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Consumers' attitude towards AI with a focus on the role of government and media in Italy

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Executive Summary

News and social media play an important role in public debates and this seems to be particularly relevant when associated to technology, because it influences firstly the degree of adoption and spread among the masses and also their cultural and information level. The spread of Artificial Intelligence has certainly not remained immune to these mechanisms since it has already established its dominance in the digital age and in everyday life. For this reason, we collected data through an experiment, proposing in a randomized manner two versions of an article in which two different perspectives on the use of ChatGPT within the university environment, one positive and one negative, are presented in a fictitious manner. The experiment was directed to students living in the North Italy, aged between 18 and 35 years old (N=260). The aim was to understand whether respondents, being subjected to different stimuli, produce different results in terms of attitude and perception towards AI and thus their degree of influence once exposed to a news item. In other words, we are willing to investigate the impact of the public discourse on the perception and consequently adoption of AI, making our first hypothesis that articles with a negative perspective have a negative impact on these aspects and on people behavior. Our aim is to increase understanding of attitudes towards AI adoption and to delve into the Italian context, characterized by unique events such as the ban of ChatGPT, in order to understand and explore how this has impacted on people. Our results suggests that people generally do not seem particularly influenced by the action and restrictions imposed by the government in Italy, as well as by media narratives. They exhibited a general positive attitude towards AI and a critical and selective approach towards information, indicating a more nuanced and less direct influence of media on their opinions about AI.

Drawing on these findings, recommendations to those who wish to better understand consumers' motivations and buying patterns in order to adapt strategies, policies to better meet consumers' needs and improve the overall experience, as well as suggestions for future research, are provided.

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Introduction

Broad objective and Research Questions

News and social media play an important role in public debates, as well as in science and technology in general (Brossard, 2013).

At the same time, generally speaking, also government communication plays a significant role in building institutional trust and credibility (Hyland-Wood et al., 2021; Kavanaugh, Sheetz, Sandoval-Almazan, Tedesco, & Fox, 2016), especially when related to technology innovation. A study conducted by Arnaboldi et al. (2023) expresses how governments are "not the only one side responsible for the delivery" of this kind of messages. The media, in fact, providing their content are able to impact the mass perception and understanding (Pan & Meng, 2016; Yang & Lee, 2020). This means that what the public is able to catch is not only the communication purely delivered by the government, but it is integrated with news coverage (Lee & Basnyat, 2013). This is an important issue, deeply analyzed also considering the current changes due to the exogenous shock by the Covid-19 pandemic. During that period, the style of communication adopted by public authorities has impacted profoundly the public behavior, giving reasons to believe that government and public authorities still play a crucial role in shaping people opinion and perceptions.

This seems to be particularly relevant when associated to technology, because it influences firstly the degree of adoption and spread among the masses and also their cultural and information level. All these phenomena were also enhanced by the Covid-19 pandemic, that contributed to making social inequalities even more evident.

The spread of Artificial Intelligence has certainly not remained immune to these mechanisms, since it has already established its dominance in the digital age and in everyday life, where we interact with it without even realizing it, making the pervasiveness its main feature.

For this reason, we collected data through an experiment, proposing in a randomized manner two versions of an article in which two different perspectives on the use of ChatGPT within the university environment, one positive and one negative, are presented in a fictitious manner. The aim is to understand whether respondents, being subjected to different stimuli produce different results in terms of attitude and perception towards AI and thus their degree of influence once exposed to a news item. In other words, we are willing to investigate the impact of the public discourse on the perception and consequently adoption of AI, making our first hypothesis that articles with a negative perspective have a negative impact on these aspects and on people behavior.

In particular, our aim is to delve into the Italian context, characterized by unique events such as the ban of ChatGPT, in order to understand and explore how this has impacted on people. Our study is aimed at AI and AI-enhanced tools in general but exploits the case of ChatGPT as a phenomenon that had an important media resonance. Also substantiating our research is the lack or scarcity of studies on AI with a focus on Italy and also related to ChatGPT, since the recent nature of this technology.

These research gaps highlighted above are critical from a practical perspective and lead to the following research questions:

1. How does media narrative influences attitudes toward AI and, in particular, ChatGPT in Italy?

2. Is there a match between consumers' and government's skepticism about AI in Italy?

The main contribution of this work is to increase understanding of attitudes toward AI use, but also to understand whether Italy can be actually considered a particular case in which political climate strongly influences AI perception. In other words, whether we can consider Italy a country where special mechanisms are in place regarding the adoption of new technologies, including ChatGPT. Indeed, it is a well-established knowledge that the narrative that the

authorities or the government make of new technologies is an influential and determining factor in the perception of new technologies by the masses and consequently in their adoption. For this reason, the Italian case is interesting to investigate. Eventually, this would be also a way to understand whether and how media narrative has an impact on people's mind and consequently, if another AI tool would come, how the government and the media should express about it.

Regarding the structure of this paper, after briefly introducing the objective and what are the research questions that will guide our entire study, a contextual backdrop will provide the necessary information to contextualize the research and convey what the potential of AI is. It will be possible to grasp how the pervasiveness of this technology in consumers' lives makes this topic particularly interesting to investigate from a consumer behavior perspective. Next, an extensive literature review will be presented to further highlight the research gap and contextualize the work with previous studies, focusing on 5 main themes. With a logical thread from this, the 5 hypotheses will then be developed, aimed at analyzing some aspects in more detail starting from the initial hypothesis and research questions. Next, how the experiment was constructed, also drawing from previous studies, will be explained and then it will continue with the Statistical analysis, which reports the results of the analysis performed on SPSS. The discussions and conclusions will then allow the interpretation of the results according to the previously described context. The main contribution of this work is to provide insights that can help those who wish to better understand consumers' motivations and buying patterns in order to adapt strategies, policies to better meet consumers' needs and improve the overall experience. Drawing on these results, we offer suggestions for future research.

1. Contextual backdrop

1.1 Why should we care about AI?

Artificial intelligence has already established its dominance in the digital age, as well as in everyday life, where we interact with it without even realizing it. We interact with AI in multiple ways and different contexts throughout our day, so that this technology has become pervasive, and not only in our working lives as we could think. We could safely say that pervasiveness is the main feature of AI. With simple voice commands we can request messages to be sent, set reminders or request information. AI is used in many facial recognition applications, such as unlocking mobile devices, authentication for access to services, security surveillance and identification of people in photos or videos. Another example, which many times is not perceived as a result of AI, is the filtering within email inboxes that alert us to emails considered "spam" or also personalized content suggestions on streaming platforms, such as Netflix or Amazon Prime. Although nowadays we tend to take for granted and underestimate the impact and action of artificial intelligence, it plays an essential role in our lives, making them more efficient, convenient and connected. These are just a few examples, but also in fields such as mobility or healthcare there are plenty of examples we could cite that enable productivity gains. In this context, news media are essential sources of information that can shape public and political debates regarding new technologies (Strekalova, 2015; Rogers et al.,1993). The predominance of AI news coverage can thus be used to gauge the public's perception of AI's importance.

AI has demonstrated the ability and promise to disrupt the status quo in a variety of industries, including digital marketing (Bolton et al., 2018; Davenport et al., 2020). Many AI-enabled applications, such as personal assistants (e.g., Alexa and Siri), streaming music (e.g., Spotify), and financial planning for personal use, as well as digital marketing, process automation, and facial recognition for business use, are widely used across industries (Kumar et al., 2019; Chan-Olmsted and Wolter, 2018). As a result of psychological research on consumer behavior, it is

well established how it is crucial to provide customized solution based on the analysis of customer insights, as a way to enhance customer satisfaction and perceived value, especially since customers are becoming more and more demanding. In this sense, artificial intelligence (AI) provides a new way to obtain, process, and analyze data, as well as develop insights and deliver personalized results (Jarek and Mazurek, 2019). In an era where consumers are becoming increasingly demanding, such applications have the potential to profoundly change how marketers engage with them (Kumar et al., 2019).

In this context, regulatory, social, and technical elements are mixing in ways that organizations have never seen before. As a result, when artificial intelligence, automation, IoT, and blockchain become more commonly used, typical company structures will change.
Despite the popularity of artificial intelligence, there is a clear "knowledge gap" when it comes to this new technology. In Pegasystems' study *'What Consumers Really Think About AI: A Global Study'*, which surveyed 6,000 adults, participants were asked how much they really knew about artificial intelligence: more than 70 per cent of all respondents confidently stated that they understood AI, despite not being able to identify some of the basic principles of AI. However, the probability that you have engaged with AI today is almost certain.
Consequently, many marketers are now turning to artificial intelligence to turn the flow of big data into valuable consumer insights and to respond to increasing customers' requests, even though they are not fully aware.

On the other hand, artificial intelligence has the ability to have an impact on privacy, fairness, consumer bias and manipulation (better ads, incorrect information). At the same time, it has been proven that artificial intelligence might, in theory, reduce the possibility of manipulation and vulnerability of consumer purchases by helping customers in their shopping experiences, ensuring that they make reasonable purchase choices (Nadimpalli, 2017).

However, this is not limited to large corporations.

While artificial intelligence has had a favorable impact on online retail, traditional and small-scale retail shops are in desperate need of a technology makeover. Because of accessibility, pricing and services connected with online purchasing, retailers have suffered a steady decline in sales. With the use of artificial intelligence, outdated shops could regain consumer trust in traditional retailing. Shops, for example, may provide on-the-spot information using artificial intelligence-powered apps, that allows customers to properly compare and evaluate the items they want to purchase. Once a customer enters the shop and opens the shop app, in-store sensors can identify and monitor customer activity and behavior. All these are some examples of how consumers interact with AI every day, thus impacting on their overall perception.

Despite the positive prospects connected with artificial intelligence and customer service, public opinion on whether artificial intelligence devices can outperform traditional human services tends to be negative. Only 2% more respondents in the Pegasystems poll agreed that artificial intelligence has the potential to improve customer service.

Although again these results suggest an unawareness on the part of consumers of the impact AI has on them and their shopping experience, the answer to the question we posed at the outset is more than obvious. We should care about AI because it is pervasive and because it is necessary in the full protection of consumers that they are aware of it. At the same time, we should care about AI because of the fundamental improvements it brings to our lives, which make it a phenomenon too great to ignore and which represents the road to an evolution that will be clearer to us in the future but which has already begun.

To do this, it is once again necessary to start with the consumers, key figures in the whole process, investigating the reasons behind their choices and perceptions.

1.2 From AI applications within a company to how this is translated in consumers' mind

We can clearly affirm there are different ways in which AI can potentially be implemented within a company that actually have at the end a huge impact on consumers' experience:

- Virtual assistant/ chatbot: Conversational AI are also known as virtual Assistant, namely an application program trained to understand natural language voice commands and complete tasks for the use. Usually implemented to deliver consistent customer care across all channels (e.g. Siri);
- Recommendation: AI- based recommendation systems is a class of Machine Learning algorithm using Big Data to suggest products, services and information to users in a personalized way (e.g. Netflix);
- Intelligent Data Processing: it is the automation of data extraction from unstructured documents, to transform unstructured data into usable information;
- Image processing: it is the process of transforming an image into a digital form, in order to improve the quality or get insights;
- Autonomous robot: it is a robot or machine designed to deal with its environment on its own, making decisions and working in collaboration with people;
- Language processing: it is the branch of AI related to understanding human natural language in its spoken and written form;
- Intelligent object: it is a physical object extended with new capabilities by integrating information technologies;
- Computer Vision: it is a field of AI able to derive information from digital images, videos and other visual inputs, sometimes also to make recommendations;
- Autonomous vehicle: it is a vehicle able to sense the environment and operate without human involvement;
- Robotic process automation (RPA): it is the use of automation technologies to mimic back- office repetitive tasks usually performed by people.

From a marketing perspective, one of the most impacted field in which the implementation of AI solution can actually make a huge difference in terms of customer satisfaction and engagement is the Customer Care. In particular, there are different companies which have already adopted these solutions, especially in the retail sector.

Marketers are increasingly exploiting AI strategies when interacting with potential customers, particularly for data collection and message targeting. Nevertheless, how consumers perceive the implementation of AI in marketing activities is not clear and explained. In this sense, companies are trying to implement several strategies to address costumer concerns and improve understanding and trust in AI- driven marketing. For example, companies such as Google and Facebook provide transparency reports explaining how their AI algorithms work and how data is used, as well as blog posts or videos where these concepts are explained in simple language. Many e- commerce websites provide opt- in settings that allow users to control the level of personalized advertising. Also streaming platforms like Spotify tend to highlight how their AI-powered recommendation systems is based on what individuals usually listen to.

1.3 ChatGPT and the Italian Case

One of the most disruptive events in the research field related to AI has been the development and spread of Large Language Models, trained on a huge amount of data and that through a Generative pre-trained transformer can generate human-like responses to queries in natural language.

In this context, ChatGPT, which is the Chat Generative Pre-trained Transformer developed in 2019 by OpenAI, has paved the way for a new generation of AI- applications based on the natural language processing. ChatGPT has been trained on data including books, articles and websites and made accessible to the public in 2022.

Although the announcement generated hype since the beginning, at the same time many concerns arised regarding to its potential uses, potential misinformation and biased answers.

This led policy makers to act accordingly, in order to identify in advance potential risks and damages associated with this technology.

Particularly interesting is the Italian case, in which the Authority of Data Protection and Privacy banned the use of ChatGPT in the entire country for a period.

The Authority for the Protection of Personal Data ordered the provisional restriction of the processing of Italian users' data against OpenAI, at the same time opening an investigation.
This follows a data breach suffered by OpenAI in March 2023, containing information regarding conversations and also personal data of people who subscribed to the premium version. Following this, the Privacy Guarantor found a lack of information to users, as well as a lack of a legal basis to explain the massive collection and storage of personal data for the purpose of training algorithms.
The situation is aggravated by the fact that the information provided by ChatGPT does not always correspond to the real data and that the service is aimed at people over the age of 13. The absence of a tool to verify the age of users would expose minors to profound risks. All these factors prompted the Italian authority to take the measures mentioned above.

In response, OpenAI immediately declared its willingness to cooperate with the Italian authority in order to comply with European privacy regulations and thus arrive at an agreed solution. Thus, on the eve of the expiry of the terms imposed by the privacy authority, OpenAI restored and made the service available again in Italy in April 2023.

This is why we can consider Italy a country where special mechanisms are in place regarding the adoption of new technologies, including ChatGPT. As analyzed above it is a well-established knowledge that the narrative that the authorities or the government make of new technologies is an influential and determining factor in the perception of new technologies by the masses and consequently in their adoption. For this reason, the Italian case is interesting to investigate.

2. Detailed Literature Review

2.1 Theme 1: AI awareness

A recent study conducted by Chen H. et al (2020) found that consumers' understanding of AI is intuitive, but also very fragmented. The focus is this study is on AI applied to marketing communications, where study's participants are generally amazed by the level of sophistication that Artificial Intelligence can actually achieve, but this makes them feel uncomfortable to know what a non-human can do to them. At the same time, they seem relieved by the fact that AI cannot achieve the level of depth and complexity that human beings are able to pursue. This suggests how participants interpreted AI from the lens of human- centered construction of technology and not from the technology determinism perspective.

Generally talking about AI, consumers are not able to identify the differences between AI and other related terms such as machine learning, natural language processing and robotics. As for AI applied to their everyday life, two aspects on which consumers seem to be conflicted about how they perceive AI are the ones related to functionality and emotions. For example, consumers value voice-assisted artificial intelligence as a valuable addition to their lives for simple tasks and convenience. However, users themselves are skeptical about developing emotional relationships with AI devices, even when a slight emotional connection is formed. Costumers tend to perceive AI marketing as something that it is unavoidable and generally acceptable but do not are aware and do not think it influences their purchasing behavior for sure.

In conclusion, although consumers have gained some basic knowledge, their understanding is still limited and lacking depth, since they are not able to capture and value all the usage of AI a company can apply to its business.

2.2 Theme 2: AI narratives by media

Despite the many possibilities of enhancing one's processes with the help of artificial intelligence, nowadays it is crucial for companies to have their credibility and to play a role in public opinion. For this very reason, their choices are also influenced by the AI narrative and the public debate. For example, Media narratives and public discussions surrounding privacy concerns led Google to introduce privacy-focused features and policies. Google implemented the "Auto-Delete" feature in 2019, allowing users to delete their location history and web activity data after a specified period. Youtube, when media narratives highlighted issues such as inappropriate content targeting children and the spread of extremist ideologies, updated its recommendation algorithm in 2019. In 2018, also Amazon faced criticism and media scrutiny over potential bias in its AI-powered facial recognition technology, Rekognition. As a result, the company implemented a one-year moratorium on providing police departments with access to this technology. The decision was influenced by concerns raised in media narratives about the potential for misuse, bias, and infringement of civil liberties.
These are examples of how companies are influenced by media narratives about AI, but we are going to adopt the consumers' perspective, trying to dig into their minds and understand how media could have played an important role in shaping their perceptions and adoption process of AI.

According to research conducted by The Royal Society in 2018, narratives are essential to developing science and shaping how people engage with this new knowledge and technology, having strong real-world effects. Narratives have an impact on individuals, as well as on masses and influence decisions, ways of thinking, and eventually social outcomes. News and social media play an important role in these debates, as well as in science and technology in general (Brossard, 2013). Journalistic legacy media, such as newspapers and magazines, but also television and radio, contribute to the diffusion of technological knowledge and information. Social media platforms such as Instagram, YouTube, Facebook, and TikTok, contain user-generated content, enable user interaction (Carr & Hayes, 2015), and serve as key information sources for the general public (Newman et al., 2021). They are also important sources of public

opinion (McGregor, 2020), for example, in the field of science and technology, research has demonstrated that user-generated content online may be a stronger indicator of public concern than news coverage (Chung, 2011; Soffer, 2019).

In particular, the prevalence of Artificial Intelligence in our everyday life have increased dramatically (Standford University, 2016). Therefore, the increased popularity of AI has led to a slew of ethical issues and the related debate. One key goal in developing ethical AI is to stimulate public trust and consequent adoption of these technologies.

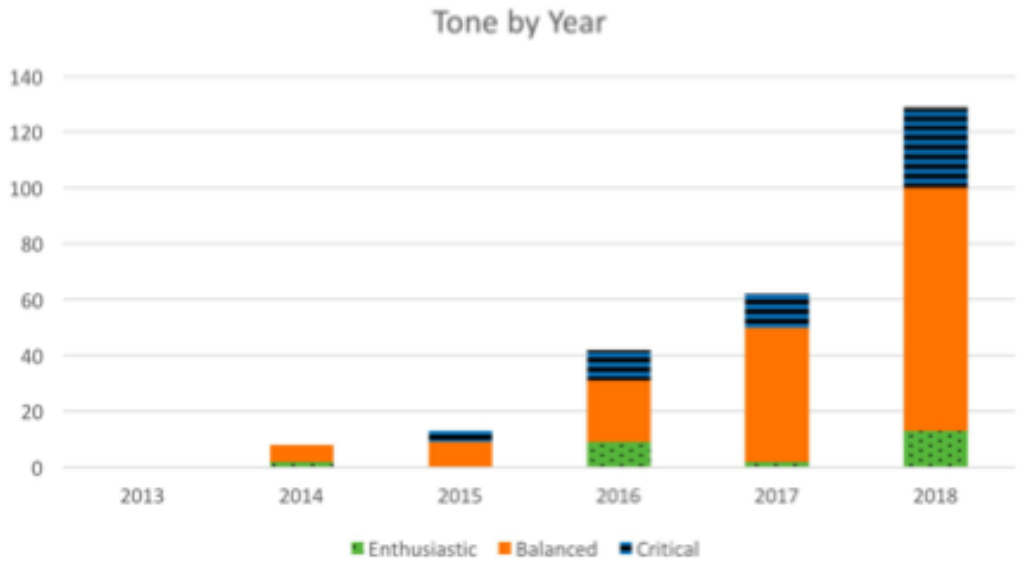
Since the media has a strong influence on how topics are presented to the public in every field (Racine et al., 2005; Royal Society, 2018; Chuan et al., 2019), public opinion regarding AI will be and is influenced by the media. This is important to be analyzed since the general public are key stakeholder in technology adoption, influencing also what kind of AI will be developed in the future and how it will be regulated. At the same time, research on how media has depicted other technologies has highlighted the disruptive potential of an excessive enthusiasm shown by media to alter the information available, as well as a lack of interest in the public debates can lead to a polarized public opinion (Dubljević et al., 2014).

AI narratives can help inspire people working in public and private sector, enabling the debate, but at the same time creating false expectations and perceptions. This effect results stronger with respect to people not engaged closely with science or technology. “Exaggerated expectations and fears about AI, together with an over-emphasis on humanoid representations, can affect public confidence and perceptions. They may contribute to misinformed debate, with potentially significant consequences for AI research, funding, regulation and reception” (The Royal Society, 2018).

We can learn from previous waves of technological progress about how narratives might influence the development and adoption of AI technologies. Technology can be a focal point for greater social narratives or concerns, but it can draw attention away from the actual hazards and benefits. It is critical to understand which are broader concerns or interests, as well as how

these are linked to problems concerning a specific technology. Perceptions of who gains and who is endangered by technical advancements can impact how a technology is received.

Consequently, practitioners have started to analyze such AI media representations. Looking at Tab.1, it is clearly how the number of articles available to be analyzed increases year by year, as well as the number of those with a Critical tone. Nevertheless, according to the studies conducted by Dubljević et al. (2020), the majority of articles analyzed has a neutral or balanced tone, presenting both positive and negative aspects of AI.



Tab.1 Tones of articles throughout different years

The study developed by Dubljević et al. (2020) in particular focused on the tone of media around the debate about AI and ethics, showing how the public debate provides an adequate representation of both hopes and fears derived by the rapid introduction of AI in our society. At the same time, they highlighted how the reporting tone was generally optimistic and enthusiastic (e. g. in 2014), while this was followed by a more critical or balanced tone just recently. Nevertheless, the public debate related to AI ethics seems to be not shaped by hype. What the study concludes is that it is clear that the society needs to be prepared for both positive and negative consequence of AI adoption.

These results are also confirmed by a study by Fast and Horvitz (2017), that, analyzing 30 years of coverage of AI in the New York Time, suggests an overall optimistic tone with an increase of concern about negative consequences of AI only in more recent years.

In conclusion, a multidimensional approach to deal with social, ethical and public concerns raised by AI is required, including making proper information more accessible to the public, to ensure the public is fully informed.

2.3 Theme 3: Government influence and communication

Nowadays, this seems to be even more relevant to understand since governments seems to be thinking about AI as something to be concerned of or something to be governed as a potential danger. This is why in Italy a temporary ban was introduced, revealing a concern shown by government and public authorities. At the same time, according to one of our research questions, it is interesting to understand whether and how people were influenced by this action implemented by the authorities and, at the same time consequently which attitude people have developed.

In particular, past literature stated that the effectiveness of communicating scientific messages depends also on how these topics may interact with audience's cultural values (O'Shaughnessy et al., 2023). In this sense, policymakers who design governance and communication strategies have to deeply understand how cultural norms are related to AI and whether there are differences across different AI applications. This is at the base of the Cultural Cognition of Risk theory by Mary Douglas and Aaron Wildavsky, which explains the individuals' tendency to perceive risks according to their personal values. In other words, people are led by several psychological processes to form beliefs about dangerous activities that can actually match the cultural evaluations of them. The main goal was to understand how to manage popular risk perceptions in order to promote public policies that can be ultimately optimal for people with different outlooks (Kahan, 2008). According to this, we identify two groups of people. The first

one is the individualists, who are actually responsible for their own well- being and they do not want any interference from society, willing to reduce the government's role when this is not aligned with individual preferences. On the opposite side, there are the egalitarians, who tend to favor equality between groups. According to O'Shaughnessy et al. (2022), this distinction borrowed from cultural cognition theory has been used to explain difference between the public and professionals, also in relation with the acceptance of scientific and technological discovery.

In this sense, we expect that people who agree that the government interferes too much in their everyday lives are the ones who are less influenced by the media narratives in forming their own opinion about AI. Consequently, we expect them to have developed more critical thinking skills and not to oppose the development of AI.

2.4 Theme 4: Technology skepticism and barriers to adoption

As for skepticism, in the past literature have said that consumers during their everyday life can get information anywhere and are sometimes exposed also to exaggerated or false information, that contribute to create a skeptical opinion towards media and technology. It has been proved that an overexposure to information entails a lower cognitive capability to analyze and process the entirety of the information, ultimately reducing critical thinking (Pelau et al., 2021). Focusing on AI, the history has been marked by cycles of high expectations and disappointments, resulting in a lack of trust in AI. Also, ethical concerns, related to privacy and data sharing, played an important role in this sense. Additionally, some studies show that people's willingness to trust AI depends on factors like anthropomorphism, social influence and organizational interactions. However, consumer skepticism varies based on current trends and individual characteristics. For example, consumers with strong critical thinking skills can consciously or unconsciously connect different pieces of information from various sources, but skeptical consumers tend to be less trusting of technology, AI and the information they find online (Pelau et al, 2021).

As for barriers to adoption, we started by analyzing studies concerning various artificial intelligence applications in order to investigate potential barriers to adoption. In particular, most of the retrieved studies considered the barriers to adoption of products such as AI-powered voice assistants. The literature has analyzed in depth the technical aspects of voice assistants but has neglected studies on users' attitudes and acceptance of these aspects. Generally, however, the literature states the presence of a certain degree of resistance to adopting AI-powered solutions (Dwivedi et al., 2021; Klumpp, 2018). The main reasons can be traced according to several authors to a lack of trust, caused by various factors. Certainly, increasing attention is being paid to the ethical dimension around AI. In this regard, according to Ene et al. (2021), the willingness to trust and adopt AI is mainly related to three factors: social influence, the level of anthropomorphism and hedonistic motivation (Gursoy et al., 2019). Furthermore, performance-related factors such as perceived usefulness and ease of use (Wang et al., 2021) also play a key role in determining the adoption of AI-enabled products. According to us, it is crucial to understand the differences in terms of barriers to adoption and how the risk is perceived among people exposed to different stimuli and with different attitudes towards media narratives.

We expect people who are more optimistic about the future of AI should be the ones who will support strongly the development of AI, showing less barriers to adoption and being less influenced by the government action and media narrative. We expect that people who are more skeptical about technology are the ones who are also scared by the future.

2.5 Theme 5: ChatGPT case

As we said, the Italian Case about ChatGPT is interesting to investigate since we reasonably think that the whole narrative of the fact has had a considerable impact on people’s perception of AI due to the huge media resonance. In particular, also the ethical concern arised around privacy law and the protection of personal data after the launch of ChatGPT, that led governments to take concrete actions, it is something that played an important role in shaping

the reasoning and perception of the public audience. Due to the recent spread of attention paid to ChatGPT, the literature is scarce and fragmented, focusing mainly on general acceptance and without a specific focus on the Italian context. This highlights a gap in the current literature. Some studies focused on the use of ChatGPT in general education (Cotton et al., 2023) or in medical education (Gilson et al., 2023), but what emerges eventually is still a partially adoption of ChatGPT in academia or higher education. According to Artur Strzelecki (2023), students are more inclined to adopt AI-powered chat technology and new technologies in general, mainly driven by a "performance expectancy" factor. We expect our research to confirm these findings.

Moreover, according to Choudhury and Shamszare (2023), ChatGPT has received a lot of attention for its extraordinary ability to respond in a human manner, but at the same time it has raised concerns about the broader implications of its use. For instance, it could be used for malicious purposes, such as frauds. Another concern stems from the fact that ChatGPT's model being driven by public data could unintentionally reflect societal biases and thus produce biased responses. This has prompted policy makers and researchers to identify and address potential risks, trying to prevent malicious use. This is aimed at striking a balance between trust and validation of ChatGPT, because while a complete lack of trust could lead to underutilization of this technology, resulting in lost opportunities, it is necessary to ensure responsible and effective use of this tool, to maximize its benefits and minimize its risks. In any case, the study confirms the importance of trust in technology adoption. Finally, according to Deng and Lin (2022), another fear is that ChatGPT might be used to promote misinformation, especially when integrated into platforms with a large audience, like social media. Furthermore, the ability to generate human-like content increases the risk of impersonation and identity theft.

In addition to this, we expect that people who think that government can be trusted are also those thinking that ChatGPT is something to be afraid of. This should be verified since we believe that skepticism and trusting governments plays a role in people liking or disliking ChatGPT. At the same time, we reasonably believe that students may adopt a different point of view and that is the reason why we investigated through demographics questions.

3. Hypotheses Development

Thus, we explored the following 5 hypotheses:

Hp1: more optimistic about the future of AI people are the ones

Hp1.a: strongly supporting the development of AI

Hp1.b: showing less barriers to adoption

Hp1.c: being less influenced by the government action

Hp1.d: being less influenced by media narrative.

According to what we have said and explained before, we expect that people who are more skeptical about technology are the ones who are also scared by the future, in terms of how technology will have an impact on their lives. In fact, people in Italy exposed to the media narrative reporting the ban of ChatGPT should tend to develop a general negative attitude towards AI. What we would like also to investigate is whether there is a mismatch between people attitude and intention to support the development of AI and actual influence in showing less barriers to adoption. This reasoning might not be verified since as we highlighted in the literature review people tend to have a fragmented knowledge of AI and its potentiality, resulting in uncertainty when it comes to actually use it.

Hp2: people who agree that the government interferes too much in their everyday lives are the ones who are less influenced by the media narratives in forming their own opinion about AI.

We expect these people to have developed more critical thinking skills and not to oppose the development of AI.

The observation that individuals who share the belief that the government excessively intrudes into their daily lives are less susceptible to media narratives when forming their own opinions about AI underscores an intriguing and potentially consequential dynamic. This suggests that a

heightened awareness of government interference might prompt individuals to exercise a more critical and independent judgment when it comes to media messages and their influence on their perspectives of artificial intelligence. This finding hints at the complex interplay between one's perception of government intervention and their receptivity to external narratives, particularly with respect to emerging technologies like AI. To fully comprehend the underlying mechanisms and implications of this relationship, further research is essential, including investigations into the specific attitudes and factors that mediate this phenomenon, as well as its generalizability across diverse demographic groups.

Hp3: Increased usage of ChatGPT is associated with

Hp3.a: lower levels of skepticism towards artificial intelligence

Hp3.b: reduced susceptibility to media narratives.

The observation that greater engagement with ChatGPT corresponds to lower levels of skepticism towards artificial intelligence and diminished vulnerability to media narratives highlights a potentially noteworthy trend. This phenomenon suggests that as individuals become more accustomed to interacting with AI technologies like ChatGPT, they may develop a deeper understanding and acceptance of AI's capabilities, leading to a reduced inclination to question its efficacy or be swayed by external media influences. Such a finding could have significant implications for our understanding of AI's societal impact and the role of interactive AI platforms in shaping public perceptions and attitudes toward this technology. Further research will be needed to investigate the underlying factors contributing to this relationship and to determine its generalizability across different populations and contexts.

Hp4: Individuals who exhibit higher levels of trust in government are more likely to express concerns and apprehension regarding ChatGPT.

This hypothesis should be verified since we believe that skepticism and trusting governments plays a role in people liking or disliking ChatGPT. At the same time, we reasonably believe

that students may adopt a different point of view and that is the reason why we investigated through demographics questions.

The correlation between individuals who demonstrate a heightened degree of trust in government and their inclination to express concerns and apprehension regarding ChatGPT presents an intriguing insight into the dynamics of public perception. This finding suggests that those who have greater faith in government institutions may perceive ChatGPT's capabilities and implications differently, possibly regarding it with a more critical and cautious lens. It underscores the intricate relationship between one's trust in government and their attitudes toward advanced AI technologies like ChatGPT.

To comprehensively understand this phenomenon and its potential ramifications, further research is imperative. This research could explore the underlying mechanisms and motivations driving this association, as well as the broader societal implications for the development and acceptance of AI technologies in a context where trust in government plays a role. Additionally, examining whether this pattern holds across various demographic groups and cultural contexts would be of great importance.

Hp5: people who get information not from online sources are more skeptical about AI.

The observation that individuals who do not primarily obtain their information from online sources tend to harbor greater skepticism towards AI is an intriguing aspect of contemporary information consumption and its effects on public perception. This suggests that those who rely on traditional or offline information channels may have limited exposure to the rapid advancements and potential benefits of artificial intelligence, which could contribute to a more skeptical stance.

Understanding this relationship calls for further investigation to uncover the underlying mechanisms at play. Examining the specific factors that influence these individuals' skepticism and whether it varies across different forms of offline information sources could provide valuable insights. Additionally, considering the potential implications for bridging the

information gap and promoting a more informed and nuanced understanding of AI among diverse segments of the population is of significant importance.

4. Methodology and Experiment Design

We distributed a web-based semi structured experiment to students living in the North Italy, aged between 18 and 35 years old, who are in contact with technology and public source of information daily, also thanks to the university context. The experiment was designed on Qualtrics, and we collected the data from July 2023 through August 2023.

The experiment consisted of showing two versions of an article from a credible newspaper that reported the negative or positive perspective on the adoption of Artificial Intelligence in the world of Education and particularly in the university environment. The choice of article was guided by the opinion of an expert, who selected the article most appropriate for the experiment. Thus, the purpose was to investigate substantial differences in the responses about AI attitude and adoption of the two groups of respondents subjected to two different stimuli.

Then, using a funnel approach, we started by first analyzing the topic of artificial intelligence in general, in order to investigate the respondents' level of awareness. To this end, questions Q1 and Q2 were introduced as part of the first block. The first block is thus aimed at grasping knowledge regarding the generic concept of Artificial Intelligence, as the literature pointed out that consumers' knowledge of Artificial Intelligence is intuitive and fragmented and that many have difficulty distinguishing the concept of AI from other related terms (Chen H. et al., 2021). The first question is retrieved from O'Shaughnessy, Matthew R., et al. "What governs attitudes toward artificial intelligence adoption and governance?". Science and Public Policy 50.2 (2023): 161-176, where AI awareness was measured using a multiple-choice question. They have respectively analyzed the items discussed by previous studies, adapting them to their research. After a brief definition of AI taken from B. Zhang and A. Dafoe, "Artificial

intelligence: American attitudes and trends," (SSRN Electronic Journal, Jan. 9, 2019), Q1 was formulated in the following way: "How much have you heard about AI before today?", with the possibility to choose among 4 items ["None at all"; "A little"; "A moderate amount"; "A lot"]. Q2 was formulated as "How much are you aware that AI is affecting your life presently?", with 3 items: "Aware", "A little aware", "Not aware at all".

The following section of the experiment is related to questions from Q3 to Q6, about general perception of AI and technology skepticism. People were asked to self- evaluate their skepticism and perception of AI on a seven-point Likert scale. The questions were mainly retrieved from O'Shaughnessy, Matthew R., et al. "What governs attitudes toward artificial intelligence adoption and governance?". Science and Public Policy 50.2 (2023): 161-176, which used items from previous literature. As for Q3, assessing the general perception of AI, we proposed to modify the list of items ("Thinking about me personally, the benefits of AI outweigh the risks"; "Thinking about society more generally, the benefits of AI outweigh the risks"; "AI should be carefully managed"; "AI should be regulated by the government"; "I support the use of AI") by adding the last item "I could develop an emotional attachment to AI", retrieved from Baker et al. (2022). Public understating of artificial intelligence through entertainment media. AI & Society, 2022. Q4, directly assessing the technology skepticism, people were asked to self-evaluate on a seven- point Likert scale the following 4 items: "New technologies are more about making profits rather than making people's lives better"; "I am worried about where all this technology is leading"; "Technology has become dangerous and unmanageable"; "I feel uncomfortable about new technologies". Also Q5 was retrieved from the same study, evaluating the optimistic or pessimistic attitude towards the AI in the future. Finally through Q6, we were able to assess the propensity to support or oppose the development of AI on a seven-point Likert scale. According to our hypotheses, people who are more optimistic about the future of AI should be the ones who will support strongly the development of AI, showing less barriers to adoption and being less influenced by the government action and media narrative. We expect that people who are more skeptical about technology are the ones who are also scared by the future.

The following section of our experiment was focused on Individualism and political influence. The question Q7 was retrieved from O'Shaughnessy, Matthew R., et al. "What governs attitudes toward artificial intelligence adoption and governance?". Science and Public Policy 50.2 (2023): 161-176. The first two items ("The government interferes far too much in our everyday lives"; "The government should stop telling people how to live their lives") were retrieved from past studies. Then the other 4 items were: "I was able to catch the attitude of the government towards AI from the media"; "The government has adopted a positive attitude towards AI"; "The government has adopted a negative attitude towards AI"; "I have been influenced by the policies implemented by the current government in using AI".

Then, the following section is about barriers to adoption. The questions related to barriers to adoption were retrieved from the study conducted by Antioco and Klleijnen (2010), who have respectively analyzed and used items adapted from previous studies. In particular, Q8 asked people to self- evaluate on a seven- point Likert scale through 6 different items: "I think that using AI products does not fit into my daily routine"; "The product prices are of good economic value/ The product prices are fair"; "How risky do you feel it would be for you to purchase AI-powered products?"; "I think that the purchase of an AI- powered product would lead to financial risk for me because of the eventuality of higher maintenance and repair costs"; "How sure you are about the AI- powered product's ability to perform satisfactorily?"; "To what extent does the AI- powered product agree with your traditions and norms?". These items aimed at exploring respectively usage barriers, value barriers, financial risks, performance risks, compatibility with tradition and cultural norms. As for Q10, the main goal was to explore the effective intention to adopt, through asking to "Rate the likelihood that you would purchase or use one of these AI- powered products?" on a seven- point Likert scale.

The following section of the experiment is dedicated to ChatGPT and the Italian case. The questions in our experiment aimed at understanding the awareness of the ChatGPT case and of its impact in their daily life through Q11, Q12, Q14 and Q15. We expect that people using ChatGPT a considerable number of times during the span time of a month should be less skeptical about AI and less influenced by media narrative. In addition, Q13 aimed at analyzing

the behavioral intention on a seven- point Likert scale, namely the trust through the first seven items (“ChatGPT is competent in providing the information and guidance I need”; “ChatGPT is reliable in providing consistent and dependable information”; “ChatGPT is transparent”; “ChatGPT is trustworthy in the sense that it is dependable and credible”; “ChatGPT will not cause harm, manipulate its responses, create negative consequences for me”; “ChatGPT will act with integrity and be honest with me”; “ChatGPT is secure and protects my privacy and confidential information”) and the intention to use through the last two items (“I am willing to take decisions based on the recommendations provided by ChatGPT”; “I am willing to use ChatGPT in future”) with respect to ChatGPT. Q14 was asked to measure the actual use of this tool on a monthly basis, asking people to insert an indicative number of times. Both questions were retrieved from Artur Strzelecki (2023): To use or not to use ChatGPT in higher education? A study of students’ acceptance and use of technology, Interactive Learning Environments, DOI: 10.1080/10494820.2023.2209881. Eventually there are two questions, Q16 and Q17, related to the mediatic event of the ban of ChatGPT by the Italian Authority for Privacy and Data Protection. The questions aimed at understanding the awareness of this event and how much the perception of ChatGPT changed being aware of this measure implemented. Also in this case people were asked to self-evaluate their perception on a seven- point Likert scale.

The last section of the experiment assessed sociodemographic variables, since our research focused on the Italian context and in particular on people aged 18-35. In this sense, we decided to collect data about age, gender, nationality, education level, working field of interest. We collected this data since we expect to these people being more influenced by media narratives and thus developing a particular behavior and attitude towards AI which was interesting to investigate on. In this sense, we considered standard socio-demographic variables, that according to previous studies are correlated with different opinions on questions related to AI. Among these, gender, age group, job type, education level. Also these questions were partially retrieved from O’Shaughnessy, Matthew R., et al. "What governs attitudes toward artificial intelligence adoption and governance?." Science and Public Policy 50.2 (2023): 161-176.

We were interested in analyzing these variables since a different attitude towards AI can be result of different technical knowledge, measured through the Q24 about the computer science or programming knowledge, or driven by sociodemographic differences and cultural values and norms. We expect for example to find people with a higher education level or with programming experience to be more inclined to support the development of AI, being more skeptical and aware of the potentiality and benefits of AI. At the same time, we expect to find people willing to pursue a career in a cognitive or analytical field to be more aware of the impact of AI. Results retrieved from O'Shaughnessy, Matthew R., et al. "What governs attitudes toward artificial intelligence adoption and governance?" Science and Public Policy 50.2 (2023): 161-176 reported that some cultural values have a different impact on attitude towards AI with respect to other technologies, making our analysis even more worthy to be conducted, since cultural variables are considered informative of attitudes. At the end, we included also a question regarding the most used source of information, since we can assume that the style of communication might be slightly different across different media. In addition to this, people tend to trust less online sources of information, while we can assume traditional sources of information, such as print newspapers, might adopt a more conservative approach. In this sense, we expect people who get information not from online sources to be more skeptical about AI. At the same time, previous research has stated that people who have some experiences with computer science or AI tend to have a different opinion in US, thus we expect to confirm these findings also in our research.

4.1 Data collection

We collected the data from July 2023 through August 2023 on a randomly selected sample of 260 respondents. We reached a more representative audience through university channels and social media, even though we are aware that this one is a convenience sample and cannot be fully representative of the target group. The target group is composed by students (mainly University ones) living in the North Italy, aged between 18 and 35 years old, who are in contact with technology and public source of information daily. Respondents were selected to be equally distributed by gender, age and among those who visualized the negative and the positive

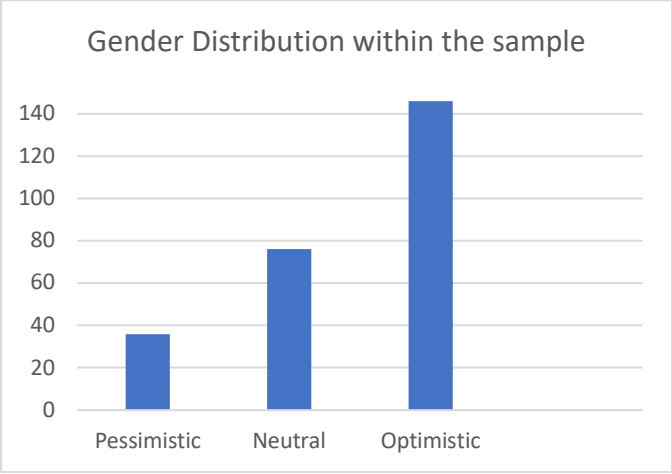
article during the experiment. Our sample was initially composed by N= 260, with a very high completion rate, even though 3 were incomplete, and thus to be removed. Nevertheless, this sample cannot be considered fully representative and cannot be generalized to represent the whole Italian population aged between 18 and 35 years old, especially with dimensions such as technology skepticism.

As a consequence, our second sample consisted of N= 258.

As for the gender dimension, we have a well- balanced sample. The percentage of women and men within our sample is aligned with the statistics registered by Istat (2022) with respect to the whole Italian population. Indeed, Istat reported in 2022 in Italy 48.7% of the population as man, while 51.3% of population are women and we reasonably believe that these statistics can be applied to our sample. The percentage registered in our sample are slightly different, since 55.0% of respondents are women, while 42.6% is men. In addition, there is a residual amount of respondents, equal to around 2.5% that identifies itself as non-binary or other.

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Other	2	,8	,8	,8
	Woman	142	55,0	55,0	55,8
	Non binary	4	1,6	1,6	57,4
	Man	110	42,6	42,6	100,0
	Total	258	100,0	100,0	

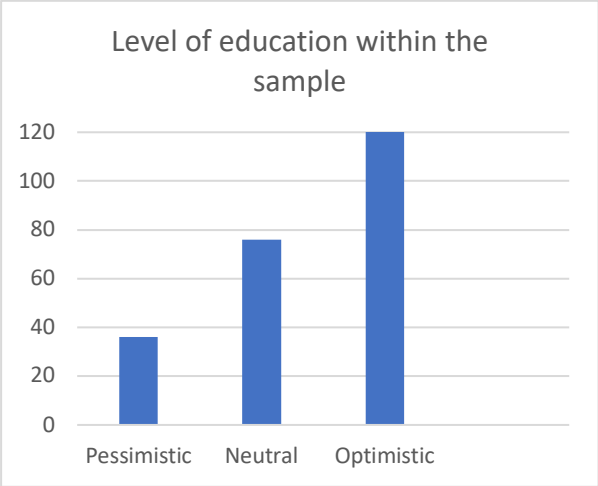


Tab.2 Gender balance of our sample

In terms of educational level, our sample is composed mainly by University students, attending their Bachelor's or Master's Degree course. The percentage are respectively 41.1% and 33.3%. There is also a good percentage of high school students, since our experiment targeted people aged 18-35.

Level of education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Other	4	1,6	1,6	1,6
	Master's Degree	86	33,3	33,3	34,9
	Bachelor's Degree	106	41,1	41,1	76,0
	High School	62	24,0	24,0	100,0
	Total	258	100,0	100,0	



Tab.3 Level of education in our sample

In terms of knowledge about Computer Science, our sample is slightly unbalanced, with 55.8% of people having experiences in programming, but we assume that this is not a considerable difference to alter our results.

Since we targeted people who are in contact with technology and also who are interested in Artificial Intelligence, we reasonably obtained that 59.7% of respondents are willing to pursue a cognitive or analytic career.

Experience in programming or Computer Science

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	114	44,2	44,2	44,2
	Yes	144	55,8	55,8	100,0
	Total	258	100,0	100,0	

Field of work

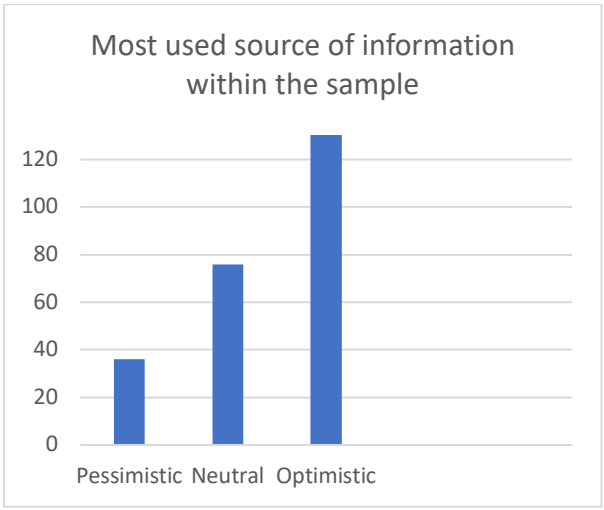
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cognitive or analytic (Finance, management, IT, ecc.)	154	59,7	59,7	59,7
	Manual (manufacturing, construction or maintanance)	10	3,9	3,9	63,6
	Social or people-oriented (Customer service, teaching, nursuring)	94	36,4	36,4	100,0
	Total	258	100,0	100,0	

Tab.4 Experience in Computer Science and Field of work in our sample

Finally, we investigated also the most used source of information among the respondents. Since the target group is mainly composed by students aged 18-35, the most used ones are Social Media (47.5%) and Web (40.3%). Nevertheless, there is also a significant portion of respondents who gets information through newspaper (9.3%), that according to us can be considered a more traditional source.

Source of information

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Newspaper	24	9,3	9,3	9,3
	Radio	2	,8	,8	10,1
	Social media	122	47,3	47,3	57,4
	Television	6	2,3	2,3	59,7
	Web (blog, articles)	104	40,3	40,3	100,0
	Total	258	100,0	100,0	



Tab.5 Most used source of information

5. Statistical Analysis

Before starting the analysis on SPSS, we checked the data on the Excel data matrix to verify its consistency and correctness. The majority of questions are ratings and scale ones, and we did not need to make corrections since we had set up the requirements to answer those questions on Qualtrics. As stated before, we deleted the incomplete answers, while we did not have any missing value since we made all the answers mandatory in order to continue the experiment.

All the analysis we performed on SPSS were aimed at verifying our hypotheses.

5.1 Results

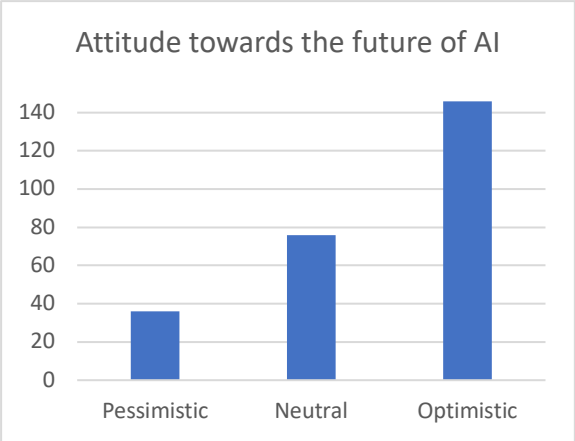
Hp1: more optimistic about the future of AI people are the ones

Hp1.a: strongly supporting the development of AI

First of all, we analyzed the attitude towards the future of AI through Q5 (renamed as Future_perc). In particular, according to Tab.6 in our sample 56.6% of respondents stated to be optimistic about the further development of AI, while only 14.0% of them registered a negative attitude.

Future_perc

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pessimistic	36	14,0	14,0	14,0
	Neutral	76	29,5	29,5	43,4
	Optimistic	146	56,6	56,6	100,0
	Total	258	100,0	100,0	



Tab.6 Attitude towards the future of AI

Then, we decided to cross two variables, namely Q5 and Q6. Q5, that we renamed as Future_perc, asked people to self- evaluate their optimistic, pessimistic or neutral attitude towards the future of AI, while with Q6 people were asked to rate how much they support the development of AI on a 7-point Likert scale. This latter one is a numeric variable, thus we created a contingency table in order to deepen the analysis. It is possible to observe that those who define themselves neutral about the future of AI tend to be more supportive and therefore not perfectly neutral anyway. As for optimistic and pessimistic people, the results are consistent, showing a correlation between the two variables. In fact, among optimistic ones 75% of respondents chose the maximum grade of support (7 on the Likert scale), while among pessimistic ones around 100% chose between 0 and 2 in terms of their support to the development of AI. These results are also confirmed by the second analysis we performed.

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Future_perc * Q6_1	258	100,0%	0	0,0%	258	100,0%

Future_perc * Q6_1 Crosstabulation

			Q6_1							
			0	2	3	4	5	6	7	Total
Future_perc	Pessimista	Count	2	4	10	12	2	6	0	36
		% within Future_perc	5,6%	11,1%	27,8%	33,3%	5,6%	16,7%	0,0%	100,0%
		% within Q6_1	100,0%	100,0%	55,6%	22,2%	3,1%	8,8%	0,0%	14,0%
		% of Total	0,8%	1,6%	3,9%	4,7%	0,8%	2,3%	0,0%	14,0%
	Neutrale	Count	0	0	6	24	24	10	12	76
		% within Future_perc	0,0%	0,0%	7,9%	31,6%	31,6%	13,2%	15,8%	100,0%
		% within Q6_1	0,0%	0,0%	33,3%	44,4%	37,5%	14,7%	25,0%	29,5%
		% of Total	0,0%	0,0%	2,3%	9,3%	9,3%	3,9%	4,7%	29,5%
	Ottimista	Count	0	0	2	18	38	52	36	146
		% within Future_perc	0,0%	0,0%	1,4%	12,3%	26,0%	35,6%	24,7%	100,0%
		% within Q6_1	0,0%	0,0%	11,1%	33,3%	59,4%	76,5%	75,0%	56,6%
		% of Total	0,0%	0,0%	0,8%	7,0%	14,7%	20,2%	14,0%	56,6%
Total		Count	2	4	18	54	64	68	48	258
		% within Future_perc	0,8%	1,6%	7,0%	20,9%	24,8%	26,4%	18,6%	100,0%
		% within Q6_1	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
		% of Total	0,8%	1,6%	7,0%	20,9%	24,8%	26,4%	18,6%	100,0%

Tab. 7 Crosstab Attitude towards AI vs Support development AI

Looking at the Chi- Square table (Tab. 8), we can see that there is a dependence between these two variables, since the significance is lower than 0.05. Nevertheless, Cramer's V index, based on Chi- Square statistic, is a more effective index because it is not so affected by the number of observations or the dimension of the contingency table. As we can see in Tab.8, it is equal to 0.453, that is a value higher than the threshold (0.2), meaning that is a substantive relationship between the two variables. In other words, this suggests that the Null Hypothesis (H0: the two variables are independent) is rejected and there is a difference between the analyzed groups. This means that the more people are optimistic, the more they tend to support the development of AI.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	105,745[a]	12	<,001
Likelihood Ratio	95,612	12	<,001
Linear-by-Linear Association	67,351	1	<,001
N of Valid Cases	258		

a. 7 cells (33,3%) have expected count less than 5. The minimum expected count is ,28.

Symmetric Measures

		Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Nominal by Nominal	Phi	,640			<,001
	Cramer's V	,453			<,001
	Contingency Coefficient	,539			<,001
Interval by Interval	Pearson's R	,512	,050	9,535	<,001[c]
Ordinal by Ordinal	Spearman Correlation	,463	,054	8,360	<,001[c]
N of Valid Cases		258			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Tab. 8 Chi square Test and Pearson Correlation

While the Cramer's V index indicates that there is a difference between the groups and thus the existence of correlation, the Pearson Correlation index highlights the direction of this one. In this case, the index is equal to 0.512, suggesting a positive correlation (p- value < 0.05).

In conclusion, it is possible to observe that those who define themselves neutral about the future of AI tend to be more supportive and therefore not perfectly neutral anyway. Among optimistic ones 75% of respondents chose the maximum grade of support (7 on the Likert scale), while among pessimistic ones around 100% chose between 0 and 2 (out of 7) in terms of their support to the development of AI. Through the Chi Square Test, we can observe that the more people are optimistic, the more they tend to support the development of AI.

Hp1.b: showing less barriers to adoption

Then, we moved to verify that people who are more optimistic about the future of AI are also the ones showing less barriers to adoption, namely if there is consistency between the

enthusiastic approach they theoretically declare to have and then their approach when adopting AI tools.

Barriers to adoption variable is computed as average of the results obtained through the six items in Q8. Then, we recoded the variable in classes in a different variable (Barriers_classes) to facilitate the visualization and understanding of the results. Answers were reclassified as following:

- Answers from 0 to 3 in class 1
- Answers from 3,1 to 5 in class 2
- Answers from 5,1 to 7 in class 3.

This means that the higher is the score registered, the higher are their barriers to adoption. Looking at Tab.9 we can notice that among optimistic people 54.8% of them scored a value in class 1 (between 0 and 3), namely registering low barriers to adoption.

Future_perc * Barriers_classes Crosstabulation

			Barriers_classes			
			1,00	2,00	3,00	Total
Future_perc	Pessimista	Count	12	22	2	36
		% within Future_perc	33,3%	61,1%	5,6%	100,0%
		% within Barriers_classes	10,0%	16,7%	33,3%	14,0%
		% of Total	4,7%	8,5%	0,8%	14,0%
	Neutrale	Count	28	48	0	76
		% within Future_perc	36,8%	63,2%	0,0%	100,0%
		% within Barriers_classes	23,3%	36,4%	0,0%	29,5%
		% of Total	10,9%	18,6%	0,0%	29,5%
	Ottimista	Count	80	62	4	146
		% within Future_perc	54,8%	42,5%	2,7%	100,0%
		% within Barriers_classes	66,7%	47,0%	66,7%	56,6%
		% of Total	31,0%	24,0%	1,6%	56,6%
Total		Count	120	132	6	258
		% within Future_perc	46,5%	51,2%	2,3%	100,0%
		% within Barriers_classes	100,0%	100,0%	100,0%	100,0%
		% of Total	46,5%	51,2%	2,3%	100,0%

Tab. 9 Crosstab Attitude towards AI vs Barriers to adoption (classes)

Our hypothesis seems to be verified, indeed according to Tab. 10 the significance is lower than 0.05, meaning that there is correlation and there is difference among the different groups, but Cramer's V index is lower than the threshold (0.2) suggesting there is a not so strong effect of the correlation between the two variables. This can be justified if we look at the results for pessimistic and neutral people in Tab.9: in both cases more than 60% of respondents showed an average score in class 2, namely their barriers to adoption are not so high. In other words, it

is true that the more people are optimistic, the less are their barriers to adoption but it is not a considerable effect.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13,508[a]	4	,009
Likelihood Ratio	14,905	4	,005
Linear-by-Linear Association	7,611	1	,006
N of Valid Cases	258		

a. 3 cells (33,3%) have expected count less than 5. The minimum expected count is ,84.

Symmetric Measures

		Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Nominal by Nominal	Phi	,229			,009
	Cramer's V	,162			,009
	Contingency Coefficient	,223			,009
Interval by Interval	Pearson's R	-,172	,063	-2,795	,006[c]
Ordinal by Ordinal	Spearman Correlation	-,182	,061	-2,959	,003[c]
N of Valid Cases		258			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

Tab. 10 Chi square Test and Pearson Correlation

In conclusion, it is true that the more people are optimistic, the less are their barriers to adoption but it is not a considerable effect.

Hp1.c: being less influenced by the government action

Then, we moved to verify whether more optimistic people are the ones less influenced by government's action. Their political influence has been investigated through the average of the six items in Q7, reclassified in classes in a different variable (Gov_classes) as following:

- Answers from 0 to 3 in class 1
- Answers from 3,1 to 5 in class 2
- Answers from 5,1 to 7 in class 3.

This means that the higher is the score registered, the higher is their influence from the government.

Future_perc * Gov_classes Crosstabulation

			Gov_classes			
			1,00	2,00	3,00	Total
Future_perc	Pessimista	Count	24	12	0	36
		% within Future_perc	66,7%	33,3%	0,0%	100,0%
		% within Gov_classes	19,0%	9,2%	0,0%	14,0%
		% of Total	9,3%	4,7%	0,0%	14,0%
	Neutrale	Count	32	44	0	76
		% within Future_perc	42,1%	57,9%	0,0%	100,0%
		% within Gov_classes	25,4%	33,8%	0,0%	29,5%
		% of Total	12,4%	17,1%	0,0%	29,5%
	Ottimista	Count	70	74	2	146
		% within Future_perc	47,9%	50,7%	1,4%	100,0%
		% within Gov_classes	55,6%	56,9%	100,0%	56,6%
		% of Total	27,1%	28,7%	0,8%	56,6%
Total		Count	126	130	2	258
		% within Future_perc	48,8%	50,4%	0,8%	100,0%
		% within Gov_classes	100,0%	100,0%	100,0%	100,0%
		% of Total	48,8%	50,4%	0,8%	100,0%

Tab. 11 Crosstab Attitude towards AI vs Government influence

Looking at Tab.11, among optimistic people half of the respondents (50.7%) are into the class with an intermediate level of influence from government (class 2), even though there is also a considerable portion of people who declare not to be influenced at all by the government (47.9% in class 1).

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7,537[a]	4	,110
Likelihood Ratio	8,318	4	,081
Linear-by-Linear Association	2,187	1	,139
N of Valid Cases	258		

a. 3 cells (33,3%) have expected count less than 5. The minimum expected count is ,28.

Symmetric Measures

		Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Nominal by Nominal	Phi	,171			,110
	Cramer's V	,121			,110
	Contingency Coefficient	,168			,110
Interval by Interval	Pearson's R	,092	,061	1,482	,139[c]
Ordinal by Ordinal	Spearman Correlation	,065	,062	1,042	,298[c]
N of Valid Cases		258			

a. Not assuming the null hypothesis.
b. Using the asymptotic standard error assuming the null hypothesis.
c. Based on normal approximation.

Tab. 12 Chi square Test and Pearson Correlation

In the Chi Square Test (Tab.12) the p-value is 0.110, significantly higher than the threshold (0.05), meaning that the H0 cannot be rejected. This suggests a relationship between the

variables does not exist. In other words, the difference observed in the data is random and not statistically significant.

This result suggests that even though more optimistic people tend to be less influenced by the government's action, in general in our sample this is a common trend among all the groups. The highest percentage of people in class 1 is registered for pessimistic people. We can deduct that they are those people who consider the government as an external force not to be trusted and thus they do not undergo its influence.

Hp1.d: being less influenced by media narrative.

We distinguished the respondents who viewed the two versions of the article by the variable Article, where 1 indicates the positive article and 0 the article presenting the negative view on AI. In particular, the distribution of the respondents who viewed the two versions appears to be fairly balanced because about 60% (160 out of 257) of the sample viewed the positive one, while about 40% viewed the negative one.

As for the persons who were exposed to the article and the positive stimulus, we investigated the general perception of AI by looking at the mean of items 1,2,5,6 of question Q3 (new variable Gen_perc_pos). Specifically, respondents were asked to indicate how much they agreed with several statements on a scale from 0 to 7. This means that the higher the mean of the items, the more positive their perception of the AI.
The group of respondents exposed to the positive stimulus presented an average equal to 4.57, with a standard deviation equal to 0.94. The standard deviation is based on not only on the deviations between average and the value but on the squared deviation. It is important to consider this index since the overall data it may be affected by extreme values, and this is potentially a risk for us because if some data are very far from the others they contribute in the summary. A higher standard deviation indicates that the values are spread over a wider range and therefore not all close to the mean. In this case the standard deviation is quite low, meaning

there is slow dispersion of data. Also, the Kurtosis and the Skewness registered a low value, meaning there are not significant outliers.

As for the other group, the mean was 3.39, with standard deviation equal to 1.16.

This means that those who viewed the positive article did actually register a more positive perception towards AI. This means that it was influenced by exposure to the article, thus confirming the effect of the media narrative on people's perception of new technologies.

Statistics

Gen_perc_pos

N	Valid	160
	Missing	0
Mean		4,5734
Std. Deviation		,93944
Variance		,883
Skewness		,275
Std. Error of Skewness		,192
Kurtosis		,591
Std. Error of Kurtosis		,381
Percentiles	25	4,0000
	50	4,2500
	75	5,2500

Tab. 13 Descriptive analysis of general perception of AI of respondents exposed to the positive stimulus (Gen_perc_pos with Article=1)

Focusing on the optimists, in the sample of persons who viewed the positive article exactly 57 persons are respectively in class 1 and class 2 with regard to Gov_classes, meaning that they are influenced by the government in a moderate way. With a p-value > 0.05 and equal to 0.09, there is no correlation, i.e. there is no difference between these groups.

As for Tech Skepticism, it has been computed as the average of the answers obtained through the 4 items of the Q4, recoded as TechSkept variable.

In this case, 72.4% of the optimists have low skepticism (class 1). In this case, the correlation is statistically significant (p value < 0.05), meaning that indeed the most optimistic people are those with the fewest barriers to adoption. In fact, the Pearson correlation is negative (-0.249) and Cramer's V is higher than the threshold (0.2). As for barriers to adoption, 61.2%

demonstrate low barriers to adoption, although these results would appear to be random as the existence of a correlation is not verified (p value > 0.05).

All these tabs are included in the appendix.

In the sample of people who viewed the negative article, with regard to the general perception towards AI, the mean is lower than before, i.e. equal to 3.39, with a low standard deviation as well (1.16). Low values are also recorded for Kurtosis and Skewness, suggesting the absence of outliers. Furthermore, looking at the minimum and maximum values, we can see that the maximum value entered does not exceed 6, thus stopping at an intermediate value of positive perception on the scale.

Statistics

Gen_perc_pos

N	Valid	98
	Missing	0
Mean		3,3903
Std. Deviation		1,16382
Variance		1,354
Skewness		-,428
Std. Error of Skewness		,244
Kurtosis		,180
Std. Error of Kurtosis		,483
Minimum		,00
Maximum		5,75
Percentiles	25	2,5000
	50	3,5000
	75	4,2500

Tab.14 Descriptive analysis of general perception of AI of respondents exposed to the negative stimulus (Gen_perc_pos with Article=0)

Focusing on the optimists who nonetheless viewed the article negatively concerning AI, exactly 13 and 17 persons are placed in class 1 and class 2 (43.3% and 56.7%) respectively with regard to Gov_classes, meaning that they are not so influenced by the government's action. With a p-value > 0.05 and equal to 0.383, there is no correlation, i.e. there is no difference between these groups.

As for Tech Skepticism, 50.0% of the optimists have low skepticism (class 1) and only 36.7% of them fall into class 2 of the variable TechSkept_classes. In this case the correlation is statistically significant (p value < 0.01), meaning that again the most optimistic people are those with the fewest barriers to adoption. In fact, the Pearson correlation is negative (-0.460) and

Cramer's V is higher than the threshold (0.2) and equal to 0.384. As far as barriers to adoption are concerned, 30.0% demonstrate low barriers to adoption, while 63.3% fall into class 2 (moderate barriers to adoption), although these results would appear to be random as the existence of a correlation is not verified (p value > 0.05).
Also, all these tabs are inserted in the appendix.

By means of the last item of Q7, we then investigated how much respondents state and are aware that they are influenced by the government, in order to check whether this corresponds to our results and their awareness.
In particular, in the analyses performed with Article=0, both optimistic and pessimistic respondents stated that they were little influenced by the policies implemented by the government. As for the people who viewed the article as positive, 83.6% of the optimistic respondents indicated a value between 0 and 3 (little influenced), while only a fraction indicated a higher value. Among the pessimists 37.5% of them indicated a value between 4 and 5 indicating moderate influence. The Chi Square test shows a p-value < 0.001, thus the existence of a difference between the groups examined.

In conclusion, people who are optimistic about the future of AI are those who are most supportive of AI development and with the least barriers to adoption, are moderately influenced by the actions of government and authorities on AI and are not influenced by the media narrative in forming their opinion on AI.

Hp2: people who agree that the government interferes too much in their everyday lives are the ones who are less influenced by the media narratives in forming their own opinion about AI.

As for this hypothesis, how many people agree that the government interferes too much in their everyday lives is observed through the first item of Q7. We reclassified in a different variable (Q7_6_classes) this variable as following:

- Score between 0 and 3 in class 1: people think that government does not interfere in everyday life
- Score between 3,1 and 5 in class 2: people think that government interferes in everyday life
- Score between 5,1 and 7 in class 3: people think that government interferes too much in everyday life

First, we analyze the people who viewed the article with a positive perspective on AI (Article=1), by going to select cases on SPSS. Since the last item of Q7 is an ordinal variable, we are going to create Contingency tables.

We will therefore focus only on people who entered a value between 5 and 7 at Q7, i.e. in class 3, who are convinced that the government interferes too much in their daily lives:

- 85.7% of them are on average affected by actions taken by the government. The Chi Square test is significant (p-value < 0.001) and the Cramer's V index is equal to 0.37. At the same time, Pearson's index is equal to 0.437, suggesting that the more they feel the government intervenes in their lives in a meaningful way, the more they are influenced by the policies implemented by the government.
- As for barriers to adoption, 71.4% of respondents falls into class 1, thus they have few barriers to adoption. However, the p-value is > 0.05, so the results are random.
- Regarding technological skepticism, 85.7% fall into class 1, so they have little skepticism towards new technologies. The Chi Square Test is statistically significant, as the p-value is less than 0.01, the Cramer's V index is 0.398 (greater than 0.2) and the Pearson correlation is 0.175.

The tables can be found in the appendix.

We also cross-referenced the variable Q7_6_classes with the variable Gen_perc_pos, those who fall into class 3 regarding their perception of government interference in their daily lives have an average perception of AI of 4.5.

We now focus on people who viewed the article with a negative perspective on AI. Of these, few fall into the highest class in terms of their perception of the influence of government action.

As for the people who agree that the government interferes too much in their lives:

- Fifty per cent were found to have moderate barriers to adoption (class 2), with the others equally distributed in the other two classes. The Chi-Square test shows a weak correlation (p-value < 0.05), with Cramer's V equal to 0.247.
- As far as influence from the government is concerned, 100% is placed in the second bracket. The correlation is statistically significant, meaning that the more people feel government interference, the more they are actually influenced by it.
- 50% say they are moderately skeptical towards new technologies, while the remaining half are very skeptical. However, the Chi Square Test does not register a correlation (p-value > 0.05).

We also cross-referenced the variable Q7_6_classes with the variable Gen_perc_pos, those who fall into class 3 in terms of perceived government interference in daily life have an average perception of AI of 3.75.

In conclusion, we can affirm that generally people who see government as particularly intrusive in their everyday lives are weakly influenced by the media narrative. In fact although people subjected to the negative stimulus reported more pessimistic and conservative outcomes toward AI and new technologies no particular and considerable differences stand out such that an influence from the media can be asserted with certainty.

Hp3: Increased usage of ChatGPT is associated with

Hp3.a: lower levels of skepticism towards Artificial Intelligence

Hp3.b: and less influenced by media narrative.

The variable Q14_1 captures the number of times each user uses ChatGPT in a month. It is therefore a quantitative variable for which it might make sense to perform an outlier analysis.

Let us first perform a descriptive analysis.

Looking at the entire sample and thus at all respondents, the average usage stands at 11 times, but with a fairly high standard deviation (12.77). As for those who viewed the article with a positive outlook, the average is instead 13.25, significantly higher than the other case, where it is 7.47. This shows a clear difference between the two groups subjected to two different stimuli.

Statistics

Q14_1

N	Valid	258
	Missing	0
Mean		11,05
Median		6,00
Mode		0
Std. Deviation		12,769
Skewness		1,466
Std. Error of Skewness		,152
Kurtosis		1,288
Std. Error of Kurtosis		,302
Minimum		0
Maximum		50
Sum		2852

Tab.15 Descriptive analysis of ChatGPT usage for all the respondents

Statistics

Q14_1

N	Valid	98
	Missing	0
Mean		7,47
Median		4,00
Mode		0
Std. Deviation		9,858
Skewness		1,838
Std. Error of Skewness		,244
Kurtosis		2,743
Std. Error of Kurtosis		,483
Minimum		0
Maximum		40
Sum		732

Tab.16 ChatGPT usage related to people exposed to the negative stimulus (Article=0)

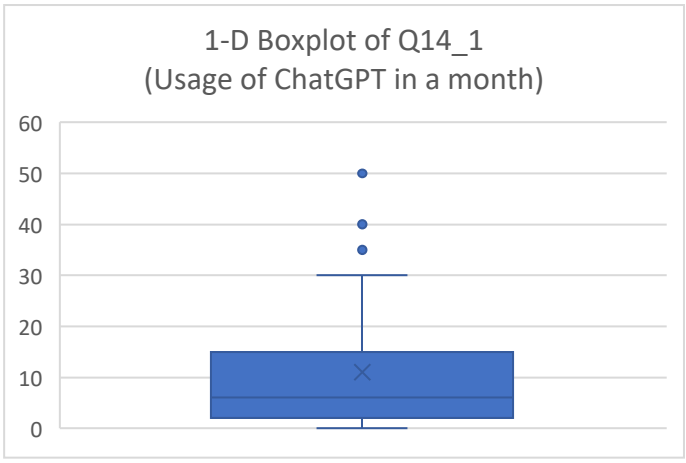
Statistics

Q14_1

N	Valid	160
	Missing	0
Mean		13,25
Median		9,50
Mode		0
Std. Deviation		13,838
Skewness		1,237
Std. Error of Skewness		,192
Kurtosis		,519
Std. Error of Kurtosis		,381
Minimum		0
Maximum		50
Sum		2120

Tab.17 ChatGPT usage related to people exposed to the positive stimulus (Article=1)

We then proceed to analyze the potential influence of outliers, which may affect the robustness of the analysis and the range of variability.



Tab.18 Outlier analysis of the number of times people use ChatGPT on a monthly basis (Q14_1)

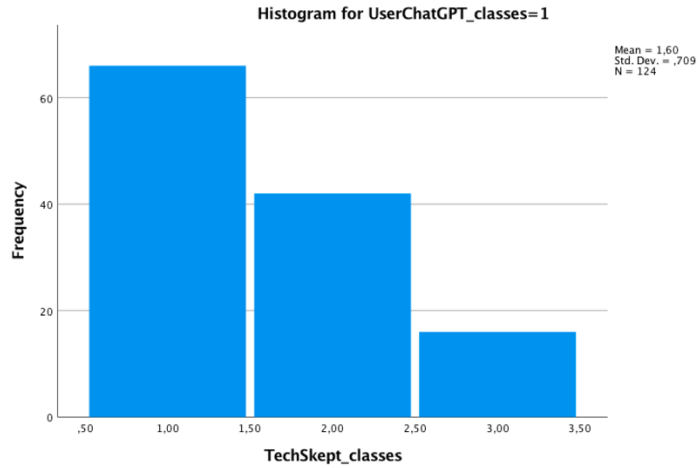
As we can see in tab.18, there are 3 upper outliers, which indicated they use ChatGPT around 50 times in a month. It would be recommended to delete them, but we think that it is not necessary to eliminate those values since we can reasonably assume that they inserted the number of questions asked to ChatGPT and not the number of sessions or tasks for which they used this tool.

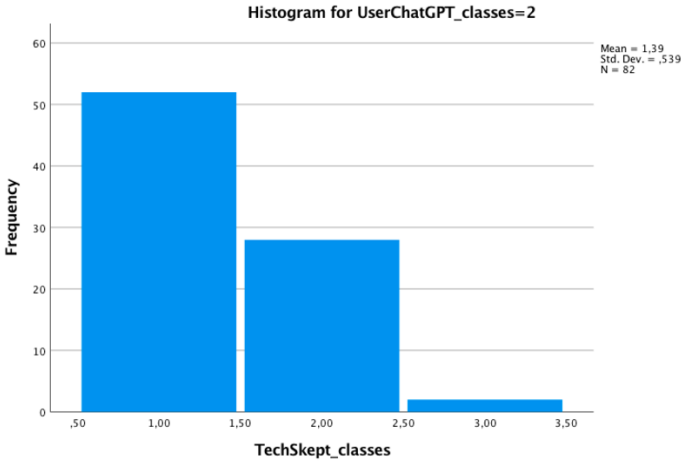
Before to run an ANOVA Analysis, we looked at the descriptive analysis through a contingency table. We reclassified the usage of ChatGPT (Q14_1) into classes and into another variable to facilitate the visualization of results (UseChatGPT_classes), according to the number of times

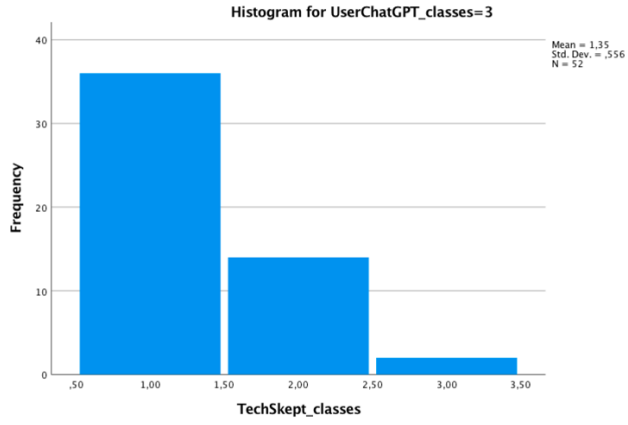
people used ChatGPT in a month. The higher the class, the higher the usage of ChatGPT on a monthly basis.

UseChatGPT_classes * TechSkept_classes Crosstabulation

			TechSkept_classes			
			1,00	2,00	3,00	Total
UseChatGPT_classes	1,00	Count	66	42	16	124
		% within UseChatGPT_classes	53,2%	33,9%	12,9%	100,0%
		% within TechSkept_classes	42,9%	50,0%	80,0%	48,1%
		% of Total	25,6%	16,3%	6,2%	48,1%
	2,00	Count	52	28	2	82
		% within UseChatGPT_classes	63,4%	34,1%	2,4%	100,0%
		% within TechSkept_classes	33,8%	33,3%	10,0%	31,8%
		% of Total	20,2%	10,9%	0,8%	31,8%
	3,00	Count	36	14	2	52
		% within UseChatGPT_classes	69,2%	26,9%	3,8%	100,0%
		% within TechSkept_classes	23,4%	16,7%	10,0%	20,2%
		% of Total	14,0%	5,4%	0,8%	20,2%
Total		Count	154	84	20	258
		% within UseChatGPT_classes	59,7%	32,6%	7,8%	100,0%
		% within TechSkept_classes	100,0%	100,0%	100,0%	100,0%
		% of Total	59,7%	32,6%	7,8%	100,0%







Tab.19 Contingency table and Histograms about ChatGPT usage and Technological skepticism

As we can see in Tab. 19, for each class of usage of ChatGPT, most respondents are always in the lowest class as for Technological skepticism, suggesting there are not different behaviour among the different groups.

Then, we performed the ANOVA analysis between the variables Q14_1, which is the quantitative variable capturing the usage of ChatGPT, and Tech_Skept_classes, the ordinal variable able to capture the technological skepticism. In this analysis, The H0 is about the independence on mean and so the mean by groups is equal to each other.

The H1 is that at least for two modalities we have two different mean values.

The rule is based on the execution of an F Test, that is used to perform this type of analysis.

Through the ANOVA analysis we investigate the dependance of the two variables, namely if according to the modalities of the qualitative variable, the quantitative one changes on mean. The dependent variable is the quantitative one, while the qualitative one is the control variable. In questo caso, it should be the qualitative variable (indicating skepticism) that drives the quantitative one (i.e., ChatGPT use), but behind an ANOVA is different.

ANOVA

Q14_1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	754,228	2	377,114	2,337	,099
Within Groups	41151,012	255	161,377		
Total	41905,240	257			

ANOVA Effect Sizes[a,b]

		Point Estimate	95% Confidence Interval Lower	95% Confidence Interval Upper
Q14_1	Eta-squared	,018	,000	,057
	Epsilon-squared	,010	-,008	,050
	Omega-squared Fixed-effect	,010	-,008	,050
	Omega-squared Random-effect	,005	-,004	,025

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

Tab.19 ANOVA Analysis between the number of times people use ChatGPT on a monthly basis (Q14_1) and the Technology Skepticism classes

Actually, in this case the p-value is higher than 0.05, thus it is not significant, meaning there is not a dependance.

ANOVA

Q14_1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	23,756	1	23,756	,123	,726
Within Groups	30424,244	158	192,559		
Total	30448,000	159			

ANOVA Effect Sizes[a,b]

		Point Estimate	95% Confidence Interval Lower	Upper
Q14_1	Eta-squared	,001	,000	,030
	Epsilon-squared	-,006	-,006	,024
	Omega-squared Fixed-effect	-,006	-,006	,024
	Omega-squared Random-effect	-,006	-,006	,024

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

Tab.20 ANOVA Analysis related to people exposed to the positive article (Article=1)

ANOVA

Q14_1

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	211,681	2	105,840	1,091	,340
Within Groups	9214,727	95	96,997		
Total	9426,408	97			

ANOVA Effect Sizes[a,b]

		Point Estimate	95% Confidence Interval Lower	Upper
Q14_1	Eta-squared	,022	,000	,095
	Epsilon-squared	,002	-,021	,076
	Omega-squared Fixed-effect	,002	-,021	,075
	Omega-squared Random-effect	,001	-,010	,039

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

Tab.21 ANOVA Analysis related to people exposed to the negative article (Article=0)

Considering the subsample first with Article=1 and then with Article=0, our previous results are confirmed, meaning that there is no correlation between technological skepticism and the usage of ChatGPT and there is not influence by media narratives.

In conclusion, people using more ChatGPT seem to be less skeptical towards AI, but these results could be random since there is no correlation between technological skepticism and the usage of ChatGPT. In other words, people who use more ChatGPT are not less skeptical about new technologies and AI, and in this sense, they are not influenced by media narratives, since both groups exposed to different stimuli registered the same results.
The hypothesis is thus only partially confirmed.

Hp4: Individuals who exhibit higher levels of trust in government are more likely to express concerns and apprehension regarding ChatGPT.

For people who think they can trust the government, we identified the second item in question Q7 "The government should stop telling people how to live their lives" where people were asked to enter a value on a scale of 0 to 7. In this sense, we assume that respondents who entered a value between 0 and 3 are those who accept and welcome government intervention, thus seen as an entity that can be trusted.

We then reclassified this variable into a new one (Gov_trust_classes), dividing the answers into classes:

- 0 to 3, class 1: Government can be trusted
- 3.1 to 5, class 2: I have a neutral stance towards government action
- 5.1 to 7, class 3: Government cannot be trusted

As far as the positive or non-positive attitude towards ChatGPT is concerned, let us look at Q13, where we assume that the average of the responses to the various items can be a good measure: as the average increases, the positive attitude towards ChatGPT also increases. Consequently, we can assume that on the contrary those with a score between 0 and 3 see ChatGPT not favourably and therefore as something to be afraid of. This variable is also reclassified into a new variable (ChatGPT_fear_classes) into three classes, where people with a score between 0 and 3 represent class 1.

First, we analyze the variable obtained from the average of the items in Q13. It shows an average of 3.20, so in general, the attitude towards ChatGPT is not particularly positive and people are somewhat skeptical about trusting it. This may be justified by the policies implemented by the government. This is also confirmed by the Kurtosis which shows a negative value (-0.214).

Statistics

ChatGPT_fear

N	Valid	258
	Missing	0
Mean		3,1952
Median		3,2222
Mode		4,00
Std. Deviation		1,25043
Variance		1,564
Skewness		-,073
Std. Error of Skewness		,152
Kurtosis		-,214
Std. Error of Kurtosis		,302
Range		6,33
Minimum		,00
Maximum		6,33
Sum		824,36

Tab.22 Results attitude towards ChatGPT (Q13)

We then cross-reference the two variables to test our hypothesis, via a Crosstab.

Gov_trust_classes * ChatGPT_fear_classes Crosstabulation

			ChatGPT_fear_classes			
			1,00	2,00	3,00	Total
Gov_trust_classes	1,00	Count	38	44	6	88
		% within Gov_trust_classes	43,2%	50,0%	6,8%	100,0%
		% within ChatGPT_fear_classes	33,3%	33,3%	50,0%	34,1%
		% of Total	14,7%	17,1%	2,3%	34,1%
	2,00	Count	50	56	4	110
		% within Gov_trust_classes	45,5%	50,9%	3,6%	100,0%
		% within ChatGPT_fear_classes	43,9%	42,4%	33,3%	42,6%
		% of Total	19,4%	21,7%	1,6%	42,6%
	3,00	Count	26	32	2	60
		% within Gov_trust_classes	43,3%	53,3%	3,3%	100,0%
		% within ChatGPT_fear_classes	22,8%	24,2%	16,7%	23,3%
		% of Total	10,1%	12,4%	0,8%	23,3%
Total		Count	114	132	12	258
		% within Gov_trust_classes	44,2%	51,2%	4,7%	100,0%
		% within ChatGPT_fear_classes	100,0%	100,0%	100,0%	100,0%
		% of Total	44,2%	51,2%	4,7%	100,0%

Tab.23 Crosstab Gov_trust_classes and ChatGPT_fear_classes

As can be seen from Tab. 23, among those who think that the government can be trusted, 50% indicated a moderately positive attitude towards ChatGPT (class 2), while 43.2% fall into class 1, thus manifesting a substantially negative attitude towards ChatGPT (which we liken to a feeling of fear). So, although the perception of ChatGPT is not fully positive, the hypothesis is only partially confirmed.

In conclusion, people with a high level of trust toward the government present a neutral or slightly negative attitude toward ChatGPT, thus emphasizing that the ban introduced in Italy has partially influenced public opinion.

Hp5: People who get information not from online sources are more skeptical about AI.

The source of information is investigated through question Q25, where we identify print newspapers, radio and television as non-online and therefore more traditional sources of information.

Given the target audience, the most used sources are social media (47.3%) and the Web through articles and blogs (40.3%), although newspapers are still consulted by 9.3% of respondents.

Source of information

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Newspaper	24	9,3	9,3	9,3
	Radio	2	,8	,8	10,1
	Social media	122	47,3	47,3	57,4
	Television	6	2,3	2,3	59,7
	Web (blog, articles)	104	40,3	40,3	100,0
	Total	258	100,0	100,0	

Tab.24 Source of information Frequency analysis

Then, we crossed the two variables in a Contingency table.

Q25 * TechSkept_classes Crosstabulation

			TechSkept_classes			
			1,00	2,00	3,00	Total
Q25	Newspaper	Count	16	6	2	24
		% within Q25	66,7%	25,0%	8,3%	100,0%
		% within TechSkept_classes	10,4%	7,1%	10,0%	9,3%
		% of Total	6,2%	2,3%	0,8%	9,3%
	Radio	Count	0	0	2	2
		% within Q25	0,0%	0,0%	100,0%	100,0%
		% within TechSkept_classes	0,0%	0,0%	10,0%	0,8%
		% of Total	0,0%	0,0%	0,8%	0,8%
	Social media	Count	76	40	6	122
		% within Q25	62,3%	32,8%	4,9%	100,0%
		% within TechSkept_classes	49,4%	47,6%	30,0%	47,3%
		% of Total	29,5%	15,5%	2,3%	47,3%
	Television	Count	4	2	0	6
		% within Q25	66,7%	33,3%	0,0%	100,0%
		% within TechSkept_classes	2,6%	2,4%	0,0%	2,3%
		% of Total	1,6%	0,8%	0,0%	2,3%
	Web (blog, articles)	Count	58	36	10	104
		% within Q25	55,8%	34,6%	9,6%	100,0%
		% within TechSkept_classes	37,7%	42,9%	50,0%	40,3%
		% of Total	22,5%	14,0%	3,9%	40,3%
Total		Count	154	84	20	258
		% within Q25	59,7%	32,6%	7,8%	100,0%
		% within TechSkept_classes	100,0%	100,0%	100,0%	100,0%
		% of Total	59,7%	32,6%	7,8%	100,0%

Tab.25 Contingency table Source of information and Technology Skepticism

As can be seen from Table 25 for newspaper and television the hypothesis is not verified, in fact 66.7% and 55.8% of respondents respectively fall into class 1 of the TechSkept_classes variable, presenting a low level of skepticism. On the contrary, for Radio, the hypothesis is verified as all fall into class 3. However, the portion of respondents who acquire information via Radio is very low, so the result cannot be generalised and is therefore not significant.

In any case, the Chi Square test is statistically significant, suggesting a link between the source of information and Technology Skepticism.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	27,216[a]	8	<,001
Likelihood Ratio	14,296	8	,074
N of Valid Cases	258		

a. 7 cells (46,7%) have expected count less than 5. The minimum expected count is ,16.

Symmetric Measures[c]

		Value	Approximate Significance
Nominal by Nominal	Phi	,325	<,001
	Cramer's V	,230	<,001
	Contingency Coefficient	,309	<,001
N of Valid Cases		258	

c. Correlation statistics are available for numeric data only.

Tab.26 Chi Square Test Source of information and Technology Skepticism

The hypothesis is only tested for Radio, but since the result is weak, the hypothesis is rejected.

Regression Models

A. Technology Skepticism

In order to analyze in a deeper way which aspects may influence the Technology Skepticism developed by respondents, we chose to perform a multiple linear regression analysis on the total number of respondents. It is used to describe the relation between variables with a linear function.

$$Y_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \ldots + \beta_{p-1} X_{i,p-1} + \varepsilon_i$$

In our case we would like to perform a multiple linear regression and we selected the variables that according to our analysis could have a significant impact on the Technology Skepticism:

- *Dependent variable (Y): TechSkept (Technology Skepticism)*
- *Independent variable (X1): Barriers_to_adopt (Barriers to adoption)*
- *Independent variable (X2): Gov_interference (Government influence)*
- *Independent variable (X3): AI_awareness*
- *Independent variable (X4): Q25 (Source of information)*

The variables were selected in such a way as to avoid overlapping among them and consequent multicollinearity problems. In particular, the third variable that captured awareness about AI, being a qualitative variable, was recoded into an ordinal numeric variable for the purpose of regression. Similarly, the last variable chosen, which captured the main sources of information used (qualitative variable), required manipulation to be used in the regression. Specifically, we grouped the sources into traditional (newspaper, radio, television) and online (web, social media) and then subsequently transformed these two categories into two dummy variables, Source_info_traditional and Source_info_online, respectively.

We assume that Y may be potentially explained by X1, X2, etc. through some coefficients that show how different variables will contribute differently.

We assume that the error present in the model is random, and that may be caused by:

- Some variables not considered into the model
- Measurement issues
- Relation between variables not perfectly linear
- Random effects which influence the relation

Before running the regression model, we make some hypotheses:

- Errors with null mean E (ε) = 0, this means that the size of the error does not depend on the size of the measurement
- Errors with constant variance
- Non correlated errors

- Errors with normal distribution

Then, we ran the Regression model considering the presence of a dummy variable. In this sense, we could add both Source_info_traditional and Source_info_online as independent variable but it would have been meaningless, thus we considered Source_info_traditional as our reference category to which the results are compared.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,497[a]	,247	,236	1,34018

a. Predictors: (Constant), Source_info_online, Gov_interference, AI_awareness, Barriers_to_adopt

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	149,385	4	37,346	20,793	<,001[b]
	Residual	454,412	253	1,796		
	Total	603,797	257			

a. Dependent Variable: TechSkept

b. Predictors: (Constant), Source_info_online, Gov_interference, AI_awareness, Barriers_to_adopt

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	,848	,522		1,626	,105	-,179	1,876		
	Barriers_to_adopt	,698	,096	,420	7,279	<,001	,509	,887	,894	1,119
	Gov_interference	,109	,081	,075	1,353	,177	-,050	,268	,956	1,045
	AI_awareness	-,534	,149	-,200	-3,586	<,001	-,827	-,241	,956	1,046
	Source_info_online	,521	,263	,112	1,982	,049	,003	1,040	,926	1,080

a. Dependent Variable: TechSkept

Tab.27 Regression Model 1

In order to assess the significance of our model, we run 3 checks:

- **First check**: we performed the **F-test** (already present in the ANOVA analysis), in which we evaluate the null hypothesis that all parameters in the model are equal to each other. If we can reject the null hypothesis, i.e. the p-value is <0.05 or even <0.01, our model is acceptable. In our case, the p-value is <0.01 and that is fine, because we know that at least one of my covariances has a significant relationship, which indicates the existence of a linear relationship between the variables considered.
- **Second check**: the **R-square** should be higher than the threshold of 0.2 and this is exactly the value shown by our model. This means that our model is good, but not that strong.

- **Third check**: the **adjusted R-square** should be higher than 0.2-0.3. Our value is 0.236 so it means that our model explains 23.6% of the variability in the dependent variable. In our case, we are facing a problem of overfitting: the result is not robust enough to estimate many parameters. We are at the limit with the small sample of our questionnaire, as this relationship is rather weak.

Suspecting a multicollinearity problem, then we conducted a VIF analysis in order to observe if a multicollinearity issue actually occurred.
As we can see, all the variables considered showed a VIF lower than 1.2, meaning that we are not facing a multicollinearity issue.

Since some coefficients were not significant, we adopted a stepwise analysis in order to solve this issue, obtaining as final results the following:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,441[a]	,195	,191	1,37831
2	,479[b]	,229	,223	1,35113
3	,492[c]	,242	,233	1,34237

a. Predictors: (Constant), Barriers_to_adopt
b. Predictors: (Constant), Barriers_to_adopt, AI_awareness
c. Predictors: (Constant), Barriers_to_adopt, AI_awareness, Source_info_online

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	117,466	1	117,466	61,833	<,001[b]
	Residual	486,331	256	1,900		
	Total	603,797	257			
2	Regression	138,281	2	69,140	37,874	<,001[c]
	Residual	465,516	255	1,826		
	Total	603,797	257			
3	Regression	146,098	3	48,699	27,026	<,001[d]
	Residual	457,698	254	1,802		
	Total	603,797	257			

a. Dependent Variable: TechSkept
b. Predictors: (Constant), Barriers_to_adopt
c. Predictors: (Constant), Barriers_to_adopt, AI_awareness
d. Predictors: (Constant), Barriers_to_adopt, AI_awareness, Source_info_online

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	95,0% Confidence Interval for B Lower Bound	95,0% Confidence Interval for B Upper Bound	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	,664	,307		2,161	,032	,059	1,268		
	Barriers_to_adopt	,734	,093	,441	7,863	<,001	,550	,917	1,000	1,000
2	(Constant)	1,639	,417		3,928	<,001	,817	2,460		
	Barriers_to_adopt	,682	,093	,410	7,364	<,001	,500	,865	,973	1,027
	AI_awareness	-,502	,149	-,188	-3,377	<,001	-,795	-,209	,973	1,027
3	(Constant)	1,092	,490		2,227	,027	,126	2,058		
	Barriers_to_adopt	,724	,094	,435	7,685	<,001	,538	,910	,930	1,075
	AI_awareness	-,542	,149	-,203	-3,638	<,001	-,835	-,249	,957	1,044
	Source_info_online	,547	,263	,118	2,083	,038	,030	1,065	,931	1,075

a. Dependent Variable: TechSkept

Excluded Variables[a]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance	Collinearity Statistics VIF	Collinearity Statistics Minimum Tolerance
1	Gov_interference	,089[b]	1,567	,118	,098	,963	1,039	,963
	AI_awareness	-,188[b]	-3,377	<,001	-,207	,973	1,027	,973
	Source_info_online	,092[b]	1,592	,113	,099	,946	1,057	,946
2	Gov_interference	,084[c]	1,493	,137	,093	,962	1,040	,940
	Source_info_online	,118[c]	2,083	,038	,130	,931	1,075	,930
3	Gov_interference	,075[d]	1,353	,177	,085	,956	1,045	,894

a. Dependent Variable: TechSkept
b. Predictors in the Model: (Constant), Barriers_to_adopt
c. Predictors in the Model: (Constant), Barriers_to_adopt, AI_awareness
d. Predictors in the Model: (Constant), Barriers_to_adopt, AI_awareness, Source_info_online

Tab.28 Regression Model 2

After the analysis, we obtained a final regression model where the factors included are Barriers_to_adopt, AI_awareness and Source of information. The Adjusted R square is not quite high, implying the final model has limited explanatory ability.

However, the final model is as follows:

Y= 1.092 + 0.724 X1 – 0.542 X2 + 0.547 X4 + E (if online source of information)

Y= 1.092 + 0.724 X1 – 0.542 X2 - 0.547 X4 + E (if traditional source of information)

Where:

Y= Technology Skepticism

X1 = Barriers to adoption

X2 = AI awareness

X4= Source of information

E = Random Error

Based on our findings, we could see that X1 has a positive impact on people's technology skepticism, while X2 a negative one.

In particular, the more people have high barriers to adoption, the less likely they adopt technologies, the more they will be skeptical about new technology.

As for source of information, looking at the coefficients of the regression model, we can say that people using online source of information have a higher technology skepticism in comparison to people using traditional ones. According to us, this can be justified since the spread of misinformation that characterizes this modern era, that exposes people to lots of information, that should be first verified.

In conclusion, we can notice that the government influence is not a determinant variable in this model, thus it does not have an impact on people's technology skepticism. On the contrary, the source of information is an important factor impacting on technology skepticism. Since different media correspond to different styles and ways in which information is presented, we can say that people, probably in the long run, are eventually influenced even if minimally by the source of information used.

B. Willingness to support AI development

Then, we decided to run another regression analysis, to determine if there is a relation between the technology skepticism, the attitude towards the future of AI and the actual willingness to support AI development. We chose to perform a linear regression analysis on the total number of respondents. These are the selected variables:

- *Dependent variable(Y): Q6 (Willingness to support AI development)*
- *Independent variable (X1): TechSkept (Technology Skepticism)*
- *Independent variable (X2): Future_perc_pos (Optimistic/negative attitude towards the future of AI)*

The variables were selected in such a way as to avoid overlapping among them and consequent multicollinearity problems. All the assumptions made before are still valid for this regression. In order to assess the significance of our model, we run 3 checks, considering the F Test, the R and the R Square. At the end we can say that our model is statistically significant and since the R Square is equal to 0.320, it explains 32.0% of the variability in the dependent variable. Also in this case, the result is not robust enough to estimate many parameters, probably due to the small size of the sample.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,566[a]	,320	,315	1,109

a. Predictors: (Constant), Future_perc, TechSkept

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	147,899	2	73,950	60,127	<,001[b]
	Residual	313,620	255	1,230		
	Total	461,519	257			

a. Dependent Variable: Q6_1

b. Predictors: (Constant), Future_perc, TechSkept

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	4,944	,279		17,738	<,001	4,395	5,493		
	TechSkept	-,244	,052	-,279	-4,681	<,001	-,346	-,141	,753	1,329
	Future_perc	,690	,110	,373	6,274	<,001	,473	,907	,753	1,329

a. Dependent Variable: Q6_1

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	TechSkept	Future_perc
1	1	2,652	1,000	,01	,02	,02
	2	,309	2,928	,00	,25	,25
	3	,039	8,232	,99	,73	,73

a. Dependent Variable: Q6_1

Tab.29 Regression Model 3

After the analysis, we obtained a final regression model where the factors included are Technology Skepticism and the attitude towards the future of AI. The Adjusted R square is not quite high, implying the final model has limited explanatory ability.

However, the final model is as follows:

$$Y= 4.944 – 0.244\ X1 + 0.69\ X2 + E$$

Where:

Y= Willingness to support AI development

X1= Technology Skepticism

X2 = Attitude towards the future of AI

E = Random Error

Based on our findings, we could see that X1 has a negative impact on people's willingness to support AI development in a concrete sense, while X2 a positive one. In other words, the more people are skeptical about new technologies, the less they are willing to support the development of AI. On the other hand, the more people have a positive attitude and are optimistic about the future of AI, the more they are willing to support its development, through purchases or just getting information from public media.

6. Discussions

This study focuses on investigating the general attitude of people towards AI and the impact of media public discourse on adoption and perception of AI in Italy. Our aim was to investigate the Italian context, characterized by the unique event of the ban of ChatGPT imposed for a while by the Data Protection Authority, which had a huge media resonance.

A deep dive into the data provides insights that can guide future research, but also decisions adopted by the government and media regarding the point of view and communication style to be adopted when new AI tools approaching the market and impacting people lives. Our research questions unfolded into 5 hypotheses designed to gain a greater understanding of people's context and attitude, which then allowed us to arrive at our conclusions.

In this discussion, the key findings will be examined to provide potential implications.

At the beginning of data analysis, it was crucial to conduct an analysis to understand the composition of our sample, also to evaluate the representativeness and potential generalization of the research outcomes.

As for gender distribution, our sample showed 55% of respondents as women and 42.6% of them as men, it mirrored the demographics of Lombardy closely.

Regarding level of education, our sample is composed mainly by University students, attending their Bachelor's or Master's Degree course. The percentage are respectively 41.1% and 33.3%. There is also a good percentage of high school students, since our experiment targeted people aged 18-35.

Geographically, our experiment target exclusively people living in Italy.

Despite some imbalances, all the variables contributed to mitigate potential biases. In this sense, we can support the extension of our findings from the sample to the target population.

The first hypotheses tested whether there is a mismatch between positive people attitude and their intention to support the development of AI, examining the role of the government and media influence. From our study, after having analyzed the government influence, barriers to adoption and technology skepticism, we can state that the two groups exposed to the two different stimuli did not register a particularly different attitude towards AI. In particular, it emerged that people who are optimistic about the future of AI are actually those who are most supportive of AI development and with the least barriers to adoption but are moderately influenced by the actions of government and authorities on AI, and are not influenced by the media narrative in forming their opinion on AI. We can assume that their optimism may be rooted in confidence in technological advances and the view that AI could bring significant benefits to society by improving quality of life, process efficiency, and even solving complex problems. However, optimism does not mean ignoring the possible problems or risks associated with AI, but we can assume they are convinced that these challenges can be addressed and overcome through appropriate regulations, responsible development, and ethical involvement in AI implementation. These people may be moderately influenced by the actions of government and authorities in AI matters. While they favor regulations that can ensure safety and ethics in the use of AI, they may be cautious about excessive regulatory interference that

could limit innovation. In addition, they may not be overly influenced by the media narrative in forming their opinions on AI. This may be due to an awareness of the media's tendency to emphasize the more sensationalistic or catastrophic aspects without fully reflecting the reality or potential of AI. Understanding the pros and cons of AI, along with an optimistic but realistic outlook, can push these people to support AI development responsibly, considering the social, ethical, and economic impacts and promoting use that maximizes the benefits and minimizes the risks associated with this evolving technology.

Then, we moved to understand the influence of media narratives in forming opinion about AI with a focus on people who see the government as excessively intrusive into their daily lives. We expected that a heightened awareness of government interference might prompt individuals to exercise a more critical and independent judgment when it comes to media messages and their influence on their perspectives of artificial intelligence. From our results, our expectations seem to be confirmed, since people who see government as particularly intrusive in their everyday lives are weakly influenced by the media narrative. In fact, although people subjected to the negative stimulus reported a slightly more pessimistic and conservative outcomes toward AI and new technologies, no particular and considerable differences stand out between the two groups such that an influence from the media cannot be asserted with certainty. In other words, people who feel intruded by the government may also be critical of information conveyed by the media, especially if they perceive that such information is influenced by political interests or a particular agenda.

This does not mean that they are not influenced by the media narrative at all, but rather that they may adopt a more critical and selective attitude toward the information they receive. Their skepticism may lead them to evaluate news more thoughtfully, seeking different sources and developing an independent opinion.

This is mainly because how these people process and react to media information is more complex and may involve a more critical approach, which does not confirm an immediate and direct influence.

Then, we tried to dive deeply in the concrete ChatGPT case. We wanted to investigate whether a higher usage of ChatGPT could be associated with a lower level of skepticism towards AI and

also a lower influence and susceptibility to media narratives. This hypothesis was going to identify a potential educational phenomenon of raising awareness, according to which the more new technologies are spread and used, the greater the acceptance by the masses and consequently the greater the openness of the masses to similar technologies. Therefore, it was also interesting to investigate how people perceived the media in this specific media case involving ChatGPT, being influenced or not by their narrative. However, from our study, through an ANOVA Analysis it emerged that the relationship between the use of ChatGPT and technological skepticism, particularly concerning new technologies and AI, appears to be independent of each other. In essence, the frequent use of ChatGPT does not necessarily correlate with reduced skepticism toward new technologies, including AI. Moreover, users of ChatGPT seem less affected or influenced by media narratives when forming their opinions regarding these technologies. The lack of correlation suggests that individuals who extensively use ChatGPT might have a more nuanced understanding of the technology. They could have separate factors driving their skepticism or lack thereof about AI and emerging technologies, which might not be directly related to their interactions with this specific AI model.

Moreover, these users might be less susceptible to being swayed by media narratives regarding AI. Their engagement with ChatGPT might have equipped them with a more informed perspective, enabling them to critically analyze the information presented by the media and form independent opinions.

However, it is important to acknowledge that while the use of ChatGPT might not directly influence skepticism towards and adoption of new technologies or AI, users' perspectives can still be shaped by various other factors, including personal experiences, education, cultural background, or exposure to different sources of information, due to the complexity of human perspectives and the broader societal discourse around technology.

The following hypothesis aimed at verifying the existence of correlation between individuals who demonstrate a heightened degree of trust in government and inclination to express concerns and apprehension regarding ChatGPT, to understand the impact of the ChatGPT ban implemented by public authority in Italy. Our expectations for this hypothesis was to be verified since we believe that skepticism and trusting governments plays a role in people liking or

disliking ChatGPT. Our sample did not register a high score related to general perception and attitude towards ChatGPT, with an average equal to 3.20 out of 7, suggesting a not so positive attitude towards ChatGPT. Among those who think that the government can be trusted, 50% indicated a moderately positive attitude towards ChatGPT (class 2), while 43.2% fall into class 1, thus manifesting a substantially negative attitude towards ChatGPT (which we liken to a feeling of fear). In other words, people with a high level of trust toward the government present a neutral or slightly negative attitude toward ChatGPT, thus emphasizing that the ban introduced in Italy has only partially influenced public opinion.

Continuing on the last hypothesis, it focused on the means and source of information used by people and how they have an impact on technology skepticism about AI, in particular distinguishing between traditional and online sources. We assume that people acquiring information from more traditional sources, namely print newspaper, radio and television, tend to be more skeptical about AI, due to a different and more conservative communication style with respect to online sources of information. The way information is presented and interpreted differs across various media sources. Individuals might perceive information from different platforms in varied ways, impacting the level of skepticism toward AI. The hypothesis is only verified for Radio, but since the result is weak, the hypothesis is rejected. In fact, the portion of respondents who acquire information via Radio is very low, so the result cannot be generalized and is therefore not significant. In other words, it appears that individuals who obtain information from sources other than online platforms might not demonstrate significantly higher levels of skepticism toward AI, with one notable exception being information sourced from radio platforms. This could be justified since, unlike online platforms, these traditional sources may not heavily focus on emerging technology-related content, resulting in a less pronounced impact on shaping attitudes toward AI. As a result, exposure to information about AI might be more infrequent or less comprehensive through traditional sources, potentially resulting in less influence on one's level of skepticism.

Then at the end, we ran two regressions analysis to investigate factors impacting the technology skepticism and then, the relationship between this latter and people actual willingness to support AI, despite their technology skepticism.

Specifically, individuals encountering significant barriers to adopting new technologies are less likely to embrace these innovations and tend to exhibit greater skepticism toward novel technological advancements. Regarding information sources, an examination of the coefficients within the regression model reveals that individuals relying on online sources tend to harbor higher levels of skepticism toward technology compared to those who prefer traditional sources. We attribute this disparity to the prevalence of misinformation in the contemporary era, inundating individuals with vast amounts of unverified information. In summary, our analysis indicates that the variable representing government influence does not hold significance in this model, thereby suggesting it lacks an impact on individuals' skepticism toward technology. In this sense, the ban imposed by the Italian authorities did not have a not so strong impact on people perception and usage of ChatGPT. Conversely, the chosen source of information emerges as a pivotal factor influencing technology skepticism. The various media platforms present information in distinct styles and formats, leading individuals, even if marginally, to be influenced by their selected information sources in the long term.

In general, the findings are well contextualized in the literature and appear to be important because they are aimed at understanding what are the influencing factors of public opinion, which as emerged from the analysis of the literature, plays a key role in the perception and adoption of new technologies and consequent education for the advancement and cultural development of the masses. In an age where technologies are increasingly pervasive and where misinformation is a real and existing problem, identifying what should be the right approach of public authorities and the media in conveying information and fulfilling public service seems crucial.

7. Limitations and Future Research

Several potential limitations might be encountered when conducting this research. Understanding these limitations is crucial for researchers and readers, as it informs about the applicability and potential biases in the findings of this research:

Size and Representativeness of the sample: the limited sample and consequent data quality, due to the fact that access to and collect data can be challenging, can actually be another factor affecting the validity of results. Indeed, the data available can be eventually limited or insufficient to draw conclusive findings, especially when studying emerging technologies. Consequently, this study might face limitations due to the size and representativeness of the sample, that can impact the generalizability of findings to the broader target population. In addition to this, our findings focused on a specific context, target and geographic area and thus might not be universally applicable, due to differences from a cultural, social and economic point of view.

Polarized sample: from the beginning, the results' analysis suggested a strong positive-oriented attitude towards AI among our respondents, which may ultimately alter the validity of our findings. Having so many positive and optimistic respondents, maybe due to specific characteristics of the target, may result in a polarized sample, not able to represent the various and multifaceted perception and perspectives on AI.

Dynamic Nature of Technology and Regulations: the dynamic and constantly evolving nature of AI could represent a limitation, since what we can consider true today might not be applicable tomorrow, making difficult to generalize the findings. At the same time ethical challenges might pose limitations in examining fully the adoption process.

Potential influence of the Covid-19: it is worth noticing that results, especially related to willingness to try, as well as government influence and perception, might be impacted by the conditions and policies imposed by the government during the pandemic.

Research Design, methodology and Biases: limitations in the research design can influence the validity and reliability of the findings, since inadequate or biased methodologies and data collection, such as the choice of the article inserted in the experiment, might affect the accuracy of the results.

Build on the exploration of public perception and the influence of media discourse on AI, future research could expand the understanding and address additional facets within this study field.

Firstly, a comparative study between Italy and other countries that adopted a different or similar approach to AI tools and regulations could be interesting to be performed. In this sense, it would be useful to understand whether Italy is aligned with other countries in terms of people responsiveness of media coverage of AI. At the same time, it would ascertain if specific socio-political climates or unique events such as in Italy have similar influences on public attitudes towards AI adoption. In addition to this, a more qualitative study might be conducted, employing qualitative methods, such as interviews or focus groups, to gain deeper insights about the public attitude towards AI and the factors influencing their perceptions beyond media influence.

In conclusion, future research should extend these findings and aim to delve deeper into the multifaceted aspects of public perception towards AI, considering varied contexts, exploring the impact of different narratives and government influence, and ultimately understanding how societal and cultural elements influence the adoption and perception of emerging technologies.

8. Conclusions

Our study provides insights into the public attitude towards AI and the influence of media discourse on AI adoption and perception in Italy, characterized by the noteworthy event of the ChatGPT ban, potentially guiding future governmental and media decisions regarding AI tools entering the market.

Our results suggests that people generally do not seem particularly influenced by the action and restrictions imposed by the government in Italy, as well as by media narratives. They exhibited a general positive attitude towards AI and a critical and selective approach towards information, indicating a more nuanced and less direct influence of media on their opinions about AI. The analysis on individuals with high trust in the government displayed a neutral to slightly negative attitude towards ChatGPT, highlighting that the ban in Italy partially influenced public opinion

but did not significantly shift perceptions. Moreover, the study uncovered that government influence did not significantly impact technology skepticism.

Overall, the findings emphasize the necessity of understanding the factors influencing public opinion, particularly in the field of new technologies. In a technological age marked by pervasive misinformation, identifying the suitable approach for public authorities and the media in communicating information to the public becomes pivotal for societal advancement and cultural development. This study has valuable implications for various stakeholders.
From policy makers' perspective, their efforts must also be focused on understand the public's nuanced attitudes towards AI, fostering transparent and responsible communication about AI developments and taking a cautious yet supportive approach to AI technology. Media companies could benefit from understanding the public's critical and selective approach to information and recommendations might include promoting accurate and balanced reporting, avoiding sensationalism and providing educational materials to inform the public in a complete way. Tech companies can use these insights to better understand public sentiment and ensure responsible and ethical development. Recommendations might focus on actively engaging in transparent communication with the public, prioritizing ethical considerations, and educating users about the benefits and limitations of AI tools.

A systematic collaborative approach can ensure the safeguarding of the consumer, who will be able to discern and analyze the information provided, fully understanding the potential of AI and thus being able to take advantage of it during the customer journey. Understanding the nuances of public attitudes toward AI is crucial for advancing technology responsibly, fostering public trust, and ensuring societal development aligned with the ethical use of AI. The main contribution of this work is to provide insights that can help those who wish to better understand consumers' motivations and buying patterns in order to adapt strategies, policies to better meet consumers' needs and improve the overall experience.

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APPENDIX

Experiment (from Qualtrics)

Inizio blocco:

Hi, I am a Double Degree Student Bocconi-NHH conducting research for my Master Thesis in Marketing Management regarding AI and potential barriers to adoption. You are being asked to answer some questions about your attitude and perception of AI with respect to your everyday life.

All data collected will be anonymized and treated for the only purpose of this university research, according the GDPR and European law. Your participation is voluntary.

By going on, you agree to the terms mentioned above.

Thanks for your participation.

Ciao,
sono una studentessa immatricolata nel programma Double Degree Bocconi-NHH e sto conducendo una ricerca per la mia tesi di laurea magistrale in Marketing Management sull'Intelligenza Artificiale e le sue potenziali barriere all'adozione. Ti chiedo di rispondere ad alcune domande sulla tua attitudine e percezione dell'IA nella vita quotidiana.

Tutti i dati raccolti saranno resi anonimi e trattati al solo scopo di questa ricerca universitaria, in conformità al GDPR e alla legislazione europea. La vostra partecipazione è volontaria.

Proseguendo, si accettano i termini di cui sopra.

Grazie per la vostra partecipazione.

Fine blocco:

Inizio blocco:

You will be asked to read a small paragraph about how AI is perceived in the University environment. Please, read it carefully and then answer the following questions.

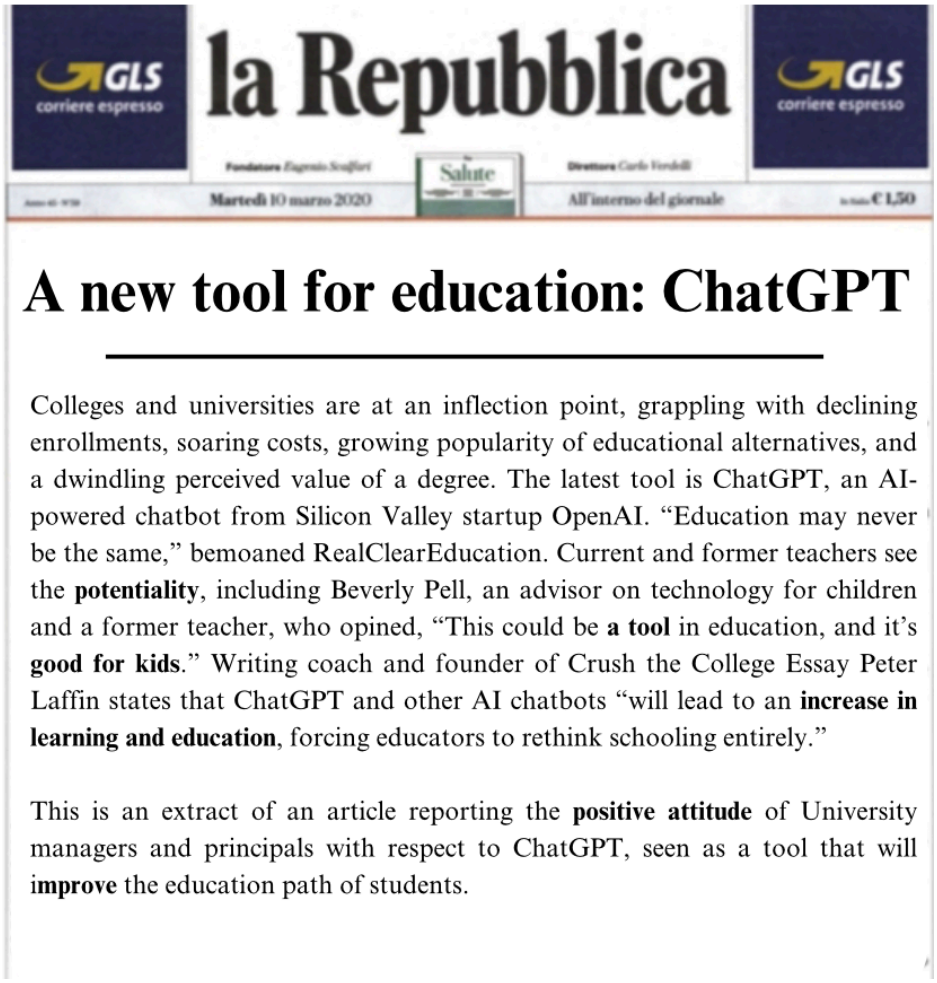
Ti sarà richiesto di leggere un breve paragrafo riguardo come l'Intelligenza Artificiale è percepita nell'ambiente universitario. Per favore, leggi attentamente e poi rispondi alle seguenti domande.

Fine blocco:

Inizio blocco: Articles

Imagine that the following headlines came in your newsfeed today.

Immagina che il seguente titolo appaia nelle tue notizie oggi.



la Repubblica

Martedì 10 marzo 2020

A new tool for education: ChatGPT

Colleges and universities are at an inflection point, grappling with declining enrollments, soaring costs, growing popularity of educational alternatives, and a dwindling perceived value of a degree. The latest tool is ChatGPT, an AI-powered chatbot from Silicon Valley startup OpenAI. “Education may never be the same,” bemoaned RealClearEducation. Current and former teachers see the **potentiality**, including Beverly Pell, an advisor on technology for children and a former teacher, who opined, “This could be **a tool** in education, and it’s **good for kids**.” Writing coach and founder of Crush the College Essay Peter Laffin states that ChatGPT and other AI chatbots “will lead to an **increase in learning and education**, forcing educators to rethink schooling entirely.”

This is an extract of an article reporting the **positive attitude** of University managers and principals with respect to ChatGPT, seen as a tool that will **improve** the education path of students.

Imagine that the following headlines came in your newsfeed today.

Immagina che il seguente titolo appaia nelle tue notizie oggi.

la Repubblica

Martedì 10 marzo 2020

A new threat: ChatGPT

Colleges and universities are at an inflection point, grappling with declining enrollments, soaring costs, growing popularity of educational alternatives, and a dwindling perceived value of a degree. The **latest threat** is ChatGPT, an AI-powered chatbot from Silicon Valley startup OpenAI. "Education may never be the same," bemoaned RealClearEducation. Current and former teachers see danger signs, including Beverly Pell, an advisor on technology for children and a former teacher, who opined, "This could be a **danger in education**, and it's not good for kids." Writing coach and founder of Crush the College Essay Peter Laffin warns that ChatGPT and other AI chatbots "will lead to **a crisis in learning**, forcing educators to rethink schooling entirely."

This is an extract of an article reporting the **concern** of University managers and principals with respect to ChatGPT, seen as a tool that will damage the education path of students, increasing **plagiarism and cheating**.

Article According to you, which is the perspective and attitude presented in the article about AI and ChatGPT?

- ○ Negative (0)
- ○ Positive (1)

Article Secondo le tue percezioni, com'è il punto di vista e l'attitude presentata nell'articolo riguardo AI and ChatGPT?

- ○ Negativa (0)
- ○ Positiva (1)

Fine blocco: Articles

Inizio blocco: AI Knowledge and Awareness

Q1 "Artificial intelligence (AI) refers to computer systems that perform tasks or make decisions that usually require human intelligence. AI can perform these tasks or make these decisions without explicit human instructions. Today, AI has been used in the following

applications: identifying people from their photos, diagnosing diseases like skin cancer and common illnesses, blocking spam email, helping run factories and warehouses, and predicting what one is likely to buy online."

How much have you heard about AI before today?

- ○ None at all (1)
- ○ A little (2)
- ○ A moderate amount (3)
- ○ A lot (4)

Q1 "L'intelligenza artificiale (IA) si riferisce a sistemi informatici che eseguono compiti o prendono decisioni che di solito richiedono l'intelligenza umana. L'IA è in grado di svolgere questi compiti o prendere queste decisioni senza istruzioni esplicite da parte dell'uomo. Oggi l'IA è stata utilizzata per le seguenti applicazioni: identificare le persone dalle loro foto, diagnosticare malattie come il cancro della pelle e le malattie comuni, bloccare le e-mail spam, aiutare a gestire fabbriche e magazzini e prevedere cosa è probabile che si acquisti online".

Quanto avevi sentito parlare di IA prima di oggi?

- ○ Per niente (1)
- ○ Poco (2)
- ○ Moderatamente (3)
- ○ Molto (4)

Interruzione di pagina

Q2 How much are you aware that AI is affecting your life presently?

- ○ Aware (1)
- ○ A little aware (2)
- ○ Not aware at all (3)

Q2 Quanto sei consapevole che l'IA sta impattando la tua vita al momento?

- ○ Consapevole (1)
- ○ Poco consapevole (2)
- ○ Per niente consapevole (3)

Fine blocco: AI Knowledge and Awareness

Inizio blocco: General perception of AI

Q3 How strongly do you agree or disagree with each of these statements? Evaluate the following statements from 1 to 7 (1= completely disagree; 7= completely agree):

	0 1 2 3 4 5 6 7
“Thinking about me personally, the benefits of AI outweigh the risks.” ()	
“Thinking about society more generally, the benefits of AI outweigh the risks.” ()	
“AI should be carefully managed.” ()	
“AI should be regulated by the government.” ()	
“I support the use of AI.” ()	
"I could develop an emotional attachment to AI" ()	

Q3 Quanto siete d'accordo o in disaccordo con ciascuna di queste affermazioni? Valutate le seguenti affermazioni da 1 a 7 (1= completamente in disaccordo; 7= completamente d'accordo):

0 1 2 3 4 5 6 7

"Pensando a me personalmente, i benefici dell'IA superano i rischi". ()	
"Pensando alla società più in generale, i benefici dell'IA superano i rischi". ()	
"L'IA deve essere gestita con attenzione". ()	
"L'IA dovrebbe essere regolata dal governo". ()	
"Sono favorevole all'uso dell'IA". ()	
"Potrei sviluppare un legame emotivo con l'intelligenza artificiale". ()	

Fine blocco: General perception of AI

Inizio blocco: Technology skepticism

Q4 How strongly do you agree or disagree with each of these statements? Evaluate the following statements from 1 to 7 (1= completely disagree; 7= completely agree):

0 1 2 3 4 5 6 7

“New technologies are more about making profits rather than making peoples’ lives better.” ()	
“I am worried about where all this technology is leading.” ()	
“Technology has become dangerous and unmanageable.” ()	
“I feel uncomfortable about new technologies.” ()	

Q4 Quanto siete d'accordo o in disaccordo con ciascuna di queste affermazioni? Valutate le seguenti affermazioni da 1 a 7 (1= completamente in disaccordo; 7= completamente d'accordo):

0 1 2 3 4 5 6 7

"Le nuove tecnologie mirano più a fare profitti che a migliorare la vita delle persone". ()	
"Sono preoccupato per la direzione che sta prendendo tutta questa tecnologia". ()	
"La tecnologia è diventata pericolosa e ingestibile". ()	
"Non mi sento a mio agio con le nuove tecnologie". ()	

Interruzione di pagina

Q5 Are you more optimistic or pessimistic about the future of AI?

- Pessimistic (1)
- Neither (2)
- Optimistic (3)

Q5 Siete più ottimisti o pessimisti sul futuro dell'IA?

- Pessimista (1)
- Neutrale (2)
- Ottimista (3)

Q6 How much do you support or oppose the development of AI? from 1 to 7 (1= Strongly oppose; 7= Strongly support)

	Strongly Oppose 0 1 2 3 4 5 6 7 Strongly Support
Degree of support/ opposition ()	

Q6 Quanto sei favorevole o contrario allo sviluppo dell'IA? da 1 a 7 (1= Fortemente contrario; 7= Fortemente favorevole):

	Fortemente contrario 0 1 2 3 4 5 6 7 Fortemente favorevole
Grado di supporto/opposizione ()	

Fine blocco: Technology skepticism

Inizio blocco: Individualism and political influence

Q7 How strongly do you agree or disagree with each of these statements? Evaluate the following statements from 1 to 7 (1= completely disagree; 7= completely agree):

	0 1 2 3 4 5 6 7
The government interferes far too much in our everyday lives ()	
The government should stop telling people how to live their lives ()	
I was able to catch the attitude of the government towards AI from the media ()	
The government has adopted a positive attitude towards AI ()	
The government has adopted a negative attitude towards AI ()	
I have been influenced by the policies implemented by the current government in using AI ()	

Q7 Quanto siete d'accordo o in disaccordo con ciascuna di queste affermazioni? Valutate le seguenti affermazioni da 1 a 7 (1= completamente in disaccordo; 7= completamente d'accordo):

	0 1 2 3 4 5 6 7
Il governo interferisce fin troppo nella nostra vita quotidiana ()	
Il governo dovrebbe smettere di dire alle persone come vivere le loro vite ()	
Ho potuto cogliere dai media l'atteggiamento del governo nei confronti dell'IA. ()	
Il governo ha adottato un atteggiamento positivo nei confronti dell'IA ()	
Il governo ha adottato un atteggiamento negativo nei confronti dell'IA ()	
Sono stato influenzato dalle politiche attuate dall'attuale governo nell'utilizzo dell'IA. ()	

Fine blocco: Individualism and political influence

Inizio blocco: Barriers to adoption

Q8 How strongly do you agree or disagree with each of these statements? Evaluate the following statements from 1 to 7 (1= completely disagree; 7= completely agree):

0 1 2 3 4 5 6 7

I think that using AI products does not fit into my daily routine ()	
The product prices are of good economic value/ The product prices are fair ()	
How risky do you feel it would be for you to purchase AI-powered products? ()	
I think that the purchase of an AI-powered product would lead to financial risk for me because of the eventuality of higher maintenance and repair costs ()	
How sure you are about the AI-powered product's ability to perform satisfactorily? ()	
To what extent does the AI- powered product agree with your traditions and norms? ()	

Q8 Quanto siete d'accordo o in disaccordo con ciascuna di queste affermazioni? Valutate le seguenti affermazioni da 1 a 7 (1= completamente in disaccordo; 7= completamente d'accordo):

	0 1 2 3 4 5 6 7
Penso che l'utilizzo di prodotti AI non sia adatto alla mia routine quotidiana. ()	
I prezzi dei prodotti sono di buon valore economico/ I prezzi dei prodotti sono adeguati ()	
Quanto ritenete rischioso l'acquisto di prodotti dotati di intelligenza artificiale? ()	
Ritengo che l'acquisto di un prodotto dotato di intelligenza artificiale comporti per me un rischio finanziario a causa dell'eventualità di maggiori costi di manutenzione e riparazione. ()	
Quanto siete sicuri della capacità del prodotto alimentato dall'intelligenza artificiale di fornire prestazioni soddisfacenti? ()	
In che misura il prodotto alimentato dall'intelligenza artificiale è in accordo con le vostre tradizioni, valori e norme culturali? ()	

Interruzione di pagina

Q9 What is the first product coming to your mind when thinking about AI-powered products?

- ○ Virtual assistants/ Chatbots (e.g. Siri) (1)
- ○ Smart home devices (e.g. Alexa) (2)
- ○ E-payments (3)
- ○ Map and navigation tools (4)
- ○ Text editors or autocorrect (5)
- ○ Facial Detection or Recognition (6)

Q9 Qual è il primo prodotto che ti viene in mente quando pensa ai prodotti alimentati dall'intelligenza artificiale?

- ○ Assistenti virtuali/ Chatbots (es. Siri) (1)
- ○ Dispositivi intelligenti per la domotica (es. Alexa) (2)
- ○ Pagamenti virtuali (3)
- ○ Mappe e strumenti per la navigazione (4)
- ○ Editor di testo o correzione automatica (5)
- ○ Rilevamento o riconoscimento facciale (6)

Q10 Rate the likelihood that you would purchase or use one of these AI-powered product? (0= Not at all likely; 1= Extremely likely)

	Not at all likely			Extremely likely
	0	0	0	1
How likely are you to buy or use one of these AI- powered products? ()				

Q10 Valutate la probabilità di acquistare o utilizzare uno di questi prodotti basati sull'intelligenza artificiale? (0= Per nulla probabile; 1= Estremamente probabile)

	Per nulla probabile			Estremamente probabile
	0	0	0	1

Quanto è probabile che acquistiate o utilizziate uno di questi prodotti basati sull'intelligenza artificiale? ()	

Fine blocco: Barriers to adoption

Inizio blocco: ChatGPT

Q11 ChatGPT is an AI-powered language model developed by OpenAI, capable of generating human-like text based on context and past conversations.

Have you ever heard about ChatGPT?

- Yes (1)
- No (2)

Q11 ChatGPT è un chatbot basato su intelligenza artificiale e apprendimento automatico sviluppato da OpenAI specializzato nella conversazione con un utente umano.

Hai mai sentito parlare di ChatGPT?

- Sì (1)
- No (2)

Interruzione di pagina

Q12 Do your daily activities have become easier after the introduction of ChatGPT?

- ○ Not at all (1)
- ○ A little (2)
- ○ A moderate amount (3)
- ○ A lot (4)

Q12 Le vostre attività quotidiane sono diventate più facili dopo l'introduzione di ChatGPT?

- ○ Per niente (1)
- ○ Un po' (2)
- ○ Moderatamente (3)
- ○ Molto (4)

Interruzione di pagina

Q13 How strongly do you agree or disagree with each of these statements? Evaluate the following statements from 1 to 7 (1= completely disagree; 7= completely agree):

	0 1 2 3 4 5 6 7
ChatGPT is competent in providing the information and guidance I need ()	
ChatGPT is reliable in providing consistent and dependable information ()	
ChatGPT is transparent ()	
ChatGPT is trustworthy in the sense that it is dependable and credible ()	
ChatGPT will not cause harm, manipulate its responses, create negative consequences for me ()	
ChatGPT will act with integrity and be honest with me ()	
ChatGPT is secure and protects my privacy and confidential information ()	
I am willing to take decisions based on the recommendations provided by ChatGPT ()	
I am willing to use ChatGPT in future ()	

Q13 Quanto siete d'accordo o in disaccordo con ciascuna di queste affermazioni? Valutate le seguenti affermazioni da 1 a 7 (1= completamente in disaccordo; 7= completamente d'accordo):

0 1 2 3 4 5 6 7

ChatGPT è competente nel fornire le informazioni e le indicazioni di cui ho bisogno. ()	
ChatGPT è affidabile nel fornire informazioni coerenti e corrette ()	
ChatGPT è trasparente ()	
ChatGPT è affidabile nel senso che è credibile. ()	
ChatGPT non causerà danni, non manipolerà le sue risposte, non creerà conseguenze negative per me. ()	
ChatGPT agirà con integrità e sarà onesto con me ()	
ChatGPT è sicuro e protegge la mia privacy e le mie informazioni riservate. ()	
Sono disposto a prendere decisioni basate sulle raccomandazioni fornite da ChatGPT ()	
Sono disposto a utilizzare ChatGPT in futuro ()	

Interruzione di pagina

Q14 How frequently do you use ChatGPT on a monthly basis? (please indicate the number of times in a month)

	0 5 10 15 20 25 30 35 40 45 50
How many times in a month? (Refer to this last semester) ()	

Q14 Quanto frequentemente utilizzate ChatGPT su base mensile? (indicare il numero di volte in un mese)

	0 5 10 15 20 25 30 35 40 45 50
Quante volte in un mese? (Riferirsi all'ultimo semestre) ()	

Q15 For which activity did you mainly use ChatGPT during this last semester?

- ○ Projects (1)
- ○ Assignments (2)
- ○ Thesis (3)
- ○ Asking suggestions (4)
- ○ Asking clarifications (5)
- ○ Just for fun or Curiosity (6)
- ○ Others (7)

Q15 Per quale attività ha utilizzato principalmente ChatGPT durante l'ultimo semestre?

- ○ Progetti (1)
- ○ Compiti, Verifiche intermedie (2)
- ○ Tesi (3)
- ○ Chiedere suggerimenti (4)
- ○ Chiedere chiarificazioni (5)
- ○ Solo per divertimento o curiosità (6)
- ○ Altro (7)

Interruzione di pagina

Q16 Are you aware that only in Italy ChatGPT has been banned by the Data Protection Authority?

- ○ Yes (1)
- ○ No (2)

Q16 Sei a conoscenza che solo in Italia ChatGPT è stato vietato dal Garante per la protezione dei dati personali?

- ○ Sì (1)
- ○ No (2)

Interruzione di pagina

Q17 How much has your perception of ChatGPT changed knowing this measure? (0 = "Not at all"; 7 = "A great deal")

	Not at all	A little	A moderate amount	A lot	A great deal
	0	1 2	3 4	5 6	7
Degree of influence ()					

Q17 Quanto è cambiata la sua percezione di ChatGPT conoscendo questa misura? (0 = "Per niente"; 7 = "Molto")

	Per niente	Un po'	Moderatamente	Considerevolmente	Molto
	0	1 2	3 4	5 6	7
Grado di influenza ()					

Fine blocco: ChatGPT

Inizio blocco: Demographics

Q18 What is your age?

_____

Q18 Quanti anni hai? (Indica un numero intero)

_____

Q19 What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Non-binary / third gender (3)
- ○ Others (4)
- ○ Prefer not to say (5)

Q19 Qual è il tuo genere?

- ○ Uomo (1)
- ○ Donna (2)
- ○ Non binario (3)
- ○ Altro (4)
- ○ Preferisco non dirlo (5)

Q20 Please indicate your nationality:

- ○ Italian (1)
- ○ Not Italian (European country) (2)
- ○ Not Italian (not European country) (3)

Q20 Indica la tua nazionalità:

- ○ Italiana (1)
- ○ Non italiana (un paese europeo) (2)
- ○ Non italiana (paese non europeo) (3)

Q21 Where do you live?

- ○ Not in Italy (1)
- ○ North Italy (2)
- ○ South Italy/ Islands (3)
- ○ Centre of Italy (4)

Q21 Dove vivi?

- ○ Non in Italia (1)
- ○ Nord Italia (2)
- ○ Sud Italia/ Isole (3)
- ○ Centro Italia (4)

Interruzione di pagina

Q22 What is the highest level of education you have completed?

- ○ Middle School Degree (1)
- ○ High School Degree (2)
- ○ Bachelor's Degree (3)
- ○ Master's Degree (4)
- ○ Others (5)

Q22 Qual è il più altro grado di educazione che hai completato?

- ○ Scuole medie (1)
- ○ Scuola superiore (2)
- ○ Laurea Triennale (3)
- ○ Laurea Magistrale (4)
- ○ Altro (5)

Q23 Now or in the future, in which field are you most interested in working?

- ○ Cognitive or analytical field (Finance, management, IT, etc.) (1)
- ○ Manual or physical field (manufacturing, construction or maintenance) (2)
- ○ Social or people- oriented field (Customer service, teaching, nursing) (3)

Q23 Ora o in futuro, in quale campo sei più interessato a lavorare?

- ○ Cognitivo o analitico (Finanza, management, IT, ecc.) (1)
- ○ Manuale o fisico (manufatturiero, costruzioni or manutenzione) (2)
- ○ Sociale o orientato alla persona (Customer service, insegnamento infermieristico) (3)

Q24 Do you have computer science or programming experience?

- ○ Yes (1)
- ○ No (2)

Q24 Hai competenze di computer science o programmazione?

- ○ Sì (1)
- ○ No (2)

Interruzione di pagina

Q25 Which are the sources of information you use the most?

- ○ Social media (1)
- ○ Web (blogs, articles) (2)
- ○ Print newspapers (3)
- ○ Television (4)
- ○ Radio (5)

Q25 Qual è la fonte di informazione che usi maggiormente?

- ○ Social media (1)
- ○ Web (blog, articoli) (2)
- ○ Giornali (3)
- ○ Televisione (4)
- ○ Radio (5)

Fine blocco: Demographics

Variable used in the Statistical Analysis

Experiment question	*Variable Recoded*	*Variable Meaning*
Q5	Future_perc	Attitude towards the future of AI (pessimistic, optimistic, neutral)
Q6		Degree of support of the development of AI (7-point Likert Scale)
Q8	Barriers_to_adopt Barriers_classes (recoded in 3 classes)	Degree of barriers to adopt AI: the higher the score, the higher the barriers to adoption
Q7 (all items)	Gov_interference Gov_classes	Degree of influence by government action: the higher is the score registered, the higher is their influence from the government
Q3 (items 1,2,5,6)	Gen_perc_pos	General perception of AI as mean of these items (on a 7-point Likert scale): the higher the mean of the items, the more positive their perception of the AI
Q7 (item 1)	Q7_6_classes	People agree that the government interferes too much in their everyday lives: 3 classes, the higher the class, the more people agree
Q4	TechSkept TechSkept_classes	Degree of technology skepticism as mean of the 4 items: the higher the score, the higher the technology skepticism.
Q14_1	UseChatGPT_classes	Number of times each respondent uses ChatGPT in a month
Q7 (item 2)	Gov_trust_classes	Level of trust towards the government: respondents who entered a value between 0 and 3 (out of 7) are those who accept and welcome government intervention, thus seen as an entity that can be trusted. The higher the class, the lower is the level of trust.
Q13	ChatGPT_fear_classes	Attitude towards ChatGPT: people associated with a score between 0 and 3 see ChatGPT not favourably and therefore as something to be afraid of. The higher is the score, the higher the positive attitude.

Q1	AI_awareness	Level of awareness about AI
Q25	Source_info_traditional Source_info_online	Source of information most used by people, distinguished as traditional (newspaper, radio, television) and online ones (social media, web). Dummy variables.

Statistical Analysis Figures

Hp1

Analysis with people exposed to the positive article (Article=1)

Future_perc * Gov_classes

Crosstab

			Gov_classes			
			1,00	2,00	3,00	Total
Future_perc	Pessimista	Count	7	1	0	8
		% within Future_perc	87,5%	12,5%	0,0%	100,0%
		% within Gov_classes	9,1%	1,2%	0,0%	5,0%
		% of Total	4,4%	0,6%	0,0%	5,0%
	Neutrale	Count	13	23	0	36
		% within Future_perc	36,1%	63,9%	0,0%	100,0%
		% within Gov_classes	16,9%	28,4%	0,0%	22,5%
		% of Total	8,1%	14,4%	0,0%	22,5%
	Ottimista	Count	57	57	2	116
		% within Future_perc	49,1%	49,1%	1,7%	100,0%
		% within Gov_classes	74,0%	70,4%	100,0%	72,5%
		% of Total	35,6%	35,6%	1,3%	72,5%
Total		Count	77	81	2	160
		% within Future_perc	48,1%	50,6%	1,3%	100,0%
		% within Gov_classes	100,0%	100,0%	100,0%	100,0%
		% of Total	48,1%	50,6%	1,3%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8,039[a]	4	,090
Likelihood Ratio	9,071	4	,059
Linear-by-Linear Association	,489	1	,484
N of Valid Cases	160		

a. 5 cells (55,6%) have expected count less than 5. The minimum expected count is ,10.

Future_perc * TechSkept_classes

Crosstab

			TechSkept_classes 1,00	2,00	Total
Future_perc	Pessimista	Count	4	4	8
		% within Future_perc	50,0%	50,0%	100,0%
		% within TechSkept_classes	5,4%	9,8%	7,0%
		% of Total	3,5%	3,5%	7,0%
	Neutrale	Count	7	13	20
		% within Future_perc	35,0%	65,0%	100,0%
		% within TechSkept_classes	9,5%	31,7%	17,4%
		% of Total	6,1%	11,3%	17,4%
	Ottimista	Count	63	24	87
		% within Future_perc	72,4%	27,6%	100,0%
		% within TechSkept_classes	85,1%	58,5%	75,7%
		% of Total	54,8%	20,9%	75,7%
Total		Count	74	41	115
		% within Future_perc	64,3%	35,7%	100,0%
		% within TechSkept_classes	100,0%	100,0%	100,0%
		% of Total	64,3%	35,7%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10,694[a]	2	,005
Likelihood Ratio	10,345	2	,006
Linear-by-Linear Association	7,073	1	,008
N of Valid Cases	115		

a. 1 cells (16,7%) have expected count less than 5. The minimum expected count is 2,85.

Future_perc * Barriers_classes

Crosstab

			Barriers_classes 1,00	2,00	3,00	Total
Future_perc	Pessimista	Count	3	5	0	8
		% within Future_perc	37,5%	62,5%	0,0%	100,0%
		% within Barriers_classes	3,3%	7,6%	0,0%	5,0%
		% of Total	1,9%	3,1%	0,0%	5,0%
	Neutrale	Count	18	18	0	36
		% within Future_perc	50,0%	50,0%	0,0%	100,0%
		% within Barriers_classes	19,6%	27,3%	0,0%	22,5%
		% of Total	11,3%	11,3%	0,0%	22,5%
	Ottimista	Count	71	43	2	116
		% within Future_perc	61,2%	37,1%	1,7%	100,0%
		% within Barriers_classes	77,2%	65,2%	100,0%	72,5%
		% of Total	44,4%	26,9%	1,3%	72,5%
Total		Count	92	66	2	160
		% within Future_perc	57,5%	41,3%	1,3%	100,0%
		% within Barriers_classes	100,0%	100,0%	100,0%	100,0%
		% of Total	57,5%	41,3%	1,3%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3,980[a]	4	,409
Likelihood Ratio	4,451	4	,348
Linear-by-Linear Association	1,977	1	,160
N of Valid Cases	160		

a. 5 cells (55,6%) have expected count less than 5. The minimum expected count is ,10.

Analysis with people exposed to the negative article (Article=0)

Future_perc * Gov_classes

Crosstab

			Gov_classes		
			1,00	2,00	Total
Future_perc	Pessimistic	Count	17	11	28
		% within Future_perc	60,7%	39,3%	100,0%
		% within Gov_classes	34,7%	22,4%	28,6%
		% of Total	17,3%	11,2%	28,6%
	Neutral	Count	19	21	40
		% within Future_perc	47,5%	52,5%	100,0%
		% within Gov_classes	38,8%	42,9%	40,8%
		% of Total	19,4%	21,4%	40,8%
	Optimistic	Count	13	17	30
		% within Future_perc	43,3%	56,7%	100,0%
		% within Gov_classes	26,5%	34,7%	30,6%
		% of Total	13,3%	17,3%	30,6%
Total		Count	49	49	98
		% within Future_perc	50,0%	50,0%	100,0%
		% within Gov_classes	100,0%	100,0%	100,0%
		% of Total	50,0%	50,0%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1,919[a]	2	,383
Likelihood Ratio	1,931	2	,381
Linear-by-Linear Association	1,708	1	,191
N of Valid Cases	98		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 14,00.

Future_perc * Barriers_classes

Crosstab

			Barriers_classes			
			1,00	2,00	3,00	Total
Future_perc	Pessimistic	Count	9	17	2	28
		% within Future_perc	32,1%	60,7%	7,1%	100,0%
		% within Barriers_classes	32,1%	25,8%	50,0%	28,6%
		% of Total	9,2%	17,3%	2,0%	28,6%
	Neutral	Count	10	30	0	40
		% within Future_perc	25,0%	75,0%	0,0%	100,0%
		% within Barriers_classes	35,7%	45,5%	0,0%	40,8%
		% of Total	10,2%	30,6%	0,0%	40,8%
	Optimistic	Count	9	19	2	30
		% within Future_perc	30,0%	63,3%	6,7%	100,0%
		% within Barriers_classes	32,1%	28,8%	50,0%	30,6%
		% of Total	9,2%	19,4%	2,0%	30,6%
Total		Count	28	66	4	98
		% within Future_perc	28,6%	67,3%	4,1%	100,0%
		% within Barriers_classes	100,0%	100,0%	100,0%	100,0%
		% of Total	28,6%	67,3%	4,1%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3,694[a]	4	,449
Likelihood Ratio	5,126	4	,275
Linear-by-Linear Association	,015	1	,901
N of Valid Cases	98		

a. 3 cells (33,3%) have expected count less than 5. The minimum expected count is 1,14.

Future_perc * TechSkept_classes

Crosstab

			TechSkept_classes			
			1,00	2,00	3,00	Total
Future_perc	Pessimistic	Count	0	16	12	28
		% within Future_perc	0,0%	57,1%	42,9%	100,0%
		% within TechSkept_classes	0,0%	29,1%	60,0%	28,6%
		% of Total	0,0%	16,3%	12,2%	28,6%
	Neutral	Count	8	28	4	40
		% within Future_perc	20,0%	70,0%	10,0%	100,0%
		% within TechSkept_classes	34,8%	50,9%	20,0%	40,8%
		% of Total	8,2%	28,6%	4,1%	40,8%
	Optimistic	Count	15	11	4	30
		% within Future_perc	50,0%	36,7%	13,3%	100,0%
		% within TechSkept_classes	65,2%	20,0%	20,0%	30,6%
		% of Total	15,3%	11,2%	4,1%	30,6%
Total		Count	23	55	20	98
		% within Future_perc	23,5%	56,1%	20,4%	100,0%
		% within TechSkept_classes	100,0%	100,0%	100,0%	100,0%
		% of Total	23,5%	56,1%	20,4%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	28,948[a]	4	<,001
Likelihood Ratio	32,410	4	<,001
Linear-by-Linear Association	20,523	1	<,001
N of Valid Cases	98		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 5,71.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	28,948[a]	4	<,001
Likelihood Ratio	32,410	4	<,001
Linear-by-Linear Association	20,523	1	<,001
N of Valid Cases	98		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 5,71.

Symmetric Measures

		Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Nominal by Nominal	Phi	,544			<,001
	Cramer's V	,384			<,001
	Contingency Coefficient	,478			<,001
Interval by Interval	Pearson's R	-,460	,086	-5,076	<,001[c]
Ordinal by Ordinal	Spearman Correlation	-,461	,087	-5,091	<,001[c]
N of Valid Cases		98			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Hp2

Analysis with people exposed to the positive article (Article=1)

Q7_6_classes * Gov_classes

Crosstab

			Gov_classes			
			1,00	2,00	3,00	Total
Q7_6_classes	1,00	Count	74	54	0	128
		% within Q7_6_classes	57,8%	42,2%	0,0%	100,0%
		% within Gov_classes	96,1%	66,7%	0,0%	80,0%
		% of Total	46,3%	33,8%	0,0%	80,0%
	2,00	Count	3	15	0	18
		% within Q7_6_classes	16,7%	83,3%	0,0%	100,0%
		% within Gov_classes	3,9%	18,5%	0,0%	11,3%
		% of Total	1,9%	9,4%	0,0%	11,3%
	3,00	Count	0	12	2	14
		% within Q7_6_classes	0,0%	85,7%	14,3%	100,0%
		% within Gov_classes	0,0%	14,8%	100,0%	8,8%
		% of Total	0,0%	7,5%	1,3%	8,8%
Total		Count	77	81	2	160
		% within Q7_6_classes	48,1%	50,6%	1,3%	100,0%
		% within Gov_classes	100,0%	100,0%	100,0%	100,0%
		% of Total	48,1%	50,6%	1,3%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	42,801[a]	4	<,001
Likelihood Ratio	38,425	4	<,001
Linear-by-Linear Association	30,377	1	<,001
N of Valid Cases	160		

a. 3 cells (33,3%) have expected count less than 5. The minimum expected count is ,18.

Symmetric Measures

		Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Nominal by Nominal	Phi	,517			<,001
	Cramer's V	,366			<,001
	Contingency Coefficient	,459			<,001
Interval by Interval	Pearson's R	,437	,057	6,109	<,001[c]
Ordinal by Ordinal	Spearman Correlation	,415	,058	5,739	<,001[c]
N of Valid Cases		160			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Q7_6_classes * Barriers_classes

Crosstab

			Barriers_classes			
			1,00	2,00	3,00	Total
Q7_6_classes	1,00	Count	77	49	2	128
		% within Q7_6_classes	60,2%	38,3%	1,6%	100,0%
		% within Barriers_classes	83,7%	74,2%	100,0%	80,0%
		% of Total	48,1%	30,6%	1,3%	80,0%
	2,00	Count	5	13	0	18
		% within Q7_6_classes	27,8%	72,2%	0,0%	100,0%
		% within Barriers_classes	5,4%	19,7%	0,0%	11,3%
		% of Total	3,1%	8,1%	0,0%	11,3%
	3,00	Count	10	4	0	14
		% within Q7_6_classes	71,4%	28,6%	0,0%	100,0%
		% within Barriers_classes	10,9%	6,1%	0,0%	8,8%
		% of Total	6,3%	2,5%	0,0%	8,8%
Total		Count	92	66	2	160
		% within Q7_6_classes	57,5%	41,3%	1,3%	100,0%
		% within Barriers_classes	100,0%	100,0%	100,0%	100,0%
		% of Total	57,5%	41,3%	1,3%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8,900[a]	4	,064
Likelihood Ratio	9,215	4	,056
Linear-by-Linear Association	,046	1	,830
N of Valid Cases	160		

a. 3 cells (33,3%) have expected count less than 5. The minimum expected count is ,18.

Q7_6_classes * TechSkept_classes

Crosstab

			TechSkept_classes		
			1,00	2,00	Total
Q7_6_classes	1,00	Count	112	16	128
		% within Q7_6_classes	87,5%	12,5%	100,0%
		% within TechSkept_classes	85,5%	55,2%	80,0%
		% of Total	70,0%	10,0%	80,0%
	2,00	Count	7	11	18
		% within Q7_6_classes	38,9%	61,1%	100,0%
		% within TechSkept_classes	5,3%	37,9%	11,3%
		% of Total	4,4%	6,9%	11,3%
	3,00	Count	12	2	14
		% within Q7_6_classes	85,7%	14,3%	100,0%
		% within TechSkept_classes	9,2%	6,9%	8,8%
		% of Total	7,5%	1,3%	8,8%
Total		Count	131	29	160
		% within Q7_6_classes	81,9%	18,1%	100,0%
		% within TechSkept_classes	100,0%	100,0%	100,0%
		% of Total	81,9%	18,1%	100,0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	25,281[a]	2	<,001
Likelihood Ratio	19,457	2	<,001
Linear-by-Linear Association	4,891	1	,027
N of Valid Cases	160		

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is 2,54.

Analysis with people exposed to the negative article (Article=0)

Q7_6_classes * Barriers_classes

Crosstab

Count

		Barriers_classes			
		1,00	2,00	3,00	Total
Q7_6_classes	1,00	23	47	2	72
	2,00	3	15	0	18
	3,00	2	4	2	8
Total		28	66	4	98

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11,913[a]	4	,018
Likelihood Ratio	8,149	4	,086
Linear-by-Linear Association	2,758	1	,097
N of Valid Cases	98		

a. 4 cells (44,4%) have expected count less than 5. The minimum expected count is ,33.

Symmetric Measures

		Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Nominal by Nominal	Phi	,349			,018
	Cramer's V	,247			,018
	Contingency Coefficient	,329			,018
Interval by Interval	Pearson's R	,169	,118	1,676	,097[c]
Ordinal by Ordinal	Spearman Correlation	,152	,102	1,508	,135[c]
N of Valid Cases		98			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Q7_6_classes * Gov_classes

Crosstab

Count

		Gov_classes		
		1,00	2,00	Total
Q7_6_classes	1,00	48	24	72
	2,00	1	17	18
	3,00	0	8	8
Total		49	49	98

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	30,222[a]	2	<,001
Likelihood Ratio	36,475	2	<,001
Linear-by-Linear Association	26,530	1	<,001
N of Valid Cases	98		

a. 2 cells (33,3%) have expected count less than 5. The minimum expected count is 4,00.

Symmetric Measures

		Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Nominal by Nominal	Phi	,555			<,001
	Cramer's V	,555			<,001
	Contingency Coefficient	,485			<,001
Interval by Interval	Pearson's R	,523	,057	6,012	<,001[c]
Ordinal by Ordinal	Spearman Correlation	,553	,063	6,501	<,001[c]
N of Valid Cases		98			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Q7_6_classes * TechSkept_classes

Crosstab

Count

		TechSkept_classes			
		1,00	2,00	3,00	Total
Q7_6_classes	1,00	20	38	14	72
	2,00	3	13	2	18
	3,00	0	4	4	8
Total		23	55	20	98

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8,058[a]	4	,089
Likelihood Ratio	9,034	4	,060
Linear-by-Linear Association	3,826	1	,050
N of Valid Cases	98		

a. 5 cells (55,6%) have expected count less than 5. The minimum expected count is 1,63.

Symmetric Measures

		Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Nominal by Nominal	Phi	,287			,089
	Cramer's V	,203			,089
	Contingency Coefficient	,276			,089
Interval by Interval	Pearson's R	,199	,091	1,985	,050[c]
Ordinal by Ordinal	Spearman Correlation	,161	,093	1,596	,114[c]
N of Valid Cases		98			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.