fewer say they are doing anything to minimise those dangers.

2.3 AI-Generated Photos: Legal and Ethical Considerations

Nguyen (2019) explores the legal basis for authorship in copyright law and how it relates to the problem of AI-generated works in his study. He points out that there is no clear legal justification for extending copyright protection to works made by AI systems in many jurisdictions, including the United States and the European Union, where copyright protection is only available for works written by human authors. A work of authorship is defined as a work that is made by a human person under US copyright law. Parallel to this, Article 2 of Directive 2001/29/EC, which governs copyright in the European Union, specifies that "copyright protection shall be granted to works expressed in any form, provided that they are original and that there is an element of creativity" On how to categorise works produced by AI systems, however, there is currently no apparent legal consensus. Some have claimed that the AI system should be regarded as the only author, while others have maintained that works produced by AI systems should be seen as a type of shared authorship between the human designers of the AI and the system itself.

Although some nations, including the UK and New Zealand, have taken action to address this problem by explicitly stating that works created by computers or other non-human entities are eligible for copyright protection, Nguyen (2019) points out that these legal frameworks are still relatively new and unproven. Generally, the legal system governing authorship and artificial intelligence-generated works is complicated and continuously changing. Although there is no universal agreement on how to handle these problems, it is crucial for politicians and academics to discuss these concerns in order to make copyright law continue to be useful and successful in the years to come.

The article by Chesterman (2020) analyses the legal frameworks surrounding AI in several jurisdictions. For instance, he mentions that some nations, like New Zealand and India, have granted legal protection to rivers and particular animals and acknowledged their status as legal persons. He contrasts this by pointing out that the Committee on Legal Affairs of the European Parliament has advised against giving AI systems and robots the status of legal persons. Chesterman (2020) also points out that current legal systems, such as tort and criminal law, are inadequate to deal with the problems that AI is posing. He contends that it is challenging to assign responsibility for AI's activities in the same way as for human beings due to its special qualities, such as its capacity to function without subjective experience or emotions. He thinks that in order to solve the issues raised by AI, new legal structures and strategies may be required.

Ultimately, Chesterman's article (2020) emphasises the necessity for a nuanced and context-specific approach to legal personhood and artificial intelligence, taking into account the special qualities and difficulties presented by these cutting-edge technologies.

3. Methodology

Growing interest has been shown in investigating the potential of artificial intelligence (AI) to produce visually appealing and intriguing images as a result of the rapid development of AI in recent years. A study was conducted into how respondents viewed images made by AI vs. those made by humans, as well as their preferences between the two. Participants in this study were shown a collection of photos and asked to score the images' perceived quality and beauty. The results give light on people's preferences for visual aesthetics, as well as valuable insights into how they interpret and assess AI-generated photographs in comparison to those created by humans. The study found that people's perceptions of AI-generated photos were frequently influenced by their pre-existing beliefs and attitudes toward artificial intelligence, highlighting the complex interaction between technology

and human perception. Participants were also asked to share their thoughts and attitudes toward AI technology. The discovery of the impact of age emphasises the necessity for researchers and developers to take demographic aspects, such as age, into consideration when building and assessing AI systems that produce visual content. Developing efficient and interesting AI systems that appeal to a wide range of users requires an understanding of how individuals from various age groups perceive and assess content provided by the technology.

A survey was chosen as the technique of data collecting for our study on human preferences for AI-generated images compared to human-created, based on a number of considerations. First, surveys are a helpful tool when conducting research on a variety of topics, since they make it possible to swiftly and effectively collect data from a large sample size according to Singh and Masuku (2014). Secondly, using a questionnaire allowed us to focus on a particular region, in this case, Romania, which diminished the influence of cultural differences on our findings. Also, we were able to simply anonymise responses through the use of Google Forms, safeguarding the anonymity of our participants. Finally, surveys gave us a chance to collect both quantitative and qualitative information, which allowed us to gain a deeper understanding of how participants saw AI-created photographs compared to human-created photos. In light of the objectives of the study and the resources at hand, it was determined that a survey was the most suitable method to use.

The questions center on how individuals feel about artificial intelligence (AI), particularly in the context of producing text and images. Participants are asked to score the quality of several photos, some of which were produced by AI, in the first few questions. Participants are also questioned about whether they would like to employ AI-generated photographs for their businesses or pay more for images made by people. The next question in the poll asks participants if they are familiar with AI and if they have ever used it to generate text or graphics. Participants are also asked to score questions about the usefulness and usability of AI, including if AI has benefited them personally.

The photos, which were created using both AI and manual processes, were chosen to reflect a variety of landscape design styles. We examined the amount of human interaction with AI in the context of image creation in addition to rating the photos' quality and appeal. We specifically asked participants to rate their level of comfort with the idea of utilising AI to make photographs, as well as how much they trusted AI-generated images in comparison to those made by humans.

Scales are incorporated into the questions to increase the precision and dependability of the measures made. Usually, ratings are given on a scale of 1 to 5, with 1 being the lowest and 5 being the highest. To gauge attitudes, opinions, and perceptions, surveys and research projects frequently employ a measurement tool known as a Likert scale according to Likert (1932). Collecting quantitative data using a Likert scale enables quick analysis and comparison across many people or groups. Scales also offer more detailed and complex information than straightforward affirmative or negative responses. Scales are used in the questions so that respondents can assess the photos' perceived quality on a range of 1 to 5, which allows for a more precise measurement. Similarly, responses to the questions about the utility and simplicity of AI technology are graded on a scale from 1 to 5, enabling a more in-depth analysis of the respondents' views on AI.

Regarding the survey, I would like to provide additional details that may be of interest. We used Google Forms to gather responses and 417 responses in total came from participants only in Romania. With respondents ranging in age from 15 to 56 years, there was a wide diversity of demographics. These details offer a crucial context for our findings and enable us to make more insightful judgments about the data. Moreover, we took a great effort to guarantee that all responses were anonymous in order to protect the privacy of our participants. The questionnaire was distributed to participants during the period of March 27th, 2023 to March 30th, 2023.

Overall, this study offers valuable information about the process and possibilities of AI for producing photos, as well as how people perceive AI-produced images. These findings might have an impact on a variety of industries, such as art, advertising, and design, and could help researchers create more sophisticated and useful AI models for creating images.

4. Results and discussion

As you can see in Figure 1, which was generated by AI, the majority of participants in our study on AI-based photo production and human preference chose image number 1. This unexpected finding shows that artificial intelligence (AI)-generated graphics have the potential to be at least as visually pleasant as works of human art. Our results offer insightful information on the possibilities of AI-generated images for the art industry.

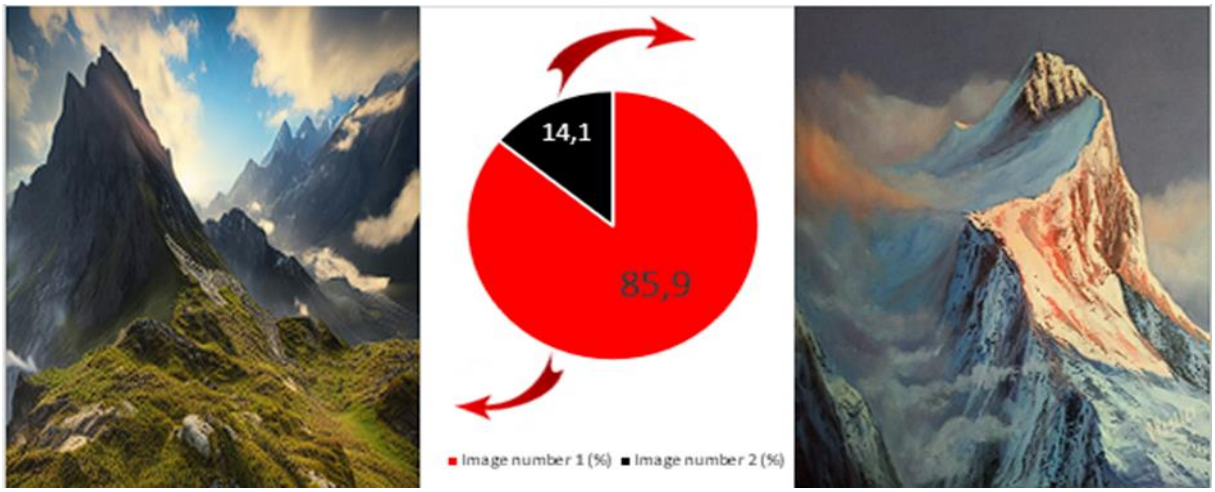

Fig. no. 1. Respondents' preferences
Source: Image by author

Additional data analysis revealed that only a small percentage of participants chose image number 3, which was a work of art made by humans. However, as you can see in Figure 2, 68.6% of the participants selected image number 4, which was produced by AI, as their preferred image. This discovery supports our earlier findings and suggests that AI-generated graphics may eventually outperform human-made art in terms of viewer choice. According to our research, participants in both studies preferred AI-generated images, with image number 1 receiving an 85.9% preference rate and image number 4 receiving a 68.6% choice rate.

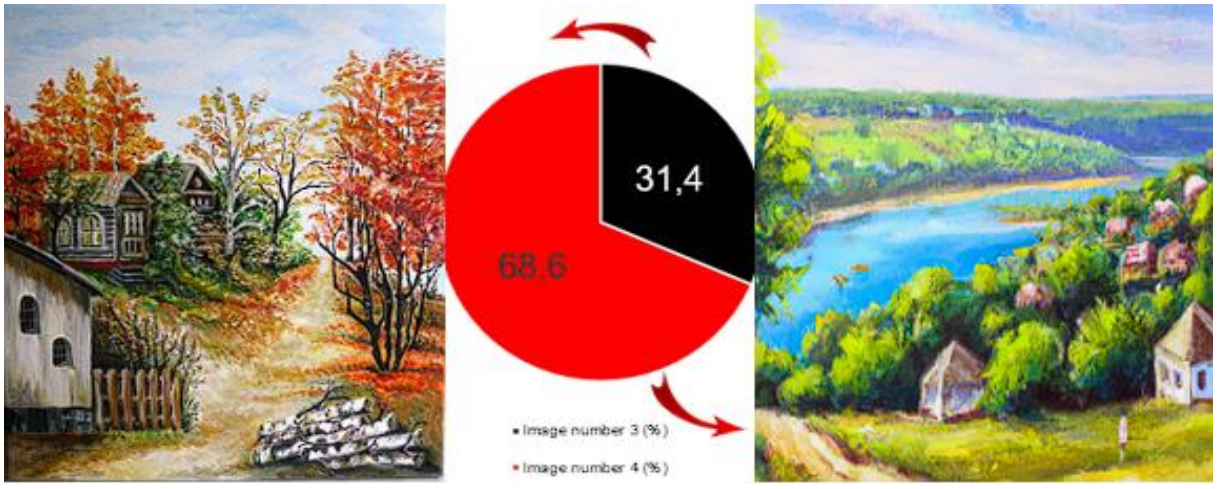

Fig. no.2. Respondents' preferences
Source: Image by author

In another experiment carried out as part of the current research on AI-based photo production and human preference, participants were asked to choose which of the images from 3 to 4 was the result of AI. As you can see in Figure 3, the findings revealed that 57.6% of the participants accurately identified which image was generated by AI, while the remaining 42.4% were unable to do so. This finding is particularly intriguing because it raises the possibility that AI-generated images could become so visually impressive as to be indistinguishable from works of art made by humans. It also

emphasises the significance of understanding how AI technology affects the production and appreciation of art, as well as the demand for additional study in this field.

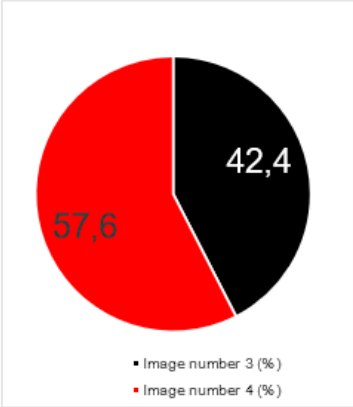

Fig. no.3. Respondents' correct guess
Source: Image by author

The participants were also shown two other photographs (Figure 4), and were asked which one they liked best. The second image was produced by AI, whereas the first was a work of art made by a person. It is interesting to note that the majority of participants (78.2%) selected the AI-generated image as their favorite. This outcome highlights the potential for AI-generated graphics to rival, if not outperform, human-created art in terms of consumer desire.

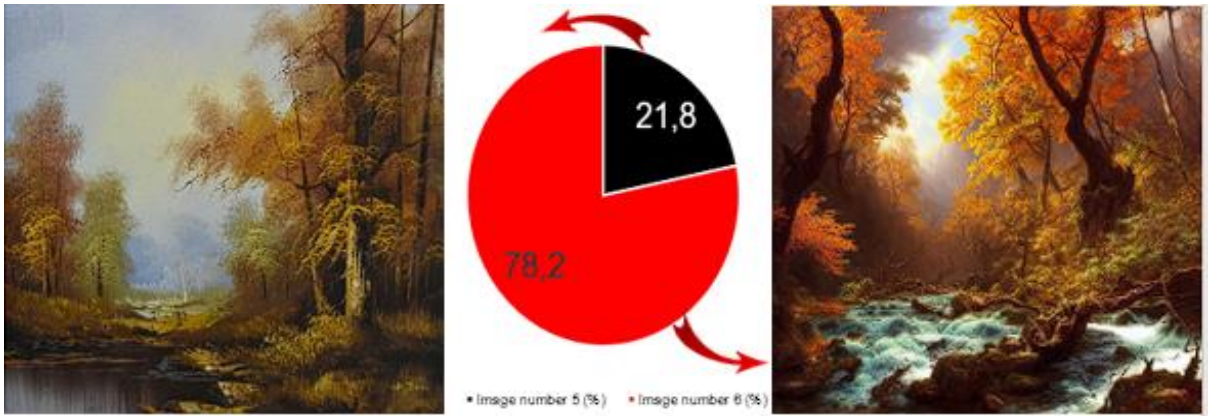

Fig. no. 4. Respondents' preferences
Source: Image by author

We also asked participants to rate the images on a scale of 1 to 5 according to their overall aesthetic impression. The results showed that the participants' average rating for image number 1, which was created by the AI and had a preference rate of 85.9%, was 4.6 out of 5 points. The average participant score was 3.6 out of 5 for image number 2, which was created by humans and had a lower preference rate of 21.8%. This discovery underscores the potential of AI-generated graphics to be as aesthetically pleasing as, if not better than, human-created artwork. It also underscores how subjective art is and how important it is to understand how people perceive and prefer things when making and appreciating art.

Table 1 correlates different measurements with the purpose of finding useful information about people and acceptance of AI-generated photos, as well as how time and age influence this regard.

Table 1. Variable Correlation

Correlated variables	Pearson Coefficient of Correlation
Ai helpness X Age	-0.5745
Ai user-friendly X Age	-0.6849
Ai utility X Age	-0.2318
Ai helpness X Time spent online	0.4185

Correlated variables	Pearson Coefficient of Correlation
Ai user-friendly X Time spent online	0.3355
Ai utility X Time spent online	0.2306

Source: Authors' own work

We carried out a study in which participants were asked to rate the claim that "AI assisted me" on a scale of 1 to 5 as part of our investigation into how the general public views AI technology. After further analysis, we discovered an intriguing pattern: there was an inverse correlation (-0,57) between the participants' ages and how they perceived the statement. In particular, we discovered that younger individuals tended to rate the statement higher, whereas older participants tended to rate it lower. According to this, younger generations may be more receptive and enthusiastic about the role that AI technology would play in their lives, whereas older generations may be more wary or cautious. This discovery has significant implications for the advancement and use of AI technology.

It is critical to comprehend how individuals of various ages view and engage with AI as it continues to permeate our daily lives. We can create AI systems that are more user-friendly and more suited to the requirements and expectations of various age groups by knowing these attitudes. Furthermore, our study also looked at the participants' evaluations of the statement "It is easy to use AI" on a scale from 1 to 5.

We found a similar inverse correlation between age and evaluation, with younger participants giving higher evaluations and older participants giving lower evaluations. In fact, the correlation coefficient was -0.68, indicating a strong negative correlation between age and evaluation. This result suggests that older generations may find AI technology more difficult to use or understand compared to younger generations. This highlights the importance of designing user-friendly AI systems that are accessible and intuitive to users of all ages. We also looked at the correlation between the participants' online activity and their assessments of the claim that "It is easy to use AI". We discovered a 0.41 positive correlation between participants' online activity and their assessment of the statement. This implies that those who spend more time online might be more accustomed to technology and hence find AI technologies more user-friendly. However, this association was lower than the inverse correlation we discovered for age, suggesting that age plays a more substantial role in influencing how people view AI technology. However, our findings highlight the need for user-friendly AI systems that can adapt to various levels of technological competency and online behavior.

In the study comparing photos made by humans with those by artificial intelligence (AI), an intriguing relationship was found between a person's age and how easy they imagined life to be in the AI-generated photos. Age and the opinion that AI may make life easier were shown to be negatively correlated in the study, with a correlation coefficient of -0.231802122. This indicates that a person's chance to think that AI-generated visuals can simplify life increases with age. On the other hand, an individual's chance of holding this belief decreases with age. The fact that this association is not very significant highlights the fact that there are many other elements that influence how people interpret AI-generated visuals in addition to age.

Overall, this study clarifies the complex interaction between people and AI-generated images. Younger people might be more open to using AI as a tool to improve their lives, whereas people over 40 might be more skeptical.

The phrase "Using AI is easy and accessible" was rated by participants on a scale of 1 to 5, with 1 denoting total disagreement and 5 denoting absolute agreement. Participants were asked to mark "0" if they had never used an AI system before. The study discovered a link between the ratings and the amount of time spent online of 0.335505884. This implies that a person is more likely to find utilising AI simple and accessible the more time they spend online. It is significant to notice that this association is not very strong, suggesting that there may be additional factors influencing how people view AI. Overall, this study shows how people's perceptions toward AI are influenced by a variety of factors and the complex interplay between humans and AI-generated images.

On a scale of 1 to 5, with 1 denoting complete disagreement and 5 denoting complete agreement, participants were asked to rate their agreement with the statement "AI can make my life easier."

The study discovered a favorable association between Internet activity and the idea that AI can simplify life, the result being 0.2306. This indicates that a person's likelihood to think that AI-generated images can simplify their life increases with the amount of time they spend online. It is crucial to note that this correlation's strength is somewhat weak, suggesting that other factors besides internet activity also affect how well people perceive AI-generated images.

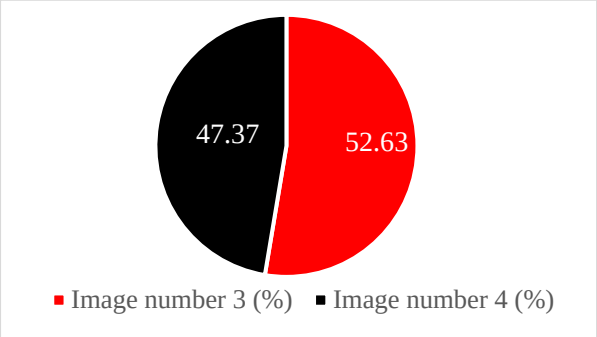

Fig. no. 5. Respondents with over 30 preferences
Source: Image by author

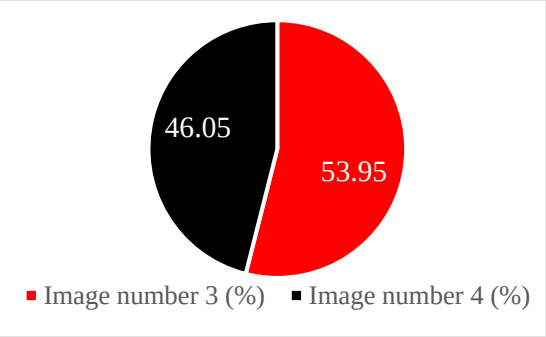

Fig. no. 6. Beliefs of AI created image
Source: Image by author

According to the data gathered from the survey, of the 76 participants aged between 30 and 56 who responded to the question, the majority favored image number 3 (Figure 5). Interestingly, when asked to identify which of the two images, 3 and 4, was created by AI (Figure 6), most of the participants believed that image number 3 was created by AI. However, the truth was that image number 3 was created by a human. This discovery emphasises how difficult it is for humans to tell apart artificial intelligence creations from real people. It also highlights how AI has the capacity to produce artwork that is difficult to tell apart from that produced by humans, erasing the distinction between what is considered human and artificial. Furthermore, given that many people have preconceived views that AI-generated art is often more abstract or unorthodox than human-generated art, this result may suggest that participants thought image number 3 was created by AI because they found it to be more aesthetically pleasing. Overall, this study clarifies how AI is affecting the art world and how it is challenging our notions of what "genuine" art is.

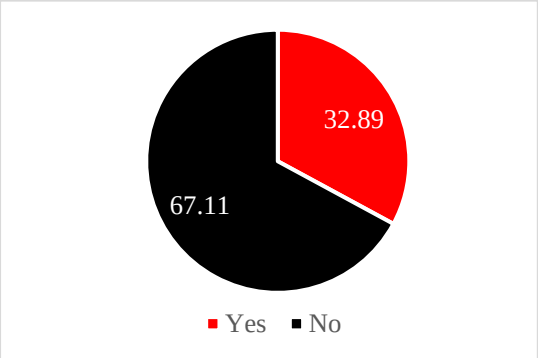

Fig. no. 7. AI does a better work?
Source: Image by author

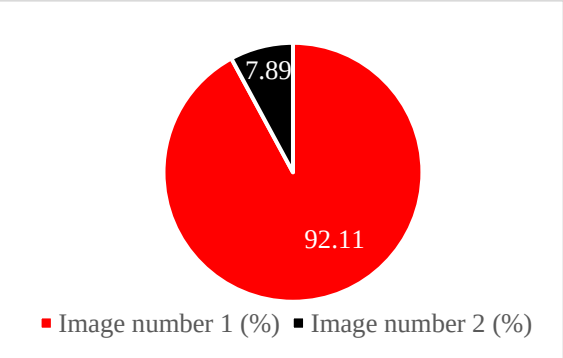

Fig. no. 8. Respondents with over 30 preferences
Source: Image by author

Based on the participants' responses, it was also found that image number 1, which was created by AI, was the most favored image, with 92.11% of the respondents choosing it as their preferred image (Figure 8). Interestingly, despite their clear preference for the AI-generated image, the participants were split in their opinion on whether AI does a better job than humans when it comes to creativity. Only 32.89% of the participants believed that AI was better at being creative, while 67.11% believed that humans still have the edge in this area (Figure 7). This finding highlights the complex relationship between AI and human creativity. While AI can certainly produce impressive works of art, as evidenced by the popularity of the AI-generated image in this study, there is still a belief among many that human creativity is unique and irreplaceable.

Moreover, the study highlights the importance of understanding the limitations of AI in the creative process. Although AI may be capable of producing aesthetically pleasing works of art, it lacks the emotional depth and contextual understanding that comes from human experience, and thus, cannot replicate human creativity in its entirety.

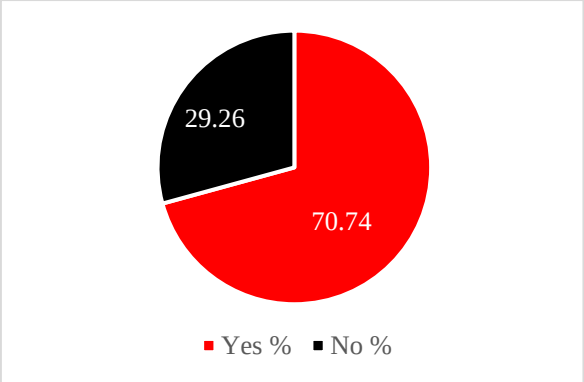

Fig. no.9. AI does a better work? (All responses)
Source: Image by author

It should be noted that the responses of the participants aged 30 to 56 years are just a part of the overall survey results. The survey received a total of 417 responses from participants ranging from age 15 to 56. When looking at the overall scores presented in Figure 9, it was found that 70.74% of the respondents answered "Yes" to the question of whether they believe that AI does a better job than humans in terms of creativity, while 29.26% answered "No". This result suggests that, overall, there is a growing acceptance of AI's potential to contribute to creative fields such as art. However, it is important to note that this acceptance may not be universal in all age groups, as the responses from participants aged between 30 and 56 indicate a more divided opinion on the matter.

5. Conclusions

A study on AI-based photo generation and human preference was conducted, and the findings suggest that AI-generated visuals may one day be at least as aesthetically pleasing as works of human art. Participants preferred AI-generated photos above those created by humans, according to the study, with the AI-generated image number 1 obtaining an 85.9% preference rate. Additional investigation revealed that AI-generated images might ultimately perform better in terms of viewer preference than human-created art, since 68.6% of the participants chose image number 4, created by AI, as their preferred image. Another interesting discovery was that while 42.4% of the participants failed to correctly identify which image was produced by AI, 57.6% of the individuals did. This implies that AI-generated graphics may eventually become so visually stunning as to be indistinguishable from human-made artwork. The majority (78.2%) of the participants chose an AI-generated image as their favorite, further demonstrating the participants' preference for AI-generated graphics over human-created art. The study also looked at how other factors, including age and amount of online time spent, correlated with people's acceptance of AI-generated images. The results showed that younger people tended to score the claim that "AI assisted me" higher than older participants, suggesting that the younger generations may be more accepting and excited about the role of AI technology in their life. Overall, the study shows how AI-generated images have the ability to match, if not surpass, human-created art in terms of consumer desire. It also emphasises how crucial it is to create user-friendly AI systems that are simple for users of all ages to use and understand. Older generations, on the other hand, can be more apprehensive or cautious about AI technology.

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