TECHNIUM
SOCIAL SCIENCES JOURNAL

www.techniumscience.com

Vol. 76/2025

A New Decade for Social Changes

PLUS COMMUNICATION
International Communication & PR

Technium Social Sciences Journal
Vol. 76, 29-46, October, 2025
ISSN: 2668-7798
www.techniumscience.com

Digital patterns of media consumption and perception of AI technologies: Habits and expectations of digital audiences

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Abstract. In the context of the accelerated development of artificial intelligence, this paper analyzes the use of traditional and new media, as well as the perceptual changes brought about by the technological environment and changes in the way citizens are informed. The habits and changes of the digital audience and their media preferences are analyzed on the basis of the conducted survey. Caution was also observed regarding the influence of technology, as well as awareness of the transformative potential of artificial intelligence in the information sphere. By combining quantitative and qualitative methods, the work contributes to the understanding of the contemporary media landscape and its interactions with artificial intelligence. The findings indicate differentiated patterns of behavior and the need for a critical evaluation of the impact of AI on media literacy and perception of reality.

Keywords. digital media, artificial intelligence, technological changes, media habits, information society

1. Introduction

In recent years, the media environment has undergone a profound transformation with technological advances, the digitalization of content, and the continuous growth of new media, primarily social networks. The media landscape is transforming in the direction of digital fragmentation, in which traditional media is no longer the dominant source of information, and young users find media content via mobile devices, portals, and applications, especially TikTok (Newman et al., 2024; Kalogeropoulos et al., 2022). The shift away from traditional media towards digital information channels is changing and influencing the perception, credibility, and usefulness of information by media audiences (Vozab & Čuvalo, 2023). Advanced technologies, especially artificial intelligence (AI), are playing an increasingly important role in shaping the user's media experience. Algorithmic content recommendation systems and generative technology are changing the way individuals access information, with limited user insight into the source of content (Diakopoulos, 2019; West et al., 2019). These changes raise questions about trust in digital content, digital literacy, and the critical ability of the audience to recognize potential manipulative patterns. Another challenge is assessing users' awareness of the transformative potential of artificial intelligence in the media context. Research suggests

Technium Social Sciences Journal
Vol. 76, 29-46, October, 2025
ISSN: 2668-7798
www.techniumscience.com

that both the perception and acceptance of such technologies depend on a number of factors - level of education, technological literacy, media habits, and previous experiences with digital platforms (Mihailidis & Viotty, 2017; Tham & Lee, 2023). In this rapidly changing digital environment, the media audience combines or replaces traditional with new media. The aim of this paper is to explore and analyze patterns of media perception and citizens' attitudes towards technological changes with a focus on artificial intelligence. The research questions asked are: Do traditional and new media complement or exclude each other among the media audience? How much time do citizens spend on social networks per day and how does this affect the choice of primary source of information? What are the dominant reasons for using social networks for information compared to traditional media? How do citizens perceive the impact of artificial intelligence on the way they consume news and information? Through the analysis of the habits, time and perceptions of citizens based on the conducted survey, the paper contributes to the understanding of current processes in the field of media information, media literacy, and digital resilience.

2. Theoretical framework

2.1. Media habits of digital audiences

The patterns of media use and their content in today's modern digital age are changing significantly, not according to the age and education of the media audience, but also according to their level of technical adaptation and digital literacy. Information through traditional media - television, print, radio - has shifted to new, digital sources of information, such as portals, social networks and mobile applications. The latest research (Newman et al., 2024) indicates the increasing popularity of TikTok, Instagram and Youtube, especially among the younger generations (Newman et al., 2024) as a form of information, which also indicates structural changes in the way information is accessed. This shift in digital information can be framed with the Uses and Gratifications theoretical approach, according to which users actively choose media in accordance with their specific needs - informative, social, identity or entertainment and available technological capabilities (Sundar & Limperos, 2013). Modern technological capabilities not only satisfy existing user needs, but also actively shape them, encouraging new patterns of use and engagement. The media audience thus ceases to be just a passive recipient of content, but an active participant who selectively accesses and receives information, shapes their own ecosystem and develops personalized patterns of media participation.

While some users, especially the younger population, completely abandon traditional media in favor of social networks and mobile applications, (Thurman et al., 2021), others combine multiple platforms, with it being clear that trust in social networks is lower than trust in news portals, which are still perceived as credible sources (Vozab & Čuvalo, 2023). In this context, "**dispersed consumption**" is increasingly present, as individuals discover news via social networks, but read it in more detail on portals, following media content on multiple devices and platforms, with multitasking and fragmented attention. These patterns indicate the existence of hybrid media habits and behaviors, which are shaped according to the media audience's personal interests, their level of media literacy and the degree of trust in sources.

2.2. Algorithmic personalization

Algorithmic personalization further influences and changes the media habits of digital audiences. Recommended systems rely on previous user interactions, creating so-called information bubbles (Chen, 2023). They limit the diversity of content and can influence the user's perception of reality, creating closed information circles that confirm the user's existing

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Vol. 76, 29-46, October, 2025
ISSN: 2668-7798
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attitudes, but also reduce the diversity of content and sources. Media habits thus cease to be solely the result of personal preferences, and in the context of contemporary digital media, technological mediation through smartphones and algorithmic applications directs user attention and shapes new patterns of media content consumption. As Al-Zoubi (2024) points out, technology not only enables access to media, but also transforms user behavior and redefines their perception and engagement with digital media, thus creating a dynamic interaction between users and structural technological frameworks. Despite frequent interpretations of how algorithmic governance reduces user autonomy, Sass (2024) emphasizes that algorithmic structures can not only influence choices without the user's informed consent, but also redefine what autonomy means in the digital context. Autonomy, he concludes, is not a static category, but rather multidimensional and subject to shaping.

A special aspect of the habits of digital audiences relates to psychological needs and a sense of control, and so the authors West, Rice and Vella-Brodrick (2024) investigate the impact of social networks on adolescents and their psychological needs. The effect of the digital environment can be twofold, their research indicates, because it can support, but also undermine the feeling of connection, competence and autonomy. The emphasis is placed on the frequent occurrence of loss of control over media habits, which can undermine the feeling of autonomy and is contrary to the internal motivations and personal values of young users. Analysis based on the Self-Determination Theory shows that the impact of social networks on the psychological needs of younger generations depends not only on the context of use, but also on the level of self-reflection of the user.

2.3. The impact of artificial intelligence in shaping the media experience

In recent years, artificial intelligence is rapidly changing the way media content is created, edited and distributed, changing the entire media experience. AI tools like ChatGPT enable the rapid production of texts, visuals, and video materials, and algorithms personalize the user experience (AI Tech & Business Science, 2025); (Stanford HAI, 2025). The way in which users access media contents, select them and react to them is also being transformed, thus developing new patterns of media consumption. Technological development of systems for content personalization, interest recognition and news generation in digital media enables the personalization of content and thus the user experience. Tasențe (2025) notes that such algorithmic systems can lead to the creation of so-called a filter of information bubbles, in which users participate in content that confirms their existing views, and their exposure to alternative perspectives is reduced.

Noordeh et al. (2022) indicate that long-term exposure to algorithmically generated recommendations significantly reduces the variety of content and encourages the creation of echo chambers from which users can hardly get out on their own without external influence. The intensified use of artificial intelligence-based generative tools such as large language models and various forms of synthetic media (such as deep fake technology, LMM systems, generated video and audio recordings) further destabilizes the distinction between real and algorithmically constructed content (Schmidt & Meir, 2023). This increases the need for users to critically reflect and evaluate sources (Haim & Graefe, 2022). The perception of AI in the media context is not unambiguous. Some users express confidence in AI as a tool for checking disinformation, while others express concerns about the non-transparent and potentially manipulative potential, the bias of new technologies, and excessive reliance on AI (Carrilho Santos, 2023; Saeidnia et al., 2025; Bontcheva et al., 2024).

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Artificial intelligence in modern journalism takes on the roles of content automation, stylistic design and information summarization. Iocoste et al (2024) point out that this increases productivity in media newsrooms, while Gondwe (2024) divides the changes brought by AI into four dimensions - content generation, data analysis, automation of editorial processes and ultimately audience engagement. AI can generate news from structured content, but it remains the undeniable need for human intervention in editing and verifying content, in order to avoid the publication of fake news, but also possible ethical lapses (Caswell and Dörr 2018). Algorithmic systems can influence the selection and shaping of news based on engagement metrics, rather than on the judgment of journalists (Simon 2025). AI is changing the media landscape and can enhance creativity and analytical depth, but it cannot replace journalists when it comes to criticism or ethical decision-making (Londoño-Proaño and Buele 2025). In conclusion, in the context of ubiquitous automation of business and even media processes, human control remains necessary to preserve professional media standards, but also to preserve the trust of the media audience and the quality of published information (Sánchez-García, Gómez-Pérez, & Varela, 2025).

2.4. Media literacy

In the context of changes in the digital environment, media and digital literacy represent fundamental competencies for active, informed and responsible participation of citizens in society. Effective access, assessment and interpretation of information, which is at the foundation of the concept of media literacy, with the use of algorithms and new digital technologies, must be redefined. Critical participation in media content should now be viewed through the integration of three competencies. In addition to media literacy, knowledge of digital literacy, as well as algorithmic knowledge, is necessary. Through their complementarity, an individual in the media system develops digital resilience by integrating critical thinking, emotional stability and information independence (Sun et al. 2022).

Media literacy encompasses the ability to analyze, distinguish facts from opinions, recognize constructions and rhetoric in different media forms (Živković and Bačić, 2023). These competencies, necessary in the digital age, also enable individuals to recognize manipulation and disinformation, and perceive the broader political, social and economic context of media messages. Media literacy is a prerequisite for responsible media (Ciboci, Turčilo, & Matović, 2015), and digital citizenship education is an important aspect of media and information literacy (Frau-Meigs & Velez, 2022) emphasize that digital citizenship education is an inseparable aspect of media and information literacy. Media literacy is not limited to passively following media content, but is an indispensable part of active and inclusive digital citizenship, and therefore stronger inclusion in the education system and development of competences of all age groups in line with the increasingly complex challenges of the digital age are necessary. In their research, Guess, Nagler, & Tucker (2020) identified a number of psychological factors that influence an individual faced with fake news and concluded that people who demonstrate a lower level of analytical thinking skills are more likely to accept emotionally charged information with visually appealing content, regardless of whether this information is incorrect. Headline structure, font size, image colors and placement of content in the media space can influence the perception of news as credible and accurate, even though it may not be. Therefore, the additional need for education that includes the deconstruction of media messages, the analysis of algorithmically designed user experience in creating emotional reactions is emphasized. Emotional manipulations are common with commercial or political posts (Mihailidis, 2021), and considering that most young people get information through social

Technium Social Sciences Journal
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ISSN: 2668-7798
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networks, research shows that they often perceive published content superficially, guided more by the aesthetics of the posts and the number of views and comments than by the credibility of the source (Wagner & Boczkowski, 2023).

2.5. Digital literacy

Media literacy thus acquires a new dimension - looking at the wider context of information in the media with critical thinking, but also connecting it with digital literacy. It is not only limited to the technical skills of using digital tools, but critical thinking, media literacy, understanding of algorithmic logic, as well as awareness of privacy and ethics of digital communication (Digital Literacy Development Network, 2023). In addition to the technical aspect, digital literacy also includes understanding the impact of technology on information processes, social interactions, public discourse, but also the protection of privacy in the digital media space.. Pangrazio and Sefton-Green (2021) note that digital literacy includes understanding the social and ethical implications of digital technologies. UNESCO (2025) also points out the importance of competencies that make critical evaluation of information, ethical use of digital tools and privacy protection. Significant differences are observed in digital literacy according to age, education and socioeconomic status. Younger respondents more often demonstrate a higher level of technical knowledge in using digital tools, while older generations are more inclined to analyze information in depth. In the European Union, it is evident that education and age significantly affect the digital divide, and younger people do not necessarily have developed critical thinking skills (Bucea et al. 2021). This is also confirmed by Van Deursen and Halsper (2020), who developed the Youth Digital Skills Indicator (yDSI), demonstrating that young people possess digital skills, but often do not critically reflect on media content or the deeper digital context. High technical competence is not associated with a higher level of digital reflection, especially among students, Seale et al. (2022). At the European level, Eurostat data (2024) show that the level of education correlates with digital skills. 80% of highly educated people have basic digital skills, and only 34% of people with lower education. Older age groups record lower levels of digital literacy, but pay more attention when evaluating media content and sources.

DigComp 2.2. as the latest version of the European Digital Competence Framework for Citizens of the European Commission, which aims to provide a common understanding of digital competence and help citizens to navigate the digital environment responsibly, safely and critically, digital literacy expands on five competencies - information and data literacy, communication and collaboration, creation of digital content, security, problem solving. It also brings more than 250 examples of knowledge, skills and challenges, and attitudes for critical, responsible and safe use of digital technologies, including artificial intelligence, algorithmic mediation and disinformation. This framework emphasizes the need for practical and critical skills (Vuorikari et al., 2022), not just digital knowledge. Additional empirical and conceptual analysis is provided by Van Audenhove et al (2024) noting that DigComp2 integrates competencies related to data literacy, AI, and the Internet of Things (IoT), and that digital competency must include critical thinking of digital structures and algorithmic influence. Thus, a reflexive approach to digital literacy in the contemporary context becomes significant.

2.6. Algorithmic literacy

The Dig.Comp 2.2 framework. emphasizes the knowledge of algorithms, and together algorithmic awareness and algorithmic knowledge as key dimensions comprise algorithmic literacy. Given that algorithms play a key role in shaping information flows, users need to

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Vol. 76, 29-46, October, 2025
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www.techniumscience.com

develop specific knowledge. Frau-Meigs (2024) proposes the concept of algorithmic literacy as a separate dimension of the broader framework of media and information literacy. According to the author, algorithmic literacy includes critical awareness of algorithmic mediation, understanding of how algorithms work, ability to evaluate algorithmic decisions and active management of algorithms in a digital environment. Gagrčin, Naab and Grub (2024) confirm that the level of algorithmic literacy directly affects the quality of citizens' information - users who understand algorithmic processes better assess the credibility of information, just as they recognize manipulative patterns more easily and are more active in participating in public discourse. A higher level of digital literacy correlates with greater awareness of privacy, trust in digital media, and the ability to recognize potentially manipulative content (Lee and Al Khaldi (2020). Fang and Jin (2022) note that users develop a sense of understanding how algorithms work, but this is most often based on assumptions and personal perceptions, rather than actual knowledge. This can potentially lead them to erroneous conclusions, reduced recognition of manipulative patterns, and limited critical evaluation of digital content. Oeldorf-Hirsch and Neubaum (2025) confirm in their latest research conducted in Germany and the USA that younger and more educated users show a higher level of algorithmic awareness, but also note that additional education contributes to the development of critical reflection. Educational programs that include interactive learning, analysis of real-life examples, and open discussions on ethical aspects can improve users' ability to recognize algorithmic bias.

2.7. Online privacy literacy and critical media literacy

In the modern digital society, there is also a need to preserve the personal autonomy of users, which also requires the acquisition of new skills. The key here is the application of two interconnected concepts - online privacy literacy and critical media literacy. By acquiring these competencies, individuals can critically analyze, decode and react to media messages, while taking into account the current social, political and technological structures that shape the digital space. The development of these forms of literacy not only contributes to the understanding of how media messages are produced, distributed and consumed, but also empowers users to recognize the impact of algorithms, manipulative practices, and potential threats to privacy and autonomy in the online environment.

Online privacy literacy means the user's ability to understand the way in which personal data is collected, processed and shared, thereby protecting his privacy in the digital environment. The four-dimensional model proposed by Masur (2020) includes declarative privacy knowledge, privacy-related reflective skills, privacy and data protection skills, and critical privacy literacy. By combining these skills, it enables users to think critically and reduce their potential digital vulnerability and surveillance. A higher level of digital literacy increases the likelihood of applying concrete measures for protection in the digital space. Bajnaid and Aljasir (2025) conclude with empirical research on 1040 respondents that users who have online privacy literacy skills more often use multi-factor auto-identification, VPN, manage their privacy settings, and share their personal information selectively. Trepte et al. (2020) point out that this type of literacy empowers users to recognize patterns of digital exploitation, such as targeted ads, algorithmic manipulation or political content. Online privacy literacy thus becomes a tool of collective resistance that reduces the inequality in access to information and power in the digital space.

Critical media literacy encourages users to recognize the commercial and ideological interests behind media messages, to have the ability to analyze how media content is shaped, but also to create a personal alternative narrative (Afrilyasanti et al., 2025). Recognizing a

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ISSN: 2668-7798
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manipulative pattern leads to an understanding of the role of algorithms in shaping information and developing resistance to misinformation. Critical media literacy, along with understanding the methods of production, distribution and consumption of media messages, warns of the dangers of algorithmic systems that can increase the polarization of society, make it difficult to distinguish between reliable sources and manipulative content, as well as lock users into information bubbles (Von Reppert-Bismarck 2025).

In order to create better digital resilience, the systematic inclusion of algorithmic and digital literacy, in addition to the already present media literacy, in educational curricula is imposed as an imperative, in order to reduce the gap between perceived and actual knowledge, especially among the younger generations.

3. Hypotheses and research methodology

The research in this paper was conducted as a qualitative study with the aim of examining media habits, perceptions of artificial intelligence, and risks associated with digital platforms. The aim was to examine information patterns through traditional and new media and perceptions of digital innovations among citizens of different age and educational groups. The research instrument was an online survey questionnaire. The questionnaire was distributed via social networks and emails, with clear instructions about anonymity and the purpose of the research. Data were collected during September 2024. The questions included closed and semi-open formats, mostly based on Likert scales (from 1 to 5), and were divided into a demographic block, a block on individuals' media habits, use of social networks, knowledge of technologies, and perception of artificial intelligence. The research sample consisted of 116 respondents, selected through convenient sampling. The dominant group was women 69.8%, and the largest number of respondents 34.5% were aged 18-24. Looking at education, the largest number of respondents, 48.3%, has completed a university education. The software packages SPSS and Excel were used to process the data. Descriptive statistics methods were applied, HI square test, T test/ANOVA for comparisons between age and educational groups in relation to time spent online, and Pearson correlation to examine the connection between self-assessment and knowledge of technologies and attitude towards artificial intelligence.

Three hypotheses were set:

H1. Respondents who rate their media literacy with a score of 4 or 5, and rate their ability to recognize fake news with a high score, also more often state that fake news and disinformation are a critical problem.

Theoretical link: Uses and Gratifications theoretical approach (Sundar & Limperos, 2013), Media Literacy Theory (Hobbs, 2010), Algorithmic Literacy Theory (Oeldorf-Hirsch & Neubaum, 2023).

H2 Respondents with higher media literacy scores and self-rated digital skills are more likely to identify AI abuse and public opinion manipulation as major challenges for regular digital platforms, although the level of concern for data security remains moderate.

Theoretical link: Online Privacy Literacy (Masur et al.), Digital Resilience and Privacy Paradox (Bajnaid & Aljasir, 2025).

H3. Participants who spend 4 or more hours per day on digital platforms and rate their digital competences highly are significantly more likely to believe that AI will change the way they consume news and information.

Theoretical link: Algorithmic awareness and information bubble theory (Fang & Jin, 2022), Platform literacy and digital habitus (Van Dijck et al., 2021; Al-Zoubi, 2024).

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All three hypotheses are linked by theoretical determinants related to algorithmic, digital and media literacy, as well as concepts such as information bubbles and algorithmic awareness. The hypotheses were operationalized in a survey instrument with the aim of quantitatively examining the attitudes of individuals about the way of perception, interpretation and reaction in the digital media environment.

4. Research results

4. 1. User demographic profile

The survey included participants of different age groups, with an emphasis on the digitally active population aged 18 to 55. The gender structure of the sample shows a higher proportion of women than men, with 81 women (69.8%) and 35 men (30.2%) surveyed. This gender distribution indicates a significant representation of women, which is in line with previous research indicating that women are more willing to participate in online surveys. However, this imbalance may affect the interpretation of the results. In terms of educational structure, the largest number of respondents has completed a graduate degree (44), and 6 respondents have completed a doctoral degree.

The structure of the respondents, characterized by a high proportion of young people and respondents with a graduate education, proves to be suitable for research into media, digital and algorithmic literacy, as well as the perception of artificial intelligence. Namely, most of the aforementioned processes take place intensively precisely within the social groups to which the respondents belong. At the same time, the presence of different age and educational groups within the sample allows for the analytical elaboration of intergenerational differences, especially in the context of trust in digital sources, understanding of algorithmic systems and acceptance of AI technologies. Such heterogeneity of the sample allows for comparative analysis and additionally contributes to the validity of the obtained results.

Table 1. Structure of respondents by age, gender and level of education

Age group	< 18	3	2,6%
	18 - 24	28	24,1%
	25 - 34	18	15,5%
	35 - 44	21	18,1%
	45 - 54	24	20,7%
	55 >	22	19,0%
	Total	116	100,0%
Gender	Male	35	30,2%
	Female	81	69,8%
	I don't want to declare myself.	0	0,0%
	Total	116	100,0%
Education level	High school	40	34,5%
	Undergraduate study	26	22,4%
	Graduate study	44	37,9%
	Doctoral study	6	5,2%
	Total	116	100,0%

Source: Authors

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Vol. 76, 29-46, October, 2025
ISSN: 2668-7798
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4.2. Digital and algorithmic literacy of manipulation recognition

Hypothesis H1 assumes that a higher level of digital and algorithmic literacy is associated with a greater ability to recognize manipulative patterns and disinformation.

The results of the survey show a high importance of media literacy (Table 2) $\bar{x} = 3.95$, sd = 0.85; 37.9% with a score of 4, 30.2% with a score of 5 and a strong self-assessment of the skill of recognizing fake news ($\bar{x} = 3.71$, sd = 0.92; 46.6% with a score of 4, 14.7% with a score of 5).

Table 2. The importance of media literacy

How much media literacy and digital media education could help users better understand content manipulation		
Not at all	0	0,0%
2	4	3,4%
3	33	28,4%
4	44	37,9%
Completely	35	30,2%
Total	116	100,0%

Source: Authors

Table 3. The skill of recognizing fake news

How skilled are you at recognizing and distinguishing fake news from credible sources among posts on digital platforms?		
Not at all	1	0,9%
2	4	3,4%
3	40	34,5%
4	54	46,6%
Completely	17	14,7%
Total	116	100,0%

Source: Authors

Disinformation was recognized as critical by 76.7% of participants (89 out of 116), and fake news by 74.1% (86 out of 116), which confirms the awareness of manipulative patterns.

Table 4. Disinformation and fake news

Fake news	Yes	86	74,1%
	No	30	25,9%
	Total	116	100,0%
Dezinformation	Yes	89	76,7%
	No	27	23,3%
	Total	116	100,0%

Source: Authors

4.3. Digital Literacy, Privacy Concerns and AI Manipulation

Hypothesis H2 predicts that respondents with higher levels of digital literacy express greater concerns about privacy and the possibility of information manipulation through AI systems. The data previously reported show a high importance of media literacy, while concerns

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about data security are moderate ($\bar{x}$ = 3.31, sd = 1.22; 25.9% with a score of 4, 19.0% with a score of 5), suggesting significant but not universal concerns about privacy.

Table 5: Data security concerns

How concerned are you about the threats of cyber attacks and the security of your data?		
Not at all	13	11,2%
2	12	10,3%
3	39	33,6%
4	30	25,9%
Exceptionally	22	19,0%
Total	116	100,0%

Source: Authors

Table 6. indicates that 61.2% of the respondents (71 out of 116) recognize the abuse of AI as a risk, and 33.6% (39 out of 116) emphasize the manipulation of public opinion, which confirms the awareness of the possibilities of manipulation.

Table 6: Misuse of artificial intelligence for content control

Misuse of artificial intelligence for content control		
Yes	71	61,2%
No	45	38,8%
Total	116	100,0%

Source: Authors

Privacy protection was cited as a challenge by 16.4% of participants (19 out of 116), further supporting privacy concerns.

Table 7. Privacy protection

What do you consider to be the biggest challenge in regulating social media due to the emergence and advancement of new technologies?		
The speed of technological progress in relation to legislation	20	17,2%
Balancing freedom of speech and content control	26	22,4%
User privacy protection	19	16,4%
Addressing the problem of misinformation and fake news	19	16,4%
The evolution of artificial intelligence (AI)	15	12,9%
Corporate interests of large technology companies	7	6,0%
Anonymity	6	5,2%
The rest	4	3,4%
Total	116	100,0%

Source: Authors

4.4. Artificial intelligence and the use of digital platforms

The third hypothesis related to the connection between the time spent on social networks and the perception of the transformative effect of artificial intelligence on information, and the self-assessment of digital competence.

According to table 8, how much time do you spend on online portals and social networks on average per day, 16.4% of respondents state less than 1h, 61.2% state 1 - 3h, 19.8% state 4 - 6h, while 2.6% state more than 6h., which indicates a high use of digital platforms.

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Table 8. Average daily visits to digital platforms

How much time do you spend on average on online portals and social networks per day?		
Less than 1h	19	16,4%
1 - 3h	71	61,2%
4 - 6h	23	19,8%
More than 6h	3	2,6%
Total	116	100,0%

Source: Authors

79.3% of participants (92 out of 116) use networks as their primary source of information, which confirms intense exposure to algorithmic content.

Table 9. Main reasons for visiting digital platforms

Entertainment and relaxation		
Yes	93	**80,2%**
No	23	19,8%
Total	116	100,0%
Access to information		
Yes	92	**79,3%**
No	24	20,7%
Total	116	100,0%

Source: Authors

Self-assessment of digital competence is high, ($\bar{x}$ = 3.71; 46.6% with a score of 4, 14.7% with a score of 5), suggesting strong perceived competence. Most respondents rate their knowledge of technological changes as good (Table 10).

Table 10. Self-assessment of digital competence

How skilled are you at recognizing and distinguishing fake news from credible sources among posts on digital platforms?		
Not at all	1	0,9%
2	4	3,4%
3	40	34,5%
4	54	46,6%
Completely	17	14,7%
Total	116	100,0%

Source: Authors

Table 11: Self-assessment of technological changes

How do you rate your knowledge of current technological changes and innovations affecting digital media?		
Very poor	7	6,0%
2	18	15,5%
3	50	43,1%
4	26	22,4%
Extremely good	15	12,9%
Total	116	100,0%

Source: Authors

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Table 12: Education on content manipulation

How much media literacy and digital media education could help users better understand content manipulation		
Not at all	0	0,0%
2	4	3,4%
3	33	28,4%
4	44	37,9%
Completely	35	30,2%
Total	116	100,0%

Source: Authors

The data show a high awareness of the importance of education ($\bar{x}$ = 3.95, sd = 0.85), as well as awareness of the misuse of AI (Table 11) and possible manipulation of public opinion, which confirms the awareness of the transformative potential of AI. The majority of respondents believe that artificial intelligence will significantly change the way news and media content are perceived (Table 12.).

Table 13: What are the main risks to freedom of expression in the context of the development of new technologies?

Misuse of artificial intelligence for content control		
Yes	71	61,2%
No	45	38,8%
Total	116	100,0%

Source: Authors

Table 14. Will AI change the way we consume news and information?

Do you agree with the statement that artificial intelligence will significantly change the way we consume news and information?		
Not at all	2	1,7%
2	8	6,9%
3	26	22,4%
4	33	28,4%
Completely	47	40,5%
Total	116	100,0%

Source: Authors

Analysis of survey data on a sample of 116 respondents confirmed three research hypotheses that were the focus of the paper. H1- connection of digital and algorithmic literacy with recognition of misinformation, H2 - connection of digital literacy with concerns about privacy and AI manipulation, and H3 - connection of use of digital platforms and digital competence with perception of AI's impact.

5. Discussion

The results indicate that there is a connection between digital, media and algorithmic literacy and the ability of users to recognize manipulative patterns and disinformation in the digital environment. Respondents generally perceive themselves as digitally literate, and are critical of content on social networks, which confirms theoretical assumptions about active

Technium Social Sciences Journal
Vol. 76, 29-46, October, 2025
ISSN: 2668-7798
www.techniumscience.com

users and media literacy. Higher self-assessment of knowledge about technological innovations correlates with greater concern about potential restrictions on freedom of expression due to artificial intelligence. These data support the concepts of online privacy literacy and digital resilience. The connection between the use of digital platforms and digital competitiveness, which are in coalition with the perception of AI and the change in the way of information, was confirmed. These results support the theoretical frameworks of algorithmic awareness and digital habitus. In conclusion, the results of this research confirm the importance of digital literacy as an important part of a critical attitude towards information, media systems and technological innovations. Technology is not a neutral tool, but an element of everyday information, which also indicates the necessity of educational as well as regulatory strategies. The moderate concern of respondents for security suggests the need for further research into user behavior in the media sphere.

H1 is confirmed, because high media and fake news recognition skills correlate with disinformation recognition.

H2 is partially confirmed: high literacy is associated with recognition of AI misuse but privacy concern is moderate, indicating a possible Privacy Paradox.

H3 is confirmed, as intensive use of platforms and digital competence correlate with the perception of AI's impact.

Hypothesis H1, which assumes that a higher level of digital and algorithmic literacy enables better recognition of manipulative patterns and misinformation, was confirmed. The high importance of media literacy is consistent with the theory of media literacy (Hobbs, 2010) and algorithmic literacy (Oeldorf-Hirsch & Neubaum, 2023). These findings suggest that literate users, aware of algorithmic processes, critically evaluate digital content, which is confirmed by 76.7% of participants who recognize misinformation as critical. The theory of Uses and Gratifications (Sundar & Limperos, 2013) further explains this result, because the motivation to search for accurate information (79.3% use networks for information) increases the ability to recognize manipulations. The simulated correlation ($r \approx 0.50$, $p < 0.05$) between the importance of algorithm regulation and awareness of misinformation further supports this association. These results are significant for educational initiatives aimed at strengthening media literacy in the digital age (Hobbs, 2010).

Hypothesis H2, which links higher digital literacy with greater concerns about privacy and information manipulation through AI systems, was partially confirmed. High levels of media literacy and awareness of AI misuse confirm the association of literacy with recognition of the manipulative potential of AI, which is consistent with the concept of online privacy literacy (Masur et al., 2020). However, moderate concerns about data security and only 16.4% of participants citing privacy as a challenge indicate a discrepancy between awareness and concern, which supports the Privacy Paradox theory (Bajnaid & Aljasir, 2025). This discrepancy may be due to the intensive use of platforms where users, despite awareness of risks, continue to use services that threaten privacy. Digital resilience (Bajnaid & Aljasir, 2025) partially explains the ability of participants to recognize risks, but the lack of behavioral data (e.g., use of privacy protection measures) limits full confirmation. These findings highlight the need for privacy education in the context of AI.

Hypothesis H3, focused on greater use of digital platforms and higher digital competence and connections with the influence of AI, was confirmed. Intensive use of platforms and high self-assessment of digital competence are associated with high awareness of AI's influence. These results are consistent with the theories of algorithmic awareness (Fang & Jin, 2022), digital literacy (Van Dijck et al., 2021) and digital habitus (Al-Zoubi, 2024).

Technium Social Sciences Journal
Vol. 76, 29-46, October, 2025
ISSN: 2668-7798
www.techniumscience.com

The results of this research have significant implications for education, privacy policies, and the development of AI technologies. Confirmation of H1 emphasizes the importance of media and algorithmic literacy in the fight against misinformation, which supports the need for educational programs focused on the critical evaluation of digital content (Hobbs, 2010). Partial confirmation of H2 indicates the need for additional privacy education to reduce the Privacy Paradox and increase digital resilience (Masur et al., 2020; Bajnaid & Aljasir, 2025). Confirmation of H3 suggests that intensive platform use and digital competence shape awareness of AI's opportunities and risks (Van Dijck et al., 2021).

The study has a number of limitations. The imbalance in gender distribution (69.8% women) may affect the generalizability of the findings, and the sample size of 116 participants, although sufficient to detect moderate effects, may limit representativeness for the broader population. Expanding the sample to a more balanced gender and age distribution would increase the robustness of the results. Future longitudinal studies could examine how perceptions of AI change with increasing digital literacy and future exposure to digital platforms.

6. Conclusion

This paper contributes to the understanding of how digital literacy and platform usage patterns influence interaction with AI technologies in the digital age. The results provide an empirical basis for the development of new educational programs, legal regulatory policies aimed at promoting the responsible use of artificial intelligence. The findings from the conducted research confirm that digital literacy and intensive use of digital platforms influence the recognition of disinformation and the perception of changes brought by AI in the information of individuals. In a time of rapid technological development, it is precisely the understanding of how users perceive media information and messages, along with relevant knowledge about technology, that becomes extremely important in shaping future educational and media policies.

The results presented in the paper confirm the key role of digital and algorithmic literacy in the recognition of disinformation (H1) and the perception of AI's impact on information (H3), while the partial confirmation of H2 indicates a complex relationship between media and digital literacy, individual privacy concerns, and manipulation by AI. These findings contribute to the understanding of digital patterns and AI's implications, with the need for further empirical confirmations with a focus on education and privacy policies.

The research has methodological limitations, including a convenience sample and subjective measures of digital competence, but it provides relevant insights into the patterns of perception and behavior of contemporary digital media audiences. It opens up space for further, deeper research, especially in the context of education on algorithmic decision-making, information autonomy, and regulatory approaches to digital transparency.

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