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Research Article

Exploring the impact of visual components on the perceived realism of generative AI videos

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ABSTRACT

Generative artificial intelligence (Gen-AI) tools have a significant impact on the creation of audiovisual content. Although these tools are still at an early stage in video production, there are tools such as Sora (OpenAI) that demonstrate the great potential of Gen-AI to create advanced audiovisual content. This study evaluates through a comparative analysis the level of realism, attractiveness and composition of the videos generated by Sora compared to real videos. Using a questionnaire validated by experts (n = 12), a quasi-experiment was conducted with college students (n = 62) who were divided into two groups: a control group that visualized real videos from YouTube and an experimental group that visualized videos created with the Sora tool. The results show that attractiveness, particularly the elements of lighting, saturation and color, are key factors in the recognition of a Gen-AI video. The paper concludes that Gen-AI tools should focus on improving the attractive elements to achieve more consistent and natural results.

Keywords: artificial intelligence, Sora, AI video generation, text-to-video, audiovisual analysis, quasi-experiment

INTRODUCTION

Although the first research in the field of artificial intelligence (AI) began in the 1950s, it is only in recent years that this technology has been democratized and enabled its widespread use (Abeliuk & Gutiérrez, 2021; García-Peñalvo et al., 2024). This has enabled the proliferation of AI tools capable of mimicking human thinking to generate content (Herath et al., 2025; Sarkar & Gul, 2023). Generative artificial intelligence (Gen-AI) is a specialized branch of AI that is responsible for generating content in various formats such as texts, images, videos or audios from prompts or written instructions (Cao et al., 2023; Celik, 2023; Galvez-Martínez, 2024).

In this context, numerous companies and technology firms have been involved in the development of Gen-AI tools for the production of audiovisual and multimedia content (Carbonell-Alcocer et al., 2025; Sánchez-García et al., 2023; Zwakman et al., 2021). One of the pioneers and most innovative is OpenAI (Motlagh et al., 2024). Since 2018, it has been working on the GPT series, which has been further developed with GPT-2, GPT-3, and GPT-4. These are configurable AI models that make it possible to create personal assistants, develop creative texts and produce images, among other things.

In late 2022, OpenAI launched the conversational variant ChatGPT (Dempere et al., 2023), the most popular AI tool capable of generating coherent and relevant text from written text (OpenAI et al., 2023; Zhai, 2023). The impact of this tool was so great that OpenAI and Apple announced an agreement in mid-2024 to integrate ChatGPT into the Apple ecosystem as part of Apple Intelligence (OpenAI, 2024a).

The operation of these conversational tools is based on large-scale language models (LLMs) (Kalyan, 2023). LLMs are designed to process and generate natural language text, which enables them to synthesize complex information through the use of advanced techniques such as positional coding and attention mechanisms (Kalyan, 2023). At the core of these models are complex neural network architectures, such as transformers, which represent the state of the art in various natural language tasks (Wolf et al., 2020; Zhao et al., 2023).

There are also Gen-AI tools for image generation that use LLMs (Bewersdorff et al., 2025). Among the best-known tools for generating images from text descriptions is Dall-E, launched by OpenAI in 2021, which integrates linguistic and visual information to generate content in visual format (Betker et al., 2023; Leivada et al., 2023; Putland et al., 2025). OpenAI has continued to work on the development of Gen-AI tools and in 2024 launched Sora, an AI model capable of creating realistic and imaginative scenes in videos from textual instructions (OpenAI, 2024b). Sora generates videos of up to one minute in length with high quality and visual coherence throughout the scene from text instructions given by the user (Brooks et al., 2024; Chen et al., 2024; Liu et al., 2024). To generate these videos, Sora is based on a diffusion transformer architecture. The original output can be refined by introducing details based on textual cues (Peebles & Xie, 2023). Thanks to the introduction of certain advanced machine learning and deep learning techniques (Batista & Santaella, 2023), highly realistic audiovisual contents are produced (Bijalwan et al., 2025; Cho et al., 2024).

In audiovisual production processes, these highly realistic outcomes are applicable to a variety of professional fields as they increase creative and artistic capacity (Adetayo et al., 2024; Doshi & Hauser, 2023; Sun et al., 2024). As a result, AI tools have been integrated into the professional activities of large companies to create original content in various formats and sectors such as the creative industries, design, entertainment or education and training (Alasadi & Baiz, 2023; Epstein et al., 2023; Fui-Hoon Nah et al., 2023; Owan et al., 2023). This has a significant impact and revolutionizes the way tasks are performed in these areas by supporting, optimizing and simplifying human tasks (Medina-Romero, 2023).

Even though the use of these AI tools is gradually becoming widespread, social education about their use is necessary (García-Peñalvo, 2023), as it can be controversial how it can generate a false perception of reality by making what is really indistinguishable from what has been generated with AI (Fernández Mateo, 2023; Mogavi et al., 2024). This social education is necessary to train people to scrutinize the content we are exposed to (Suárez-Roca & Vélez-Bermello, 2022) and develop critical criteria to recognize material generated with AI (Belloch, 2012).

In addition to this problem, it is currently practically impossible to distinguish genuine content from AI-generated content (Espacio Telefónica, 2023). The generation of videos with Gen-AI tools is an emerging field (Fijačko et al., 2025). Therefore, it is necessary to conduct studies to understand the human ability to distinguish real content produced by humans from content generated by tools that generate hyper-realistic content.

On the other hand, the potential of these tools is the subject of debates about the quality and authenticity of the content created and the ethical implications they entail (Babl & Babl, 2023; González Arencibia & Martínez Cardero, 2020; Joosten et al., 2024). From this ethical perspective, the use of these tools could lead to privacy violations, as confidential information contained in the data used to train these tools could be inadvertently disclosed.

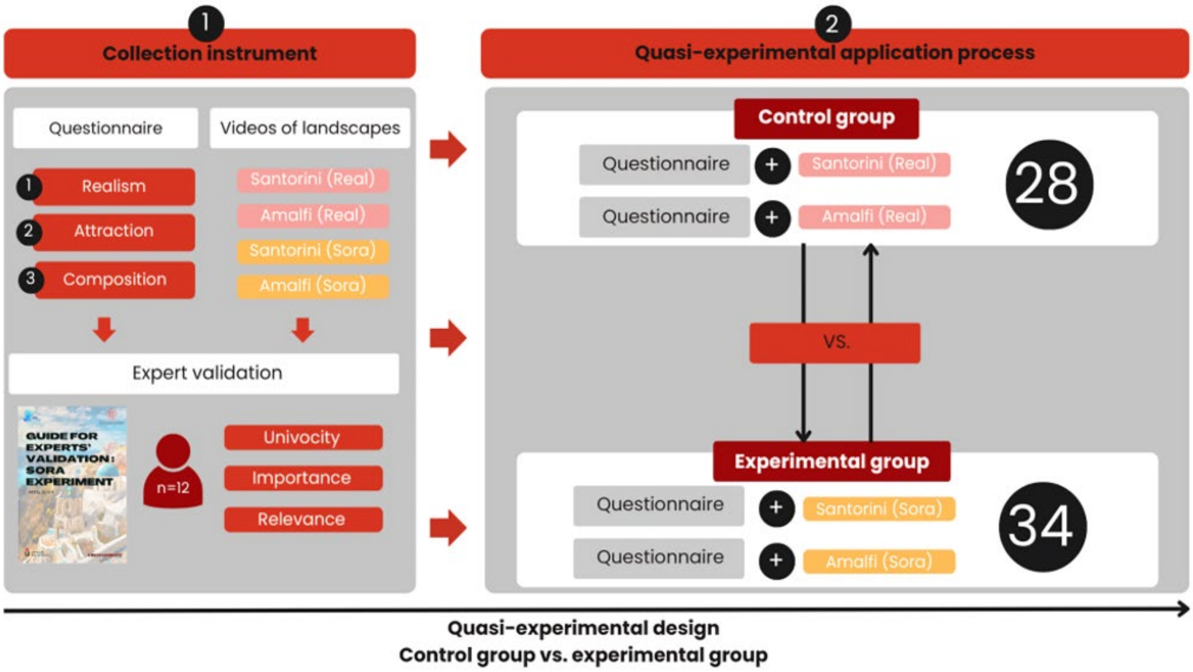


Figure 1. Methodological design (Source: Authors' own production)

Furthermore, these tools carry the risk of perpetuating and reinforcing existing biases in the training datasets, which could lead to unfair or discriminatory outcomes (Ara & Ara, 2024; Obrenovic et al., 2023; Wach et al., 2023). Therefore, the implementation of Gen-AI must carefully consider these aspects, focusing on transparency, accountability and the application of strict ethical guidelines to reduce potential harm (Diaz-Rodriguez et al., 2023).

The aim of the research is to make a first approach to the use of Sora as a Gen-AI tool for video production and to evaluate the degree of realism of its productions compared to human audiovisual productions.

To achieve this goal, the following research questions (RQs) are posed:

RQ1: How do respondents perceive the attractiveness and composition of AI-generated videos compared to real videos showing similar landscapes and environments?

RQ2: What are the key attractions and compositional elements that influence the perceived realism of Gen-AI videos of landscapes?

This article is structured as follows. We first explain the methodology used in the study. We then present the results after analyzing the survey conducted. After that we will discuss the outcomes. Next, we conclude and answer the RQs. Finally, we show the limitations of the study.

MATERIAL AND METHODS

The methodological design develops a quasi-experiment design (Ramos-Galarza, 2021) based on the collection of information by means of a self-administered online survey.

The study consists of two phases. The initial collection instrument, which includes the development of a questionnaire and the selection of videos of landscapes to evaluate three factors: realism, attractiveness and composition. The landscapes considered were real videos of Santorini and Amalfi, two well-known Greek and Italian cities, respectively, as well as videos generated by Sora relating to the same locations. An expert validation by 12 participants evaluated the tool based on the criteria of uniqueness, importance and relevance. The following quasi-experimental application process involved 64 participants, who were divided into two groups. The control group (28 participants) watched real landscape videos of Santorini and Amalfi, followed by the questionnaire. The experimental group (34 participants) watched the videos of Santorini and Amalfi generated by Sora and then also answered a questionnaire. **Figure 1** shows the methodological procedure developed.

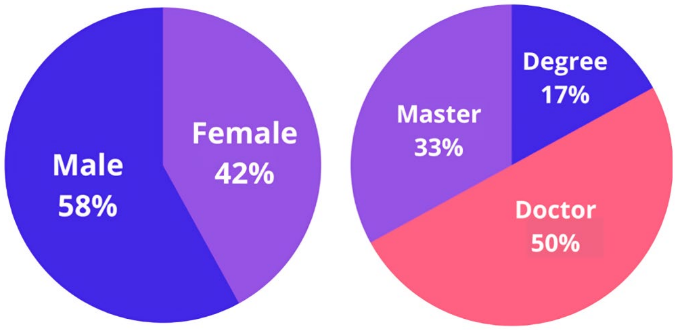


Figure 2. Characterization of expert judges (Source: Authors' own production)

Figure 1 illustrates a quasi-experimental design in which participants' perceptions of real and Sora-generated videos of Santorini and Amalfi were compared to evaluate perceptions of realism, attractiveness, and composition using questionnaires validated by experts.

Given the lack of studies in this area (Mvondo & Niu, 2024), the methodological approach is aimed at collecting data and making a first approximation of the phenomenon, the objective being to assess the attractiveness, composition and realism of the videos created with the Sora tool.

A quasi-experiment is presented (Ramos-Galarza, 2021) in which two standard videos generated by Sora (OpenAI, 2024a) and two fragments of real videos hosted on the YouTube platform (Go Places Pro, 2021; Ryan Shirley, 2021) are used. All videos show landscapes and are comparable in terms of composition, realism and attractiveness.

Design and Validation of the Data Collection Instrument

Data collection instrument

A questionnaire was designed based on the validated framework for human characterization of visual realism proposed by Fan et al. (2017). Since the questionnaire focuses on variables related to video and AI, the structure was modified and the variables related to realism, attractiveness and composition were retained according to the manual prepared by Achi (2004).

The design of the questionnaire was validated by experts according to the criteria of relevance, uniqueness and affiliation (Escobar-Pérez & Cuervo-Martínez, 2008). For this purpose, a self-administered online form containing the research objectives was created and validated by 12 experts. The selection of the jury members was based on the criterion that they should have at least a college degree and experience in one of the areas of media education, digital literacy, disinformation, digital content or audiovisual communication. **Figure 2** shows the distributions by gender and academic level of the experts.

After the validation process, the questions and answer options were adapted considering the experts' assessments. The complete characterization of the experts and the answers recorded during the validation process can be found at Sanchez-Acedo et al. (2024).

The final questionnaire was divided into two sections (**Table 1**).

Table 1. Survey questions and variables

Question ID	Items	Variable
Section 1. Socio-demographic		
Q1	How old are you?	Age
Q2	Gender. How do you identify?	Gender
Q3	Are you currently working?	Professional activity
Q4	If yes, what is your current position?	Professional activity
Q5	Which country are you from?	Geographical
Section 2. Survey		
Q6	How does the illumination appear to you? (1) Natural (2) Slightly natural (3) Not clearly natural or unnatural	Attraction

Table 1 (Continued).

Question ID	Items	Variable
	(4) Slightly unnatural (5) Unnatural	
Q7	How does the saturation appear to you? (1) Very saturated (2) Fairly saturated (3) Neutral (4) Slightly saturated (5) Without saturation	Attraction
Q8	How does the color appear to you? (1) Very colorful (2) Slightly colorful (3) Neutral (4) Slightly uncolorful (5) Uncolorful	Attraction
Q9	How does the brightness appear to you? (1) Very bright (2) Fairly bright (3) Neutral (4) Slightly bright (5) Without bright	Attraction
Q10	How does the sharpness appear to you? (1) Very sharp (2) Moderately sharp (3) Neither sharp nor blurry (4) Moderately blurry (5) Very blurry	Attraction
Q11	What's the quality of the video? (1) High quality (2) Moderately high quality (3) Medium quality (4) Moderately low quality (5) Very low quality	Attraction
Q12	Do you see shadows in the image? (1) Definitely yes (2) Probably yes (3) Not clearly yes or no (4) Probably no (5) Definitely not	Attraction
Q13	Does the video appear to have objects well focused? (1) Definitely yes (2) Probably yes (3) Not clearly yes or no (4) Probably not (5) Definitely not	Composition
Q14	Does the perspective of the video appear natural? (1) Definitely natural (2) Moderately natural (3) Not clearly natural or unnatural (4) Moderately unnatural (5) Definitely unnatural	Composition
Q15	Does the video appear to be a close-range shot or distant view shot? (1) Very close range (2) Moderately close range (3) Between close and distant (4) Moderately distant view (5) Very distant view	Composition
Q16	Do you recognize the location of the video? (1) Definitely yes (2) Probably yes (3) Not clearly yes or no	Realism

Table 1 (Continued).

Question ID	Items	Variable
	(4) Probably no (5) Definitely not	
Q17	Does the color in the video appear natural? (1) Definitely yes (2) Probably yes (3) Not clearly yes or no (4) Probably no (5) Definitely not	Realism
Q18	Does the image contain fine details? (1) Definitely yes (2) Probably yes (3) Not clearly yes or no (4) Probably no (5) Definitely not	Realism
Q19	Does this video look like it is a video taken by a drone? (1) Definitely yes (2) Probably yes (3) Not clearly yes or no (4) Probably no (5) Definitely not	Realism
Q20	Do you think the video is real? (1) Definitely yes (2) Probably yes (3) Not clearly yes or no (4) Probably no (5) Definitely not	Realism

The first section was used to collect socio-demographic variables (Q1-P5). The second section contained two videos that were to be rated independently in terms of realism, attractiveness and composition. Next, questions Q6-P11 were used to assess attractiveness, Q12-P15 dealt with the key elements of composition and finally Q16-P20 focused on realism. In terms of attractiveness, the variables measured were lighting, saturation, coloring, brightness and sharpness. On the composition side, video quality, the presence of shadows, focus, perspective and shooting plane were evaluated. Finally, the degree of realism of the videos was assessed by determining whether they appeared natural or contained fine detail, and whether respondents recognized the location and thought the video was real. Finally, we determined which aspects created appeal and which compositional elements most influenced the perceived realism of the Gen-AI videos. Since this was a quasi-experimental design, the second block of the survey was modified and two data collection instruments were created, one for the control group and one for the experimental group.

Design, construction, and validation of the quasi-experiment

The quasi-experimental approach is a descriptive research design that aims to observe the behavior of non-randomly selected subjects in relation to the variables under study.

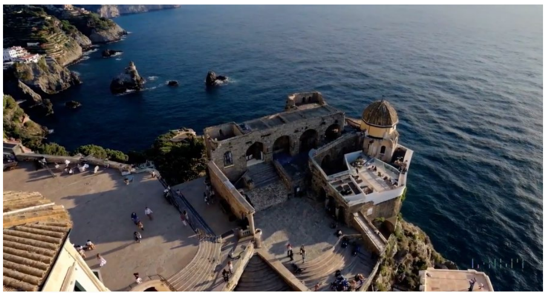
There were two groups: a control group and an experimental group. The participants in the control group watched real videos on YouTube, while the participants in the experimental group watched videos created with Gen-AI (Sora).

To select the stimuli, all videos were categorized as landscapes. Two videos created with gen-AI videos available on the Sora website and two fragments of real videos posted on YouTube were selected. A total of four stimuli were selected, taking care to ensure that they were similar in terms of both location and audiovisual characteristics.

As the possibilities for producing videos through Gen-AI are still limited, we opted for two promotional videos from Sora. None of the four videos analyzed contained sound, and they were adapted to have the same duration.

Replicas of Santorini (Greece) and the Amalfi Coast (Italy) were selected from the videos created with Sora, as shown in **Table 2**. For the real YouTube videos, scenes similar to the videos created with Sora from the

Table 2. Screenshots of AI-generated videos with Sora

	AI-generated video–Stimuli 1
Santorini	
Amalfi	

productions of Ryan Shirley (2021) and Go Places Pro (2021) were selected. All videos were homogenized by adjusting them in terms of time and resolution to isolate these variables. These images are not reproduced in the body of the article due to limitations on the use of quotation rights, but as they form part of the research tool, they are made available to any researcher who requests them privately (this does not infringe any economic rights such as publication, distribution, etc.). Similarly, the videos are hosted on YouTube and can be accessed via the URLs available in the bibliography section.

Once the stimuli were selected and standardized, they were included in the data collection instrument. The expert judges also conducted a validation of the quasi-experiment. As a result, a detailed guideline for the development process of the quasi-experiment was elaborated (Sanchez-Acedo et al., 2024).

Data Collection and Analytical Process

The validated questionnaire was implemented on the online platform Microsoft Forms for data collection. The study focused on young college students between the ages of 18 and 24. The sample was randomly selected as the aim was to make a first approximation of the phenomenon of video production using Gen-AI and to obtain preliminary data.

The study took place in the months of April and May 2024 with the participation of students from Università di Bologna with a background in visual arts. Participants were randomly and proportionally assigned to a control (n = 62) and an experimental group (n = 34). The average time to complete the experiment was 12 minutes.

As the purpose of the study is to provide an overview to identify trends and patterns, a descriptive analysis based on frequencies and percentages was performed for each variable. For this reason and in view of the sample size, no inferential statistical methods were used.

The data obtained and the results of the analysis are available from Sanchez-Acedo et al. (2024).

RESULTS

The results provide answers to the RQs outlined before. The socio-demographic results show that the average age of the participants is 21 years old, 68% of whom are female and 27% male. 81% of the respondents are not in employment and 71% of them are Italian. With regard to the variables analyzed, the results are shown below in percentages, differentiating between real videos (control group) and videos generated with Sora (experimental group).

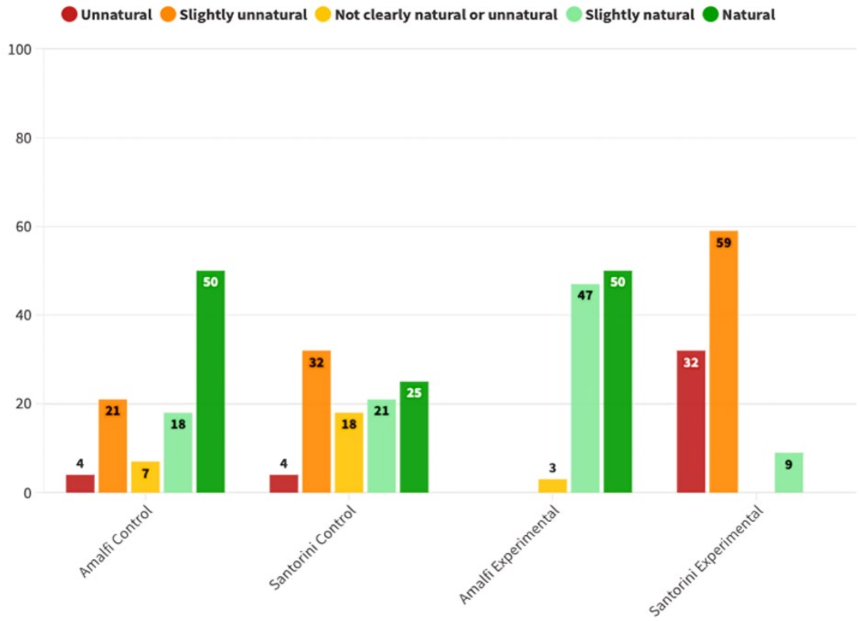


Figure 3. Results of variable attraction–Illumination (Source: Authors' own production)

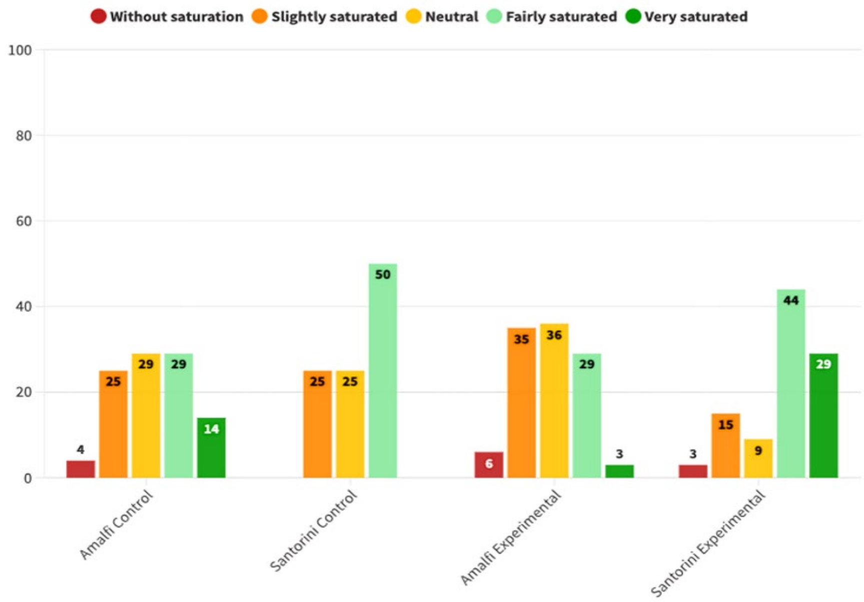


Figure 4. Results of variable attraction–Saturation (Source: Authors' own production)

Results of the Variable Attraction

Regarding the illumination in **Figure 3**, the Amalfi video generated with Sora is considered mostly natural or slightly natural (97%).

In contrast, in the Santorini video generated with Sora, it is considered to be mostly unnatural or slightly unnatural (91%). The illumination of the real videos is considered to be mostly natural or slightly natural, with 68% for Amalfi and 46% for Santorini. 25% consider the lighting of the real Amalfi video as unnatural or slightly unnatural and 36% consider the lighting of the real Santorini video as unnatural or slightly unnatural.

In terms of saturation in **Figure 4**, the real videos are considered as slightly saturated or not saturated by 29% of participants for the Amalfi video and 25% for the Santorini video. The saturation of the real video of Amalfi is considered saturated or very saturated by 43% and slightly saturated by 50% in the case of Santorini. As for the videos generated with Sora, 73% consider the Santorini video as saturated or very saturated, and the Amalfi video with 32% as saturated or very saturated, in total percentages. For the Santorini video

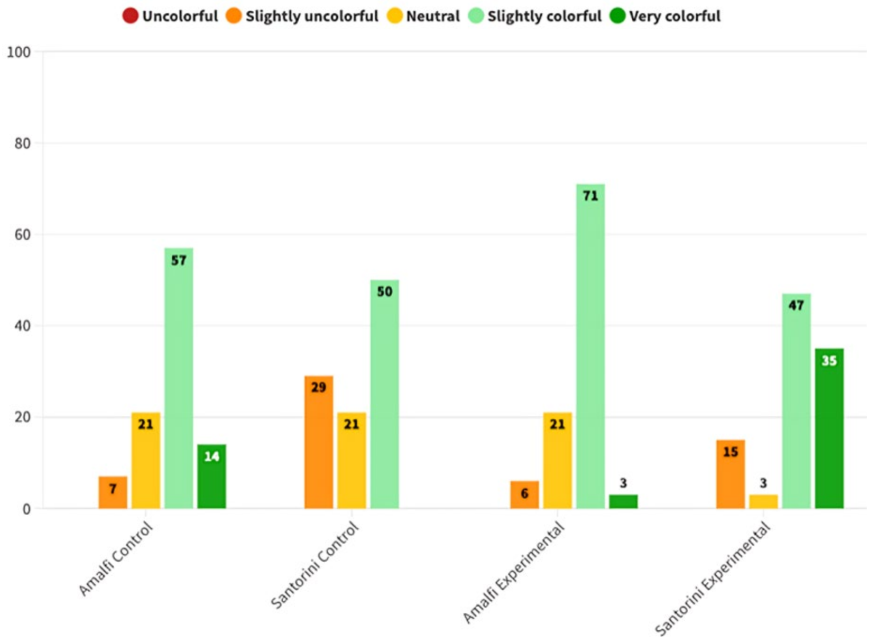


Figure 5. Results of variable attraction–Color (Source: Authors' own production)

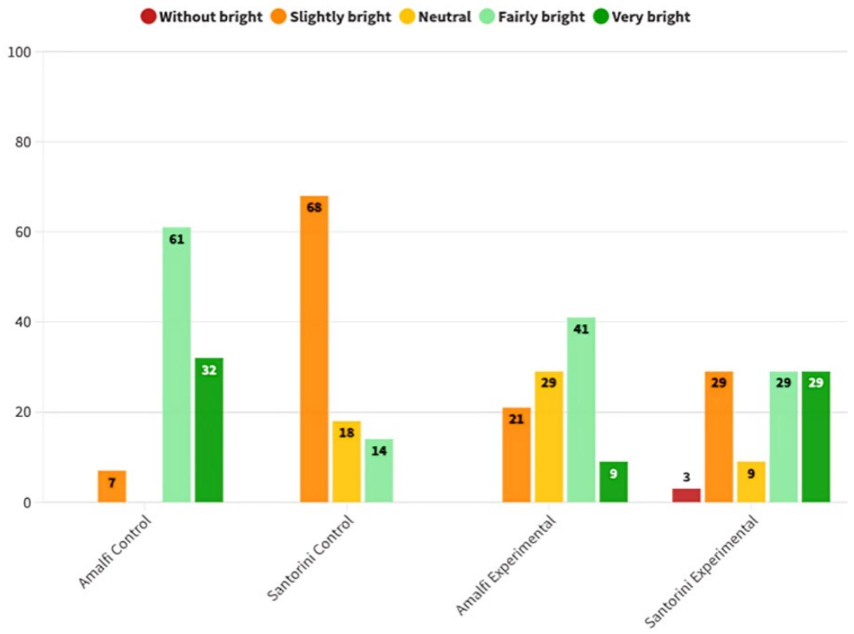


Figure 6. Results of variable attraction–Brightness (Source: Authors' own production)

generated with Sora, 41% considered it as not saturated or slightly saturated and 18% considered it as not saturated or slightly saturated.

In terms of color in **Figure 5**, the vast majority of participants responded that all four videos are slightly colorful and very colorful. For the videos generated with Sora, Amalfi was rated 74% as colorful or very colorful, and Santorini 82%. Regarding the actual videos, 71% consider the Amalfi video to be colorful or very colorful and 50% consider the Santorini video to be slightly colorful.

In terms of brightness in **Figure 6**, the Amalfi video generated with Sora is considered fairly bright or very bright by 50%, while 29% rated is as neutral. The Santorini video generated with Sora is mostly considered fairly bright by 29% and very bright by 29%. The brightness of the real videos, in the case of Amalfi is considered fairly bright or very bright by 93% and in the case of Santorini it is considered fairly bright by 14%, with 68% of the respondents answering as slightly bright.

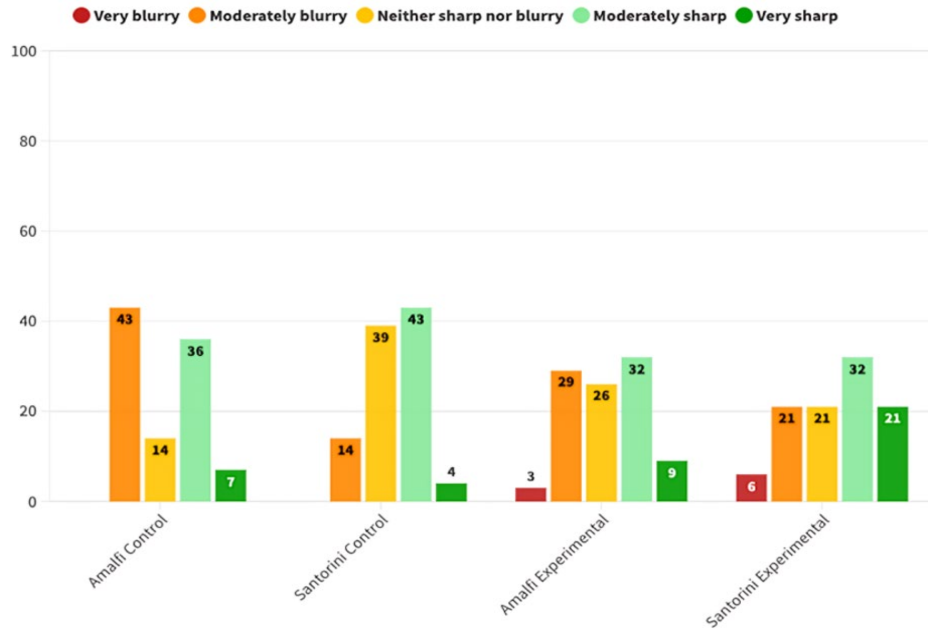


Figure 7. Results of variable attraction–Sharpness (Source: Authors' own production)

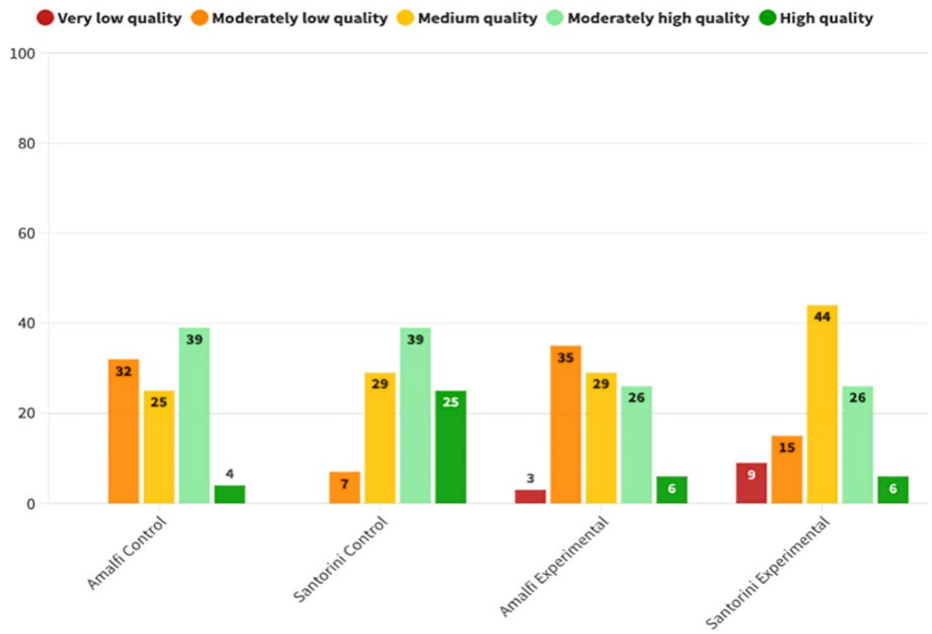


Figure 8. Results of variable attraction–Quality (Source: Authors' own production)

In terms of blurry in **Figure 7**, in the case of the real videos, the Amalfi video is considered moderately blurry with 43%, moderately sharp with 36% and very sharp with 7%. As for the real Santorini video, 14% consider it as moderately blurry, 43% as moderately sharp and 4% as very sharp. Regarding the videos generated with Sora, the Amalfi video is considered 3% very blurry, 29% moderately blurry, 26% neutral, 32% moderately sharp and 9% very sharp. Finally, the Santorini video generated with Sora is considered 6% very blurry, 21% moderately blurry, 21% neutral, 32% moderately sharp and 21% very sharp.

In terms of quality in **Figure 8**, for the real videos, the Amalfi video is considered moderately low quality by 32%, medium quality by 25%, moderately high quality by 39% and high quality by 4%. As for the real video of Santorini, 7% consider it to be moderately low quality, 29% as medium quality, 39% as moderately high quality and 25% as high quality. In the case of the videos generated with Sora, the Amalfi video is considered very low quality by 3%, moderately low quality by 35%, medium quality by 29%, moderately high quality by 26% and high quality by 6%. In the case of the Santorini video generated with Sora, it is considered very low

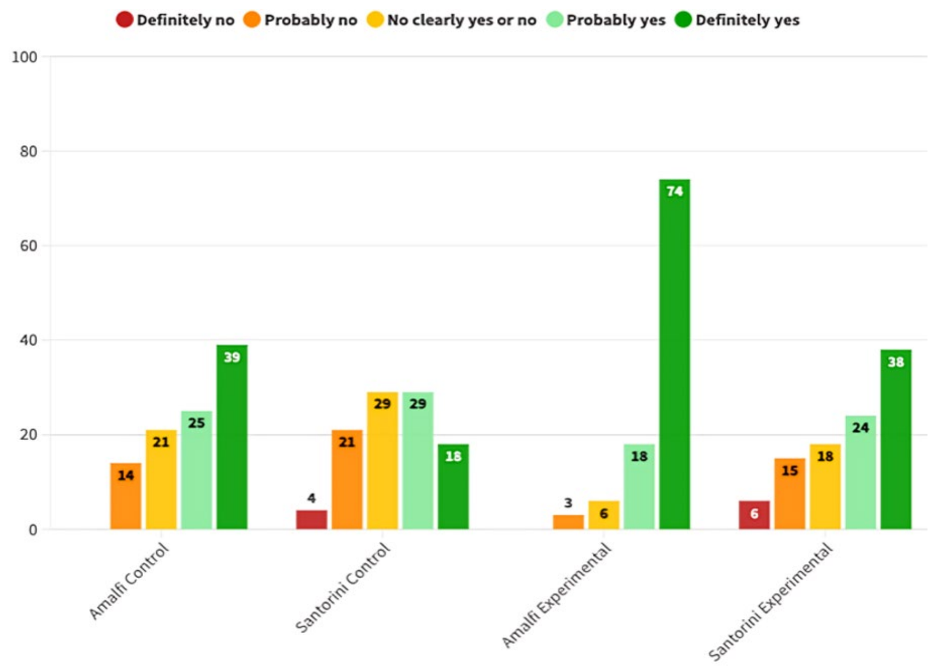


Figure 9. Results of variable attraction–Shadows (Source: Authors' own production)

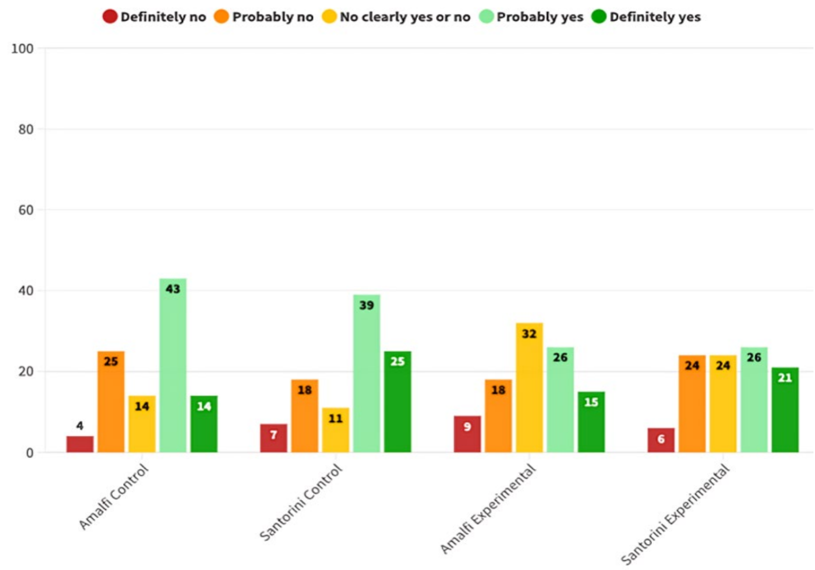


Figure 10. Results of variable composition–Well focused (Source: Authors' own production)

quality with 9%, moderately low quality with 15%, medium quality with 44%, moderately high quality with 26% and high quality with 6%.

As far as the appearance of shadows in the video is concerned in **Figure 9**, the majority consider that there are shadows in all four videos. In the case of the real Amalfi video, 39% say that there are shadows, and in the case of the real Santorini video, 18% say that there are shadows and 29% think that there probably are. As for the videos generated with Sora, in the case of Amalfi, 74% say that there are shadows in the video and in the case of Santorini, 38% say that there are shadows.

Results of the Composition Variable

As for the level of focus of the objects in the video in **Figure 10**, for the real video of Amalfi, 4% consider that it is not in focus, 25% that it is probably not in focus, 14% neutral, 43% that it is probably in focus and 14% that it is definitely in focus. For the real video of Santorini, 7% said definitely not, 18% said probably not, 11% neutral, 39% said probably yes and 25% said yes. In the case of the videos generated with Sora, in the

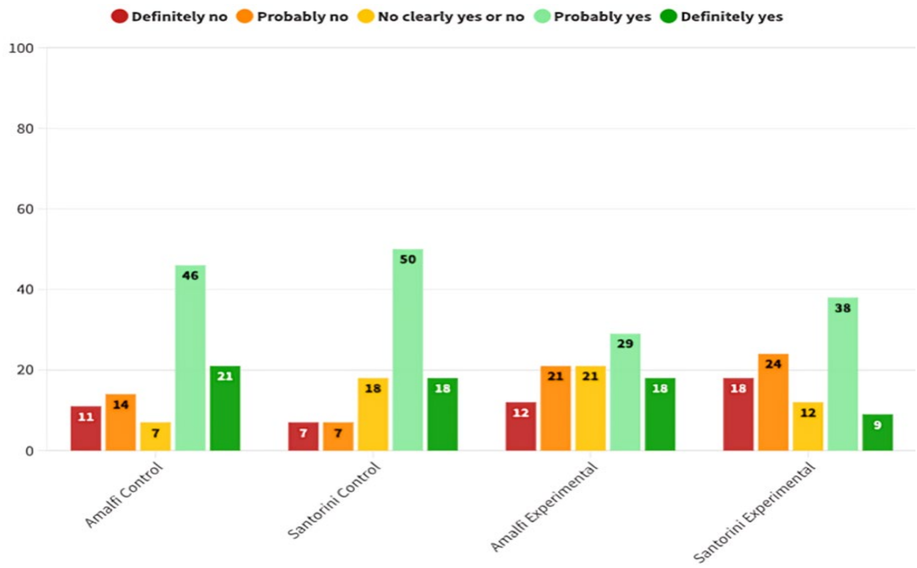


Figure 11. Results of variable composition–Perspective (Source: Authors' own production)

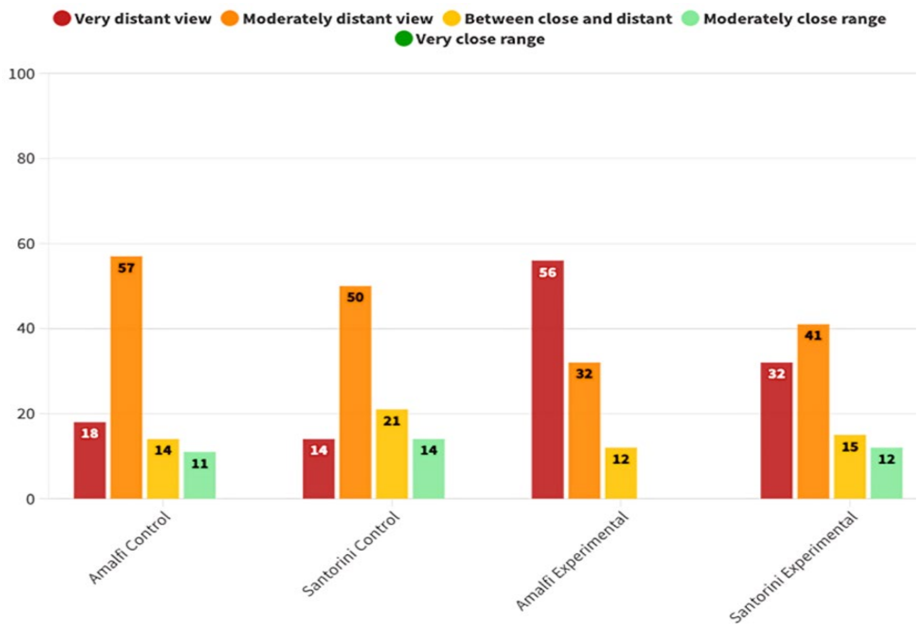


Figure 12. Results of variable composition–Distant view shot (Source: Authors' own production)

case of Amalfi, 9% said definitely no, 18% said probably no, 32% neutral, 26% said probably yes and 15% said yes. Finally, in the case of Santorini videos generated with Sora, 6% definitely no, 24% probably no, 24% neutral, 26% probably yes and 21% yes.

As for the level of focus of the objects in the video in **Figure 11**, for the real video of Amalfi, 11% consider that it is not in natural perspective, 14% that it probably is not, 7% neutral, 46% that it probably is and 21% that it definitely is. For the actual Santorini video, 7% said definitely not, 7% said probably not, 18% neutral, 50% said probably yes and 18% said yes. In the case of the videos generated by Sora, in the case of Amalfi, 12% said definitely no, 21% said probably no, 21% said neutral, 29% said probably yes, and 18% said yes. Finally, in the case of Santorini generated with Sora, 18% definitely no, 24% probably no, 12% neutral, 28% probably yes, and 9% yes.

As for the distant view shot in **Figure 12**, for the real Amalfi video, 18% consider it a very distant view, 57% moderately distant view, 14% neutral and 11% moderately close range. For the real Santorini video, 14% considered it a very distant view, 50% moderately distant view, 21% neutral and 14% moderately close range. Regarding the videos generated with Sora, in Amalfi 56% consider very distant view, 32% moderately distant

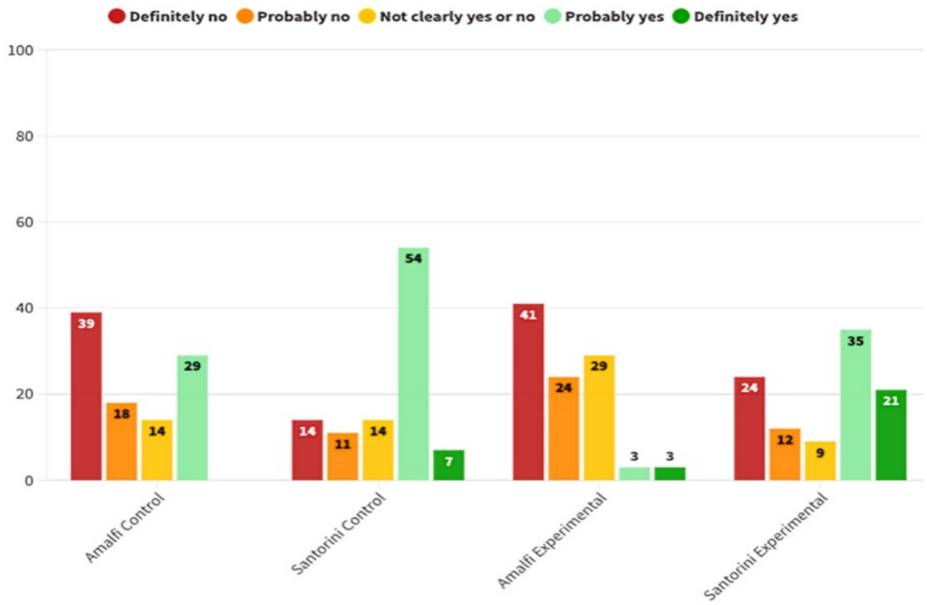


Figure 13. Results of variable realism–Location (Source: Authors' own production)

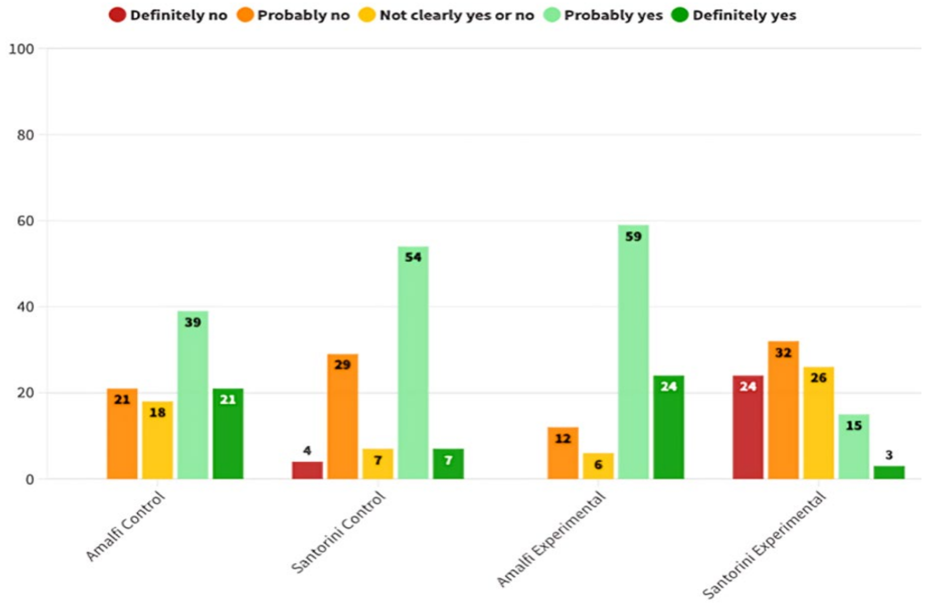


Figure 14. Results of variable realism–Color natural (Source: Authors' own production)

view and 12% neutral. For the Santorini video generated with Sora, 32% considered it a very distant view, 41% moderately distant view, 15% neutral and 12% moderately close range.

Results of Realism Variable

In the real Amalfi video, 39% do not recognize the location, 18% probably do not recognize the location, 14% neutral and 29% think they recognize the location (**Figure 13**). In the case of the real Santorini video, 14% definitely do not recognize the location, 11% probably not, 14% neutral, 54% probably yes and 7% do recognize the location. In the case of the videos generated with Sora, in Amalfi 41% do not recognize it, 24% probably do not recognize it, 29% are neutral, 3% probably yes and 3% do recognize it. In the case of Santorini generated with Sora, 24% do not recognize the location, 12% probably do not, 9% neutral, 35% probably yes and 21% definitely recognize it.

As for the natural color in **Figure 14**, for the real Amalfi video, 21% said probably not, 18% said neutral, 39% said probably yes and 21% said definitely yes. For the real Santorini video, 4% said definitely no, 29% said probably no, 7% said neutral, 54% said probably yes and 7% said yes. In the case of the videos generated with

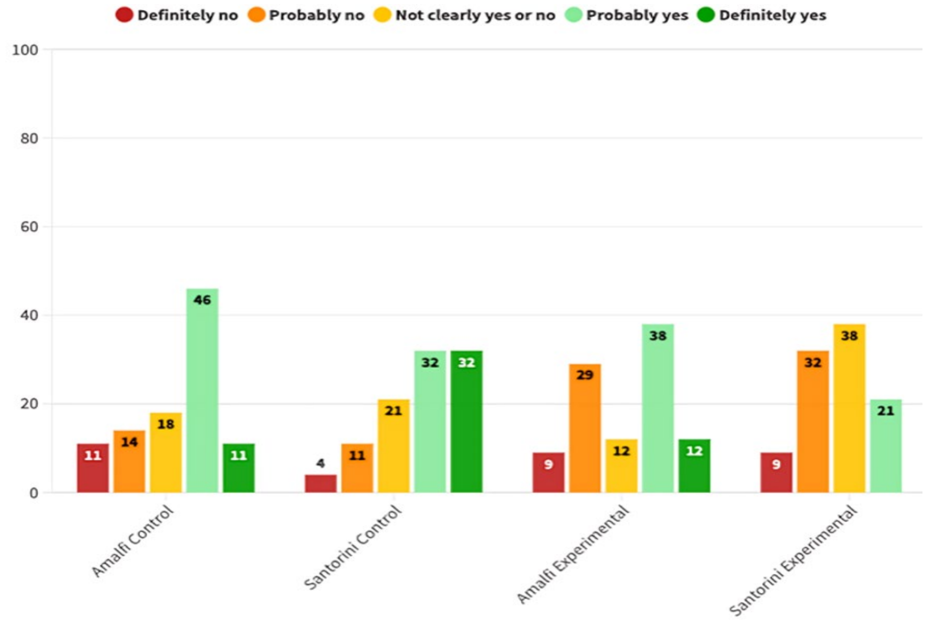


Figure 15. Results of variable realism–Fine details (Source: Authors' own production)

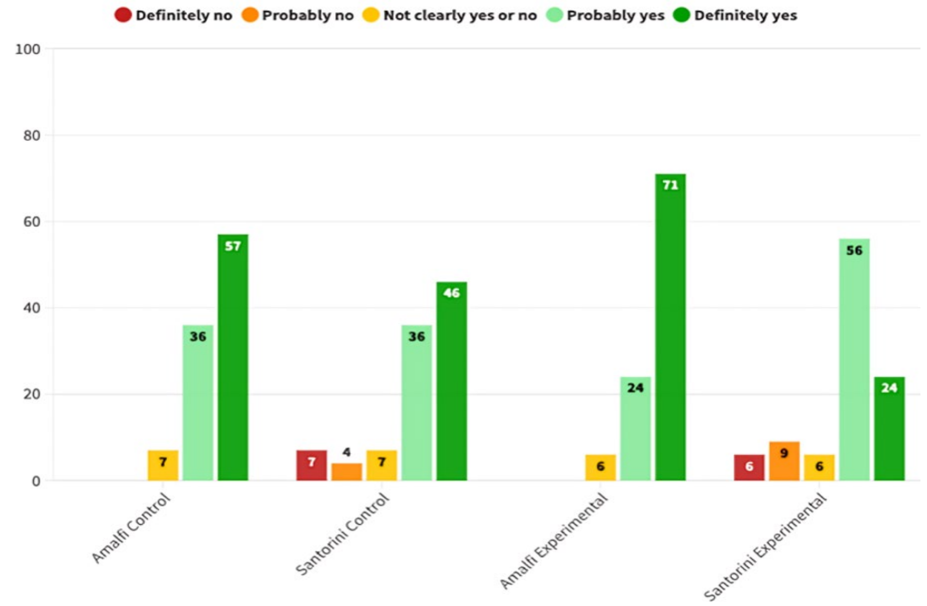


Figure 16. Results of variable realism–Drone (Source: Authors' own production)

Sora, in the case of Amalfi, 12% consider that probably no, 6% neutral, 59% that probably yes and 24% that yes. Finally, in the case of Santorini generated with Sora, 24% definitely no, 32% probably no, 26% neutral, 15% probably yes and 3% yes.

As to whether the image has fine details in **Figure 15**, for the real Amalfi video, 11% said definitely not, 14% said probably not, 18% neutral, 46% said probably yes and 11% said definitely yes. For the real Santorini video, 4% said definitely no, 11% said probably no, 21% neutral, 32% said probably yes and 32% said yes. In the case of the videos generated with Sora, in the case of Amalfi, 9% said definitely no, 29% probably no, 12% neutral, 38% probably yes and 12% yes. Finally, in the case of Santorini generated with Sora, 9% definitely no, 32% probably no, 38% neutral and 21% probably yes.

As to whether the videos were recorded by a drone in **Figure 16**, in all four cases the majority of respondents said that they were either most likely yes or most definitely yes. Thus, in the real Amalfi video, 93% voted that it was most likely shot by drone, while in the real Santorini video 82%, in the Sora video from Amalfi 96% and in the Santorini video from Sora 80%.

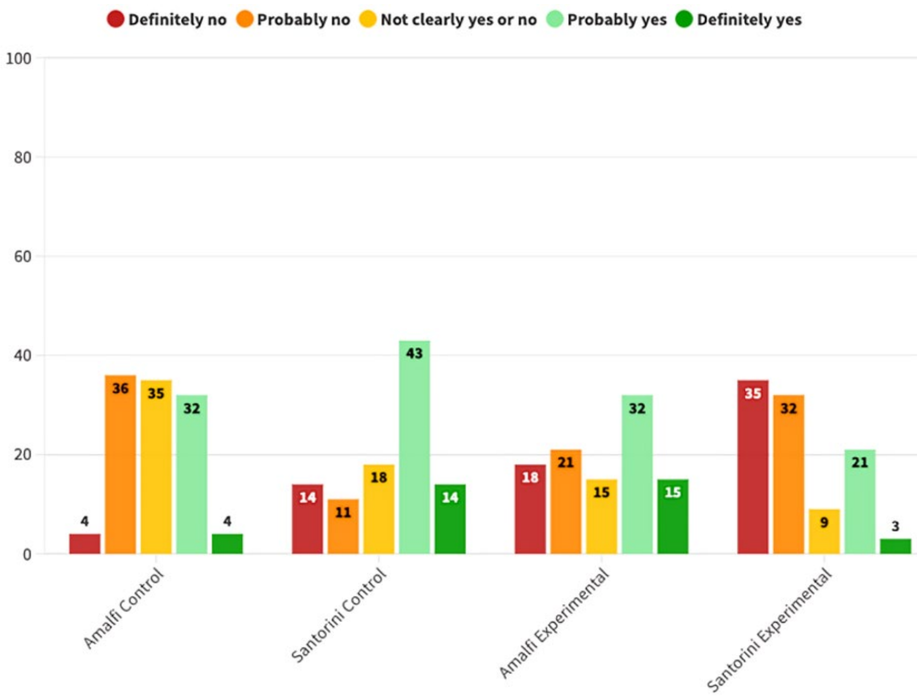


Figure 17. Results of variable realism–Video real (Source: Authors' own production)

For the real Amalfi video, 4% say it is not a real video, 36% probably not, 35% are not clear, 32% probably yes and 4% definitely yes (**Figure 17**). In the case of the real Santorini video, 14% definitely no, 11% probably no, 18% unclear, 43% probably yes and 14% definitely yes. In the case of the videos generated by Sora, for Amalfi 18% say definitely no, 21% probably no, 15% neutral, 32% probably yes and 15% definitely yes. For Santorini generated with Sora, 35% definitely no, 32% probably no, 9% unclear, 21% probably yes and 3% definitely yes.

Finally, most of the participants (71%) are not familiar with Gen-AI tools for video production. Among those who do know of such tools, Sora, Pika, or lightroom, among others, were mentioned.

DISCUSSION, CONCLUSIONS, AND LIMITATIONS

In this section we look for answers to the RQs defined in the introduction. In relation to *RQ1. How do respondents perceive the attractiveness and composition of AI-generated videos compared to real videos showing similar landscapes and environments?* the parameters of attractiveness and composition are perceived differently in the real videos and the Sora-generated videos.

The Amalfi video generated by Sora was largely perceived as natural in terms of lighting (97%), while the Santorini video generated by the AI was seen as mostly unnatural or slightly unnatural by 91% of respondents. This emphasizes the varying ability of AI-generated content to reproduce realistic lighting in different scenes. This suggests that Gen-AI models may struggle to accurately reproduce natural lighting, which could be one of the biggest challenges in achieving realism. The lighting in the videos generated by Sora, particularly in the Santorini video, is largely perceived as unnatural by participants, in contrast to the real-life counterpart where it is perceived as more natural.

In terms of saturation, the AI-generated Santorini video was generally perceived as oversaturated. 73% of respondents stated that it was either saturated or very saturated. In contrast, the real Santorini video was considered less saturated. 43% of respondents felt it was neutral or slightly saturated. This trend was also reflected in the perception of color: the AI-generated videos were often rated as too colorful, especially in the case of the Santorini video (82%). The discrepancy between the color and saturation levels of AI-generated videos and real videos suggests that the Gen-AI models may prefer vividness.

For other attributes such as sharpness and overall quality, there is not as much difference between real and AI-generated videos. Finally, in terms of attraction components, Sora is able to replicate certain visual aspects very well. However, for a critical element such as lighting (Fan et al., 2017), even more precision is required. Therefore, there are still certain technological limitations in AI tools for video creation.

As for the composition variable, there are no significant differences like lighting for the attraction variable. However, the descriptive statistical analysis shows some differences in the perception of perspective between the real videos and the videos created with Sora. For example, the perspective in the AI-generated videos was perceived as less natural. 42% of responses to the Santorini video indicated an unnatural or slightly unnatural perspective. This indicates that AI-generated content still has issues with scene composition, especially when it comes to aspects such as the naturalness of angles and perspectives.

In relation to *RQ2. What are the key attractions and compositional elements that influence the perceived realism of Gen-AI videos of landscapes?* the analysis revealed that certain attraction and composition elements have a significant influence on the perceived realism of AI-generated videos. Lighting and color were particularly influential on the realism perceived by respondents. As can be seen from the responses, the AI-generated videos, particularly for Santorini, had issues with natural lighting, which was consistently rated as unnatural by respondents. Participants considered the Santorini video created with Sora to be a non-real video due to the unnatural lighting. However, when these parameters are more consistent, as is the case with the Amalfi Coast video, participants have more difficulty distinguishing a fake video from a real one. The results suggest that the attractiveness variables have a direct influence on participants when they evaluate the degree of realism of the Sora videos. In contrast, the composition variables do not appear to have a major influence on perceived realism.

Overall, while AI-generated videos are making progress when it comes to achieving the visual appeal of real videos, there are still significant challenges when it comes to achieving complete realism, particularly in aspects such as lighting and color, which contribute significantly to the perceived naturalness of a scene. This data emphasizes the importance of making further progress in AI video synthesis to improve the authenticity and visual consistency of generated content.

In terms of place recognition, Sora is able to generate very realistic videos that resemble real places, as the Santorini and Amalfi cases show. Participants were better able to recognize Santorini as iconic elements, such as the blue domes, were accurately reproduced. In contrast, Amalfi, which has fewer iconic elements, is less recognizable to the viewer.

The study shows that the Sora tool is able to create very realistic videos, as Mogavi et al. (2024), Kustudic and Mvondo (2024), or Fijačko et al. (2025) state in their study. The videos created by Sora produce reliable reproductions of the real places, as in the case of Santorini or Amalfi.

However, the results show that it is sometimes not easy to recognize whether a video generated by Sora is real or not, an aspect that Brooks et al. (2024) and Bijalwan et al. (2025) point out. It can be observed that participants are more likely to be confused when it comes to distinguishing between real and AI-generated videos for videos from the Amalfi Coast than for those from Santorini. This difficulty in distinguishing between visual content produced with the real video maker's footage and that produced by AI reinforces the approach of the compelling need to train viewers to judge whether a video is real or not. The various regulations and investigations that have been developed to control the dissemination of this visual content reflect the ethical risks and problems of misinformation, as Adetayo et al. (2024) and Cho et al. (2024) note. In this sense, other studies such as Zhou et al. (2024) also suggest mandatory labelling of AI-generated content to regulate the blurred line between what is real and what is not. This would avoid future ethical and legal problems that could arise from the inclusion of AI tools in the production of content, as Kim (2024) and Prieto-Gutierrez et al. (2024) emphasizes.

Similarly, the results of this study show that the parameters analyzed that shape perception in terms of attractiveness, such as lighting and color, directly influence video recognition. Therefore, when writing a prompt to generate an audiovisual production, it is necessary to specify in this instruction the values of these variables, as Wang & Yang (2024) state in their study, in which they explain that the results obtained in Sora depend directly on the prompt and the instructions given.

Since the possibilities of video production with Gen-AI tools are still limited, the limitations of the present study are listed below. Firstly, the accessibility of the Sora tool. Although its release is imminent, this tool was not yet available at the time of the experiment. Therefore, the study had to rely on the sample videos provided by the tool on its website, which did not allow us to explore all the possibilities through detailed instructions, and other AI tools for video creation were investigated in a phase prior to the experiment. However, only the Sora tool was used in the study, as all other text-to-video tools were considered less effective for creating visual content. Sora is currently considered the most powerful tool for creating highly realistic videos using AI. In order to substantiate the conclusions of this study, it is necessary to repeat the experiment with a larger sample and a variety of participants with different educational and professional backgrounds.

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Ethics declaration: The Ethics Committee of the Rey Juan Carlos University has authorized the conduct of this experiment (Authorization ID 3,105,202,214,722), which involves the participation of human subjects. All the necessary procedures for its performance are approved, in accordance with the ethical standards and the requirements established in the protocol, in relation to the objectives of the study. In addition, the possible risks for the participants are justified. Likewise, the investigator’s capacity and the means available are considered favorable and appropriate for carrying out the study. The data obtained for the analysis of the results have been anonymized, guaranteeing the confidentiality of all participants.

Declaration of interest: The authors declared no competing interest.

Data availability: Data generated or analyzed during this study are available from the authors on request.

REFERENCES

Abeliuk, A., & Gutiérrez, C. (2021). Historia y evoluación de la inteligencia artificial [History and evolution of artificial intelligence]. *Revista Bits de Ciencia*, (21), 14-21. https://doi.org/10.71904/bits.vi21.2767

Achi, M. C. R. (2004). *Manual de formación audiovisual* [Audiovisual training manual]. Cholsamaj Fundacion.

Adetayo, A. J., Enamudu, A. I., Lawal, F. M., & Odunewu, A. O. (2024). From text to video with AI: The rise and potential of Sora in education and libraries. *Library Hi Tech News*. https://doi.org/10.1108/LHTN-02-2024-0028

Alasadi, E. A., & Baiz, C. R. (2023). Generative AI in education and research: Opportunities, concerns, and solutions. *Journal of Chemical Education, 100*(8), 2965-2971. https://doi.org/10.1021/acs.jchemed.3c00323

Ara, A., & Ara, A. (2024). *Exploring the ethical implications of generative AI*. IGI Global. https://doi.org/10.4018/979-8-3693-1565-1

Babl, F. E., & Babl, M. P. (2023). Generative artificial intelligence: Can ChatGPT write a quality abstract? *Emergency Medicine Australasia, 35*(5), 809-811. https://doi.org/10.1111/1742-6723.14233

Batista, A. R. F., & Santaella, L. (2023). IAs generativas: A importância dos comandos para texto e imagem [Generative AIs: The importance of commands for text and images.]. *Aurora. Revista de Arte, Mídia e Política, 16*(47), 76-94. https://doi.org/10.23925/1982-6672.2023v16i47p76-94

Belloch, C. (2012). Las tecnologías de la información y comunicación en el aprendizaje [Information and communication technologies in learning]. *Depto MIDE. Universidad de Valencia, 4*, 1-11. https://www.uv.es/bellochc/pedagogia/EVA1.pdf

Betker, J., Goh, G., Jing, L., Brooks, T., Wang, J., Li, L., Ouyang, L., Zhuang, J., Guo, Y., Manassra, W., Dhariwal, P., Chu, C., Jiao, Y., & Ramesh, A. (2023). Improving image generation with better captions. *Computer Science, 2*(3).

Bewersdorff, A., Hartmann, C., Hornberger, M., Seßler, K., Bannert, M., Kasneci, E., Kasneci, G., Zhai, X., & Nerdel, C. (2025). Taking the next step with generative artificial intelligence: The transformative role of multimodal large language models in science education. *Learning and Individual Differences, 118*, Article 102601. https://doi.org/10.1016/j.lindif.2024.102601

Bijalwan, P., Gupta, A., Johri, A., Wasiq, M., & Khalil Wani, S. (2025). Unveiling sora open AI's impact: A review of transformative shifts in marketing and advertising employment. *Cogent Business & Management, 12*(1), Article 2440640. https://doi.org/10.1080/23311975.2024.2440640

Brooks, T., Peebles, B., Holmes, C., DePue, W., Guo, Y., Jing, L., Schnurr, D., Taylor, J., Luhman, T., Luhman, E., Ng, C., Wang, R., & Ramesh, A. (2024). Video generation models as world simulators. *OpenAI*. https://openai.com/research/video-generation-models-as-world-simulators

Cao, Y., Li, S., Liu, Y., Yan, Z., Dai, Y., Yu, P. S., & Sun, L. (2023). *A comprehensive survey of AI-generated content (AIGC): A history of generative AI from GAN to ChatGPT*. arXiv. https://doi.org/10.48550/arXiv.2303.04226

Carbonell-Alcocer, A., Sanchez-Acedo, A., Benitez-Aranda, N., & Gertrudix,M. (2025). Impacto de la inteligencia artificial generativa en la eficiencia, calidad e innovación en la producción de recursos educativos abiertos para MooCs [Impact of generative artificial intelligence on efficiency, quality and innovation in the production of open educational resources for MOOCs]. *Comunicación y Sociedad*, (22), e8785. https://doi.org/10.32870/cys.v2025.8784

Celik, I. (2023). Towards Intelligent-TPACK: An empirical study on teachers' professional knowledge to ethically integrate artificial intelligence (AI)-based tools into education. *Computers in Human Behavior, 138*, Article 107468. https://doi.org/10.1016/j.chb.2022.107468

Chen, Z., Li, S., & Haque, M. A. (2024). An overview of OpenAI's Sora and its potential for physics engine free games and virtual reality. *EAI Endorsed Transactions on AI and Robotics, 3*. https://doi.org/10.4108/airo.5273

Cho, J., Puspitasari, F. D., Zheng, S., Zheng, J., Lee, L. H., Kim, T. H., Hong, C. S., & Zhang, C. (2024). *Sora as an AGI world model? A complete survey on text-to-video generation*. arXiv. https://doi.org/10.48550/arXiv.2403.05131

Dempere, J., Modugu, K., Hesham, A., & Ramasamy, L. K. (2023). The impact of ChatGPT on higher education. *Frontiers in Education, 8*. https://doi.org/10.3389/feduc.2023.1206936

Díaz-Rodríguez, N., Del Ser, J., Coeckelbergh, M., de Prado, M. L., Herrera-Viedma, E., & Herrera, F. (2023). Connecting the dots in trustworthy artificial intelligence: From AI principles, ethics, and key requirements to responsible AI systems and regulation. *Information Fusion, 99*, Article 101896. https://doi.org/10.1016/j.inffus.2023.101896

Doshi, A. R., & Hauser, O. (2023). *Generative artificial intelligence enhances creativity but reduces the diversity of novel content*. SSRN. https://doi.org/10.2139/ssrn.4535536

Epstein, Z., Hertzmann, A., & Investigators of Human Creativity. (2023). Art and the science of generative AI. *Science, 380*(6650), 1110-1111. https://doi.org/10.1126/science.adh4451

Escobar-Pérez, J., & Cuervo-Martínez, Á. (2008). Validez de contenido y juicio de expertos: Una aproximación a su utilización [Content validity and expert judgment: An approach to their use]. *Avances en Medición*, *6*(1), 27-36. https://www.humanas.unal.edu.co/lab_psicometria/application/files/9416/0463/3548/Vol_6._Articulo3_Juicio_de_expertos_27-36.pdf

Espacio Telefónica. (2023). Fake news. *La fábrica de mentiras*. https://bit.ly/3Q0SwNH

Fan, S., Ng, T. T., Koenig, B. L., Herberg, J. S., Jiang, M., Shen, Z., & Zhao, Q. (2017). Image visual realism: From human perception to machine computation. *IEEE Transactions on Pattern Analysis and Machine Intelligence, 40*(9), 2180-2193. https://doi.org/10.1109/TPAMI.2017.2747150

Fernández Mateo, J. (2023). Realidad artificial. Un análisis de las potenciales amenazas de la inteligencia artificial [Artificial reality. An analysis of the potential threats of artificial intelligence]. *Revista Internacional de Cultura Visua,l 9*(2). https://doi.org/10.37467/revvisual.v9.5004

Fijačko, N., Štiglic, G., Topaz, M., & Greif, R. (2025). Using OpenAI's text-to-video model Sora to generate cardiopulmonary resuscitation content. *Resuscitation, 207*. https://doi.org/10.1016/j.resuscitation.2024.110484

Fui-Hoon Nah, F., Zheng, R., Cai, J., Siau, K., & Chen, L. (2023). Generative AI and ChatGPT: Applications, challenges, and AI-human collaboration. *Journal of Information Technology Case and Application Research, 25*(3), 277-304. https://doi.org/10.1080/15228053.2023.2233814

Galvez Martínez, C. (2024). Mapa científico de la inteligencia artificial en comunicación (2004-2024) [Scientific map of artificial intelligence in communication (2004-2024)]. *European Public & Social Innovation Review, 9*, 1-17. https://doi.org/10.31637/epsir-2024-947

García-Peñalvo, F. J. (2023). La percepción de la inteligencia artificial en contextos educativos tras el lanzamiento de ChatGPT: Disrupción o pánico [The perception of artificial intelligence in educational contexts after the launch of ChatGPT: Disruption or panic]. *Education in the Knowledge Society, 24*, e31279-e31279. https://doi.org/10.14201/eks.31279

García-Peñalvo, F. J., Llorens-Largo, F., & Vidal, J. (2024). La nueva realidad de la educación ante los avances de la inteligencia artificial generative [The new reality of education in the face of advances in generative artificial intelligence]. *RIED-Revista Iberoamericana de Educación a Distancia, 27*(1), 9-39. https://doi.org/10.5944/ried.27.1.37716

Go Places Pro (2021). Santorini, Greece-4K UHD drone video. *YouTube*. https://www.youtube.com/watch?v=rXlqSYZOGnQ&t=456s

González Arencibia, M., & Martínez Cardero, D. (2020). Dilemas éticos en el escenario de la inteligencia artificial [Ethical dilemmas in the artificial intelligence scenario]. *Economía y Sociedad, 25*(57), 93-109. https://doi.org/10.15359/eys.25-57.5

Herath, D. B., Ode, E., & Herath, G. B. (2025). Can AI replace humans? Comparing the capabilities of AI tools and human performance in a business management education scenario. *British Educational Research Journal, 51*(3), 1073-1096. https://doi.org/10.1002/berj.4111

Joosten, J., Bilgram, V., Hahn, A., & Totzek, D. (2024). Comparing the ideation quality of humans with generative artificial intelligence. *IEEE Engineering Management Review, 52*(2), 153-164. https://doi.org/10.1109/EMR.2024.3353338

Kalyan, K. S. (2023). A survey of GPT-3 family large language models including ChatGPT and GPT-4. *Natural Language Processing Journal, 6*, Article 100048. https://doi.org/10.1016/j.nlp.2023.100048

Kim, J. G. (2024). Current use and issues of generative AI in the film industry. *Journal of Information Technology Applications and Management, 31*(3), 181-192. https://doi.org/10.21219/jitam.2024.31.3.181

Kustudic, M., & Mvondo, G. F. N. (2024). *A hero or a killer? Overview of opportunities, challenges, and implications of text-to-video model SORA*. Authorea. https://doi.org/10.36227/techrxiv.171207528.88283144/v1

Leivada, E., Murphy, E., & Marcus, G. (2023). DALL· E 2 fails to reliably capture common syntactic processes. *Social Sciences & Humanities Open, 8*(1), Article 100648. https://doi.org/10.1016/j.ssaho.2023.100648

Liu, Y., Zhang, K., Li, Y., Yan, Z., Gao, C., Chen, R., Yuan, Z., Huang, Y., Sun, H., Gao, J., He, L., & Sun, L. (2024). *Sora: A review on background, technology, limitations, and opportunities of large vision models*. arXiv. https://doi.org/10.48550/arXiv.2402.17177

Medina-Romero, M. Á. (2023). Las herramientas de inteligencia artificial orientadas al fortalecimiento del desarrollo de investigaciones científicas y académicas: El caso de Smartpaper [Artificial intelligence tools aimed at strengthening the development of scientific and academic research: The Smartpaper case]. *Ciencia Latina Revista Científica Multidisciplinar, 7*(3). https://doi.org/10.37811/cl_rcm.v7i3.6743

Mogavi, R. H., Wang, D., Tu, J., Hadan, H., Sgandurra, S. A., Hui, P., & Nacke, L. E. (2024). *Sora OpenAI's prelude: Social media perspectives on Sora OpenAI and the future of AI video generation*. arXiv. https://doi.org/10.48550/arXiv.2403.14665

Motlagh, N. Y., Khajavi, M., Sharifi, A., & Ahmadi, M. (2023). *The impact of artificial intelligence on the evolution of digital education: A comparative study of openAI text generation tools including ChatGPT, Bing Chat, Bard, and Ernie*. arXiv. https://doi.org/10.48550/arXiv.2309.02029

Mvondo, G. F. N., & Niu, B. (2024). *Factors influencing user willingness to use SORA*. arXiv. https://doi.org/10.48550/arXiv.2405.03986

Obrenovic, B., Gu, X., Wang, G., Godinic, D., & Jakhongirov, I. (2024). Generative AI and human-robot interaction: Implications and future agenda for business, society and ethics. *AI & SOCIETY, 40*, 677-690. https://doi.org/10.1007/s00146-024-01889-0

OpenAI, Achiam, J., Adler, S., Agarwal, S., Ahmad, L., Akkaya, I., Aleman, F. L., Almeida, D., Altenschmidt, J., Altman, S., Anadkat, S., Avila, R., babuschkin, I., Balaji, S., Balcom, V., Baltescu, P., Bao, H., Bavarian, M., Belgum, J., … Zoph, B. (2023). *GPT-4 technical report*. arXiv. https://doi.org/10.48550/arXiv.2303.08774

OpenAI. (2024a). Creating video from text sora is an ai model that can create realistic and imaginative scenes from text instructions. *OpenAI*. https://openai.com/index/sora/

OpenAI. (2024b). OpenAI and Apple announce partnership to integrate ChatGPT into Apple experiences. *OpenAI*. https://openai.com/index/openai-and-apple-announce-partnership/

Owan, V. J., Abang, K. B., Idika, D. O., Etta, E. O., & Bassey, B. A. (2023). Exploring the potential of artificial intelligence tools in educational measurement and assessment. *Eurasia Journal of Mathematics, Science and Technology Education, 19*(8), Article em2307. https://doi.org/10.29333/ejmste/13428

Peebles, W., & Xie, S. (2023). Scalable diffusion models with transformers. In *Proceedings of the IEEE/CVF International Conference on Computer Vision* (pp. 4195-4205). IEEE. https://doi.org/10.1109/ICCV51070.2023.00387

Prieto-Gutierrez, J. J., Segado-Boj, F., & Da Silva França, F. (2024). Artificial intelligence in social science: A study based on bibliometrics analysis. *Human Technology, 19*(2), 149-162. https://doi.org/10.14254/1795-6889.2023.19-2.1

Putland, E., Chikodzore-Paterson, C., & Brookes, G. (2025). Artificial intelligence and visual discourse: A multimodal critical discourse analysis of AI-generated images of "Dementia". *Social Semiotics, 35*(2), 228-253. https://doi.org/10.1080/10350330.2023.2290555

Ramos-Galarza, C. (2021). Editorial: Diseños de investigación experimental [Editorial: Experimental research designs]. *CienciaAmerica, 10*(1), 1-7. https://doi.org/10.33210/ca.v10i1.356

Ryan Shirley. (2021). Top 10 places on the Amalfi Coast-4K travel guide. *YouTube*. https://www.youtube.com/watch?v=Mupom-sgjAU

Sanchez-Acedo, A., Carbonell-Alcocer, A., Cascarano, P., Hajahmadi S., Gertrudix, M., & Marfia, G. (2024). Materials for the validation of a cuasiexperiment on Gen-AI. *Zenodo*. https://doi.org/10.5281/zenodo.13893803

Sánchez-García, P., Merayo-Álvarez, N., Calvo-Barbero, C., & Diez-Gracia, A. (2023). Spanish technological development of artificial intelligence applied to journalism: Companies and tools for documentation, production and distribution of information. *Profesional de la Información, 32*(2). https://doi.org/10.3145/epi.2023.mar.08

Sarkar, N. I., & Gul, S. (2023). Artificial intelligence-based autonomous UAV networks: A survey. *Drones, 7*(5), Article 322. https://doi.org/10.3390/drones7050322

Suárez-Roca, J. E., & Vélez-Bermello, G. L. (2022). Verificación de los hechos: Aplicación metodológica en el medio de comunicación El Bacán [Fact-checking: Methodological application in the media outlet El Bacán]. *Revista Científica Arbitrada de Investigación en Comunicación, Marketing y Empresa REICOMUNICAR, 5*(9), 163-184. https://doi.org/10.46296/rc.v5i9.0042

Sun, R., Zhang, Y., Shah, T., Sun, J., Zhang, S., Li, W., Duan, H., Wei, B., & Ranjan, R. (2024). *From Sora what we can see: A survey of text-to-video generation*. arXiv. https://doi.org/10.48550/arXiv.2405.10674

Wach, K., Duong, C. D., Ejdys, J., Kazlauskaitė, R., Korzynski, P., Mazurek, G., Paliszkiewicz, J., & Ziemba, E. (2023). The dark side of generative artificial intelligence: A critical analysis of controversies and risks of ChatGPT. *Entrepreneurial Business and Economics Review, 11*(2), 7-30. https://doi.org/10.15678/EBER.2023.110201

Wang, W., & Yang, Y. (2024). VidProM: A million-scale real prompt-gallery dataset for text-to-video diffusion models. In *Proceedings of the Advances in Neural Information Processing Systems 37*. NeurIPS. https://doi.org/10.52202/079017-2096

Wolf, T., Debut, L., Sanh, V., Chaumond, J., Delangue, C., Moi, A., Cistac, P., Rault, T., Louf, R., Funtowicz, M., Davison, J., Shleifer, S., von Platen, P., Ma, C., Jernite, Y., Plu, J., Le Scao, T., Gugger, S., ... & Rush, A. M. (2020). Transformers: State-of-the-art natural language processing. In *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing: System Demonstrations* (pp. 38-45). https://doi.org/10.18653/v1/2020.emnlp-demos.6

Zhai, X. (2023). ChatGPT for next generation science learning. *The ACM Magazine for Students, 29*(3), 42-46. https://doi.org/10.1145/3589649

Zhao, W. X., Zhou, K., Li, J., Tang, T., Wang, X., Hou, Y., Min, Y., Zhang, B., Zhang, J., Dong, Z., Du, Y., Yang, C., Chen, Y., Chen, Z., Jiang, J., Ren, R., Li, Y., Tang, X., Liu, Z., ... Wen, J. R. (2023). *A survey of large language models*. arXiv. https://doi.org/10.48550/arXiv.2303.18223

Zhou, K. Z., Choudhry, A., Gumusel, E., & Sanfilippo, M. R. (2024). 'Sora is incredible and scary': Emerging governance challenges of text-to-video generative AI models. *Information Research an International Electronic Journal, 30*(iConf), 508-522. https://doi.org/10.47989/ir30iConf47290

Zwakman, D. S., Pal, D., & Arpnikanondt, C. (2021). Usability evaluation of artificial intelligence-based voice assistants: The case of Amazon Alexa. *SN Computer Science, 2*, 1-16. https://doi.org/10.1007/s42979-020-00424-4