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THE FUTURE OF ARTIFICIAL INTELLIGENCE IN MEDIA: OPPORTUNITIES AND CHALLENGES

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Abstract: In the context of the dynamic, evolving, and uncertain development and application of artificial intelligence, the question arises regarding the role of technology in the creation and distribution of personalized media content. The aim of this research was to examine the perceptions of citizens of the Republic of Serbia concerning the role and significance of artificial intelligence (AI) in the media, their ability to recognize AI-generated content, as well as the legal, ethical, and professional implications of AI implementation in the media industry. The research sample was selected through opportunistic, convenient sampling and included residents of the Republic Serbia (*n*=113). The findings indicate that respondents are not fully informed about the use of AI in media content creation. It was confirmed that artificial intelligence significantly contributes to the production of unreliable or false news, and that AI is expected to partially replace journalists in the future. Familiarity with and utilization of AI tools facilitate the distribution of personalized content, enabling a more targeted approach to audiences and a substantial enhancement of the user experience, while underscoring the importance of creative work and the continuous strengthening of knowledge and skills in digital literacy. In this new environment, the future of

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journalism is envisioned as a hybrid model based on the synergy of traditional skills and modern competencies.

Ključne reči: *artificial intelligence, media, ethical standards, copyright, credible sources*

BUDUĆNOST VEŠTAČKE INTELIGENCIJE U MEDIJIMA: MOGUĆNOSTI I IZAZOVI

Sažetak: U okruženju dinamičnog, promenjivog i neizvesnog razvoja i primene veštačke inteligencije, nameće se pitanje uloge tehnologije u kreiranju i distribuciji personalizovanih medijskih sadržaja. Cilj istraživanja bio je da se ispitaju percepcije građana Republike Srbije o ulozi i značaju veštačke inteligencije (AI) u medijima, njihovoj sposobnosti da prepoznaju AI generisane sadržaje, kao i pravne i etičke i profesionalne implikacije primene AI u medijskoj industriji. Istraživački uzorak odabran je oportunističkim, pogodnim uzorkovanjem i obuhvatio je stanovnike Republike Srbije (*n*=113). Ustanovljeno je da ispitanici nisu u potpunosti informisani o upotrebi veštačke inteligencije u kreiranju medijskih sadržaja. Dokazano je da veštačka inteligencija ima veliki uticaj na kreiranje nepouzdanih ili lažnih vesti u medijima, kao i da će veštačka inteligencija u budućnosti delimično zameniti novinare. Poznavanje i upotreba alata veštačke intligencije olakšava distribuciju personalizovanih sadržaja, omogućavjući ciljni pristup publici i značajno poboljšanje korisničkog iskustva, istovremeno naglašavajući važnosti kreativnog rada i kontinuiranog osnaživanja znanja i veština digitalne pismenosti. U ovom novom okruženju, budućnost novinarstva se vizuelizuje kroz hibridni model zasnovan na sinergiji tradicionalnih veština i savremenih kompetencija.

Keywords*: veštačka inteligencija, mediji, etički standardi, autorska prava, verodostojnost izvora*

1. INTRODUCTION

The media industry has undergone significant waves of disruption over the past three and a half decades. The first wave was marked by the emergence of the internet, which, during the first decade of the 21st century, enabled digital content distribution. In the following decade, the mode of distribution shifted from downloads to streamingм, both live and on demand. The third wave is currently

unfolding in this decade, driven by the development and integration of artificial intelligence (Granados, 2024).

The application of artificial intelligence in the media is increasingly taking on a rational and strategic dimension, aligned with companies' goals of achieving sustainable and continuous growth, efficiency, and productivity. The processes of content creation, (re)distribution, and consumption have become faster, more accessible, and cost-effective. At the same time, the shaping of not only virtual but also broader societal reality has become a prominent legal and ethical issue. Accountability for untimely, imprecise, or inaccurate media content is increasingly being abdicated, by content creators, distributors, and often by inadequately media-literate audiences.

It must be acknowledged that media credibility has eroded, However, it is equally important to recognize that the media function as a "mirror of society" and are not in a position to lead the implementation of stable ethical standards. Rather, they represent only one segment of broader systemic change. A defining feature of contemporary media is a chronic lack of time, which often drives them beyond legal and ethical boundaries. Fact-checking is increasingly constrained by time pressures, and the context necessary for interpreting news is often completely omitted.

Media content should not be simplistically treated merely as information. Instead, it is essential to evaluate the manner in which content is conveyed and the broader context in which news is embedded. Therefore, the ways in which news is framed and distributed, as well as the precision in targeting specific audiences, significantly shape the perceptions of media consumers. The advent of artificial intelligence has enabled audiences, readers, listeners, and viewers, to rapidly and easily access vast amounts of information. It has also facilitated the creation and distribution of personalized media content, accompanied by continuous feedback on the motivations and loyalty of targeted audiences.

The entire narrative of this research topic must be viewed from the perspective that media do not necessarily seek to impose content that directly influences what audiences think or what opinions they form. Rather, through the selection, framing, and interpretation of topics, they define the boundaries for thought and public discourse, while retaining the ability to favor certain issues over others.

The objective of this study is to collect and analyze the opinions of citizens of the Republic of Serbia regarding the significance of artificial intelligence (AI) in the media. In contemporary society, AI is assuming an increasingly important role in both the production of news content and the dissemination of information.

The research will address several key aspects: the impact of AI on information accuracy, quality control and verification processes, data analysis, and trend forecasting.

2. LITERATURE REVIEW

The use of artificial intelligence for data processing and analysis at the point of collection provides media organizations with a strategic advantage, enabling real-time data gathering, analysis, responsive action, and forecasting of future developments. This forms a powerful platform that, in the context of a dynamic and ever-changing media market, offers organizations a substantial competitive edge in terms of innovation, creativity, and overall performance (Sančanin & Penjišević, 2022).

Due to the high costs and challenges associated with in-house AI development, particularly the need for substantial computing power, competition for technological talent, and the scarcity of large datasets, publishers are increasingly aligning their operations with the services offered by AI platform companies. The convenience, scalability, and cost-effectiveness of these platforms make them attractive, enabling publishers to harness the potential of AI without the financial burden of internal development. However, the inherent complexity of AI also increases the control exercised by platform companies over media organizations, creating lock-in effects that risk tethering media companies to their technological providers. This dynamic restricts the autonomy of media organizations and makes them vulnerable to price increases or shifts in platform priorities (Simon, 2024).

Artificial intelligence has transformed how news is produced and distributed, while simultaneously raising significant ethical and professional concerns. AI-driven systems facilitate the processing of vast amounts of information, enable the personalization of news content, and relieve journalists of routine tasks—allowing them to engage in more complex or creative work. Nevertheless, these systems also contribute to uncertainty and challenge the foundational values upon which journalism has traditionally been built, leading to important implications for the structure and function of the media landscape (Sonni, 2025).

Acknowledging the reality that AI will continue to predict and respond to audience preferences, Surjatmodjo et al. (2024) caution that excessive personalization may result in echo chambers that undermine public discourse. In this context, media organizations are encouraged to develop strategies that balance personalization with the preservation of a healthy and pluralistic public sphere.

The traditional role of the media as "gatekeepers" has been significantly undermined, given that content creation driven by artificial intelligence is now largely governed by algorithms that filter and recommend media products. As Voinea (2025) observes, these algorithms have assumed the role once held exclusively by journalists, determining how news is disseminated. By shaping exposure to various types of information and misinformation, they influence the behavior of professional communicators (van Dalen, 2024).

Vujović (2024) highlights that companies have yet to adequately address the potential risks associated with the use of artificial intelligence, noting that very few have developed clear policies to regulate its application. Even in cases where attention has been paid to possible risks, the focus has primarily been on protecting proprietary information, such as data, knowledge, and intellectual property rights, while broader social, humanitarian, and environmental risks, as well as unintended consequences, have been insufficiently explored or entirely overlooked.

In early 2024, Belić et al. conducted a study involving a sample of 580 participants to assess the public's ability to distinguish between political messages written by humans and those generated by AI. The findings reveal that the majority of respondents were unable to differentiate between the two, raising concerns about the role of artificial intelligence in political communication. The authors suggest that critical reflection on the limits of AI's influence in political contexts is essential to crafting messages that promote transparency, accountability, and democratic values.

Babacan et al. (2025) investigated the integration of artificial intelligence into undergraduate and postgraduate journalism and new media curricula across 72 universities in Turkey. Their findings indicate that AI education is predominantly theoretical, with courses focusing on AI ethics, media algorithms, and the impact of automation on news production, while practical applications, such as AI-assisted content creation, remain relatively rare. The study also highlights an uneven distribution of AI-related courses among institutions, illustrating substantial disparities in curricular depth and focus.

In this context, numerous authors emphasize that AI plays a critical role in the education of future media professionals and in equipping them with the necessary competencies to advance media work in alignment with contemporary technologies (Sančanin et al., 2024; Tejedor et al., 2024).

3. DATA, METHODOLOGY, AND STYLIZED FACTS

The findings of this study may contribute to a better understanding of public awareness and societal needs concerning the regulation and responsible use of artificial intelligence in the news and information industry. Based on this objective, the following research questions have been formulated:

Q1: In what ways does artificial intelligence affect the accuracy and credibility of information in the media?

Q2: What is the nature and extent of the impact that the use of artificial intelligence has on journalism?

Data were collected using *Google Forms*. The research sample was based on opportunistic, convenience sampling and included residents of the Republic of Serbia. A pilot study was conducted with 20 participants. Following the analysis of the pilot data, which involved assessing the content validity of all measured aspects, a final version of the survey was developed and administered to a new group of 113 respondents (n=113). Data collection was carried out between June and August 2025.

The questionnaire consisted of three sections. The first section included general demographic questions. In the second section, respondents rated their level of awareness regarding artificial intelligence in the media. In the third section, they assessed the perceived impact of artificial intelligence on the accuracy and reliability of information. A seven-point Likert-type scale was used, ranging from 1 (Not familiar at all/Not reliable at all/No impact at all) to 7 (Completely familiar/Completely reliable/Very large impact). To address the research questions, descriptive statistics, measures of dispersion, and symmetry indicators were calculated, along with correlation analysis. To test the hypotheses, non-parametric techniques were employed, including the Chi-square test, Mann-Whitney U test, and Kruskal-Wallis test. The data were processed using the SPSS statistical software package.

4. EMPIRICAL RESULTS AND DISCUSSION

The study included a total of 113 participants, of whom 32.7% identified as male and 67.3% as female. None of the respondents selected the option "Something else" regarding gender identity. Therefore, the gender-based analysis that follows includes only two groups.

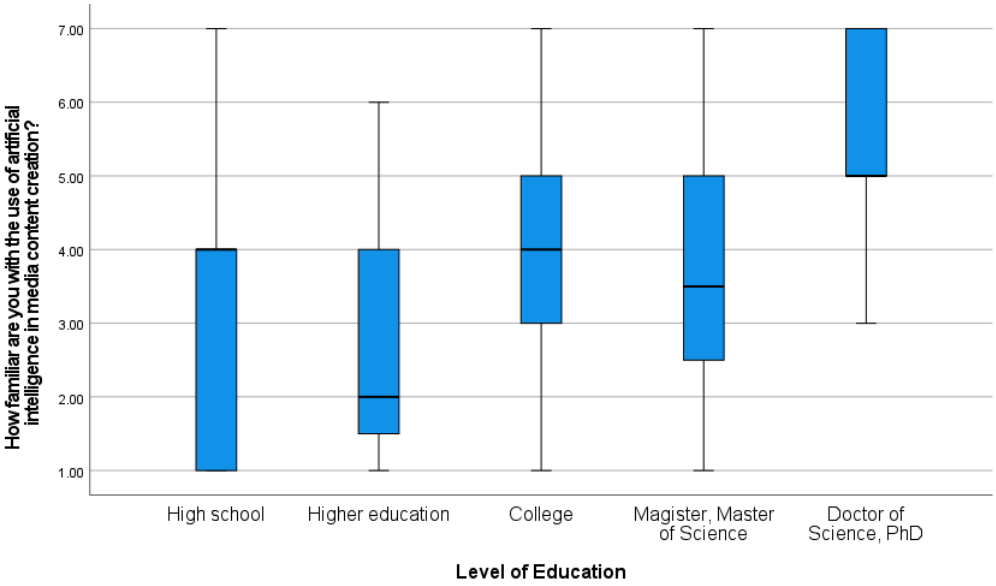
The average age of respondents was 42.40 years, with a median age of 44 and a mode of 52. A majority of participants (84.1%) reported that they were not employed in the media sector, while 8% stated that they were employed full-time and another 8% reported occasional employment in the media. For further details, see Table 1.

Table 1 Summary of demographics

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	37	32.7	32.7	32.7
	Female	76	67.3	67.3	100.0
	Total	113	100.0	100.0	
Level of Education	High school	21	18.6	18.6	18.6
	Higher education	4	3.5	3.5	22.1
	College	42	37.2	37.2	59.3
	Magister, Master of Science	28	24.8	24.8	84.1
	Doctor of Science, PhD	18	15.9	15.9	100.0
	Total	113	100.0	100.0	
Are you employed in the media?	Yes	9	8.0	8.0	8.0
	No	95	84.1	84.1	92.0
	Occasionally	9	8.0	8.0	100.0
	Total	113	100.0	100.0	

Source: Authors' calculation

Respondents reported a relatively low level of familiarity with the use of artificial intelligence in the creation of media content, with a mean score of 3.95. The Median value was 4, and the Mode was 3. The variable exhibited moderate variability (*CV* = 47.34%) and was approximately symmetric (Skewness=-0.080). Participants holding a Doctor of Science degree demonstrated the highest level of familiarity, with a mean score of 5.44. All other education groups reported average scores equal to or below 3.57. For additional details, see Graph 1.



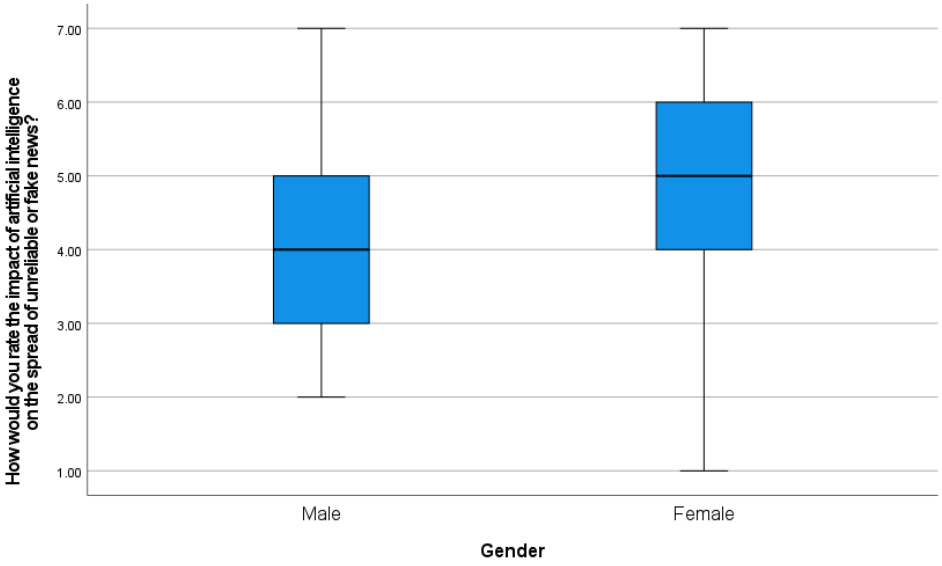
Graph 1 Knowledge of the Use of Artificial Intelligence in Media Content Creation in Relation to the Level of Education

Source: Authors' calculation

The Kruskal-Wallis test revealed a statistically significant difference in the assessment of knowledge regarding the use of artificial intelligence in media content creation among five groups of respondents categorized by educational level (Gp1, $n = 21$: High School; Gp2, $n = 4$: Higher Education; Gp3, $n = 42$: College; Gp4, $n = 28$: Master's Degree; Gp5, $n = 18$: Doctor of Science), $\chi^2(4, n = 113) = 17.433$, $p = 0.002$. Respondents with a Doctor of Science degree had the highest mean rank.

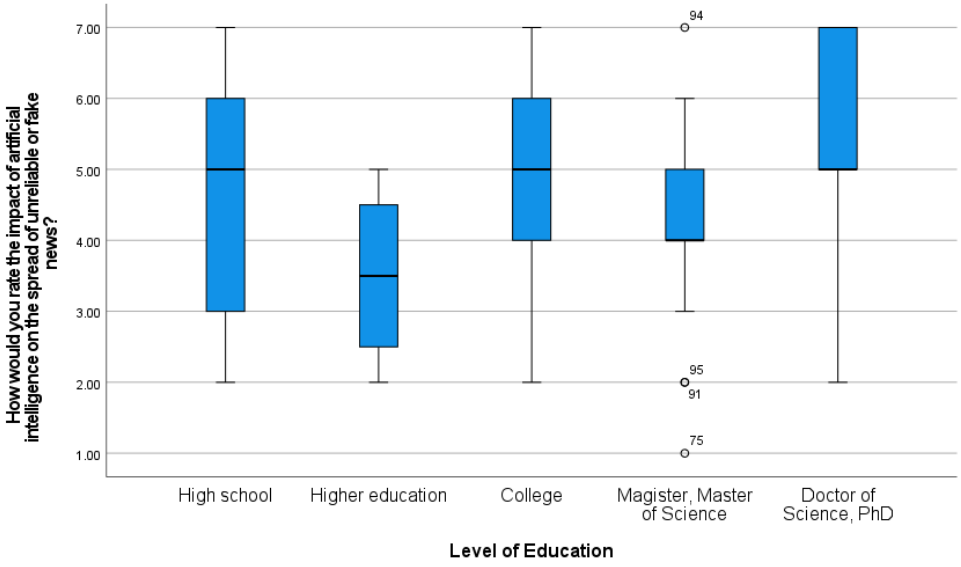
When news is generated using artificial intelligence, respondents rate its reliability with a relatively low average score of 3.11. The Median and Mode are both 3, indicating a moderate level of variability ($CV = 42.12\%$) and no skewness in the distribution (Skewness = 0.072). Perceptions of the reliability of AI-generated news are consistent across all groups, regardless of gender or educational level.

Regarding the impact of artificial intelligence on the dissemination of unreliable or false news, respondents generally believe that AI has a significant influence, with a high average rating of 4.71. Both the mode and median are 5, indicating that approximately 50% of respondents rated the influence as 6 or 7. Female respondents are more likely than male respondents to perceive AI as having a strong impact on the spread of unreliable or false news. Similarly, respondents with a Doctor of Science degree express this view more strongly than other educational groups.



Graph 2 The Impact of Artificial Intelligence on the Spread of Unreliable or False News with Respect to Gender

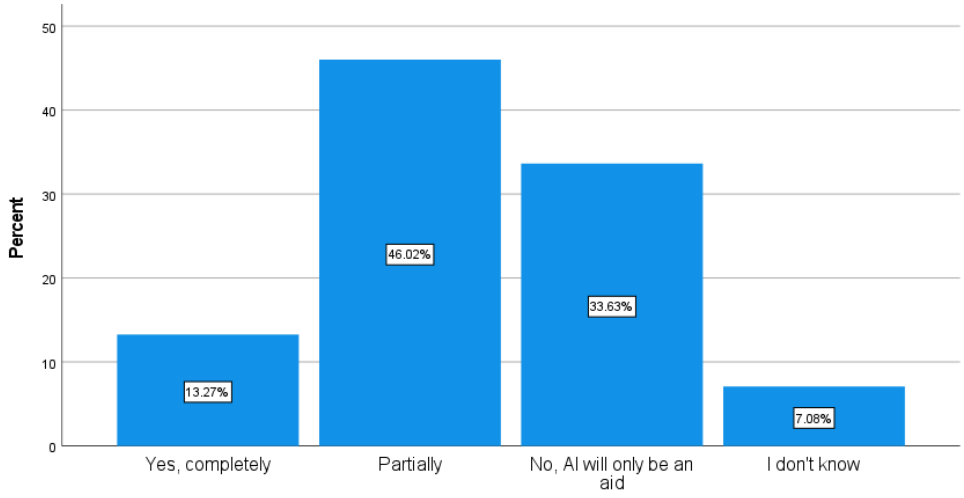
Source: Authors' calculation



Graph 3 The Impact of Artificial Intelligence on the Spread of Unreliable or False News in Relation to Level of Education

Source: Authors' calculation

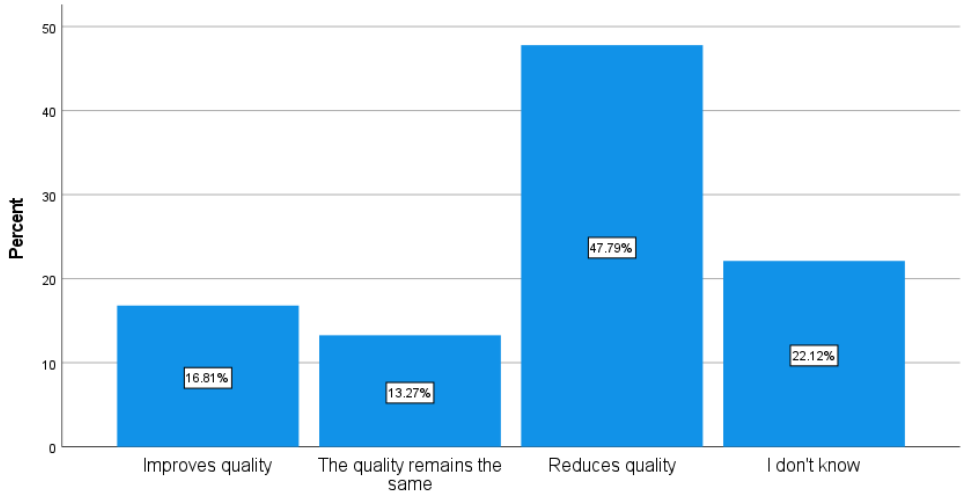
The highest percentage of respondents (46.02%) believe that artificial intelligence will *partially* replace journalists in the future. Additionally, 33.6% think that AI will only serve as a supportive tool (*No, AI will only be an aid*), 13.3% believe it will *completely* replace journalists, and 7.1% responded *I don't know*. These attitudes are consistent across all respondent groups, regardless of gender or level of education.



Graph 4 Perceptions of the Potential Replacement of Journalists by Artificial Intelligence in the Future

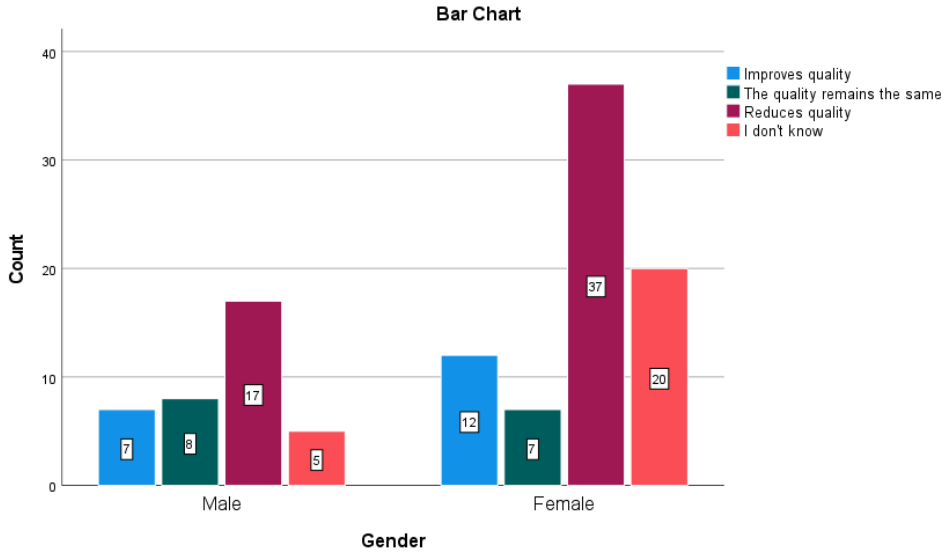
Source: Authors' calculation

Respondents predominantly believe that artificial intelligence *reduces the quality* of media content, as indicated by 47.8% of participants. Additionally, 22.1% responded *I don't know*, 16.8% believe that AI *improves quality*, and 13.3% think that *the quality remains the same*. These perceptions are consistent across all respondent groups, regardless of gender or level of education.



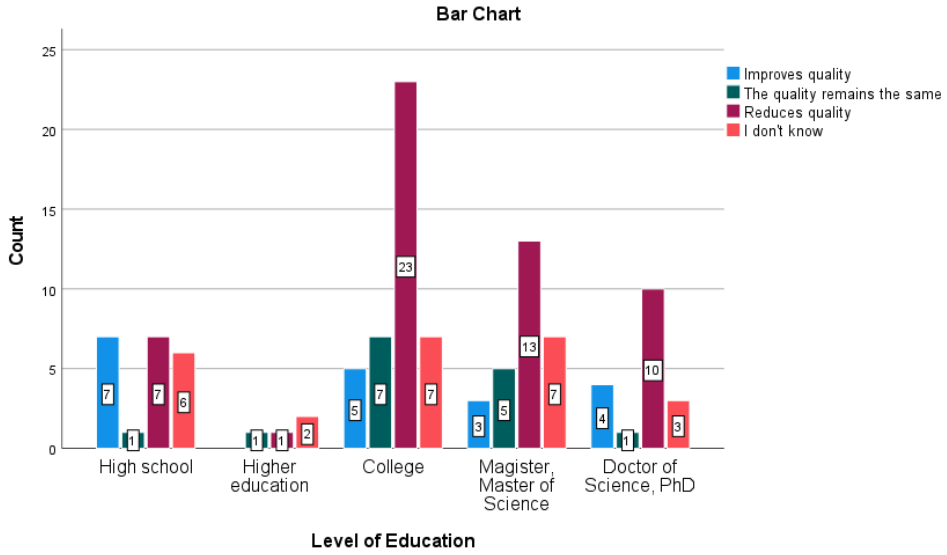
Graph 5 Perceptions of the Impact of Artificial Intelligence on the Quality of Media Content

Source: Authors' calculation



Graph 6 Perceptions of the Impact of Artificial Intelligence on the Quality of Media Content in Relation to Gender

Source: Authors' calculation



Graph 7 Opinion on the Impact of Artificial Intelligence on the Quality of Media Content in Relation to the Level of Education

Source: Authors' calculation

Iz Table 2 možemo da uočimo da ne postoje značajne linearne povezanosti među promenljivim Age, How familiar are you with the use of artificial intelligence in media content creation?, In your opinion, how reliable are news articles created using artificial intelligence? i How would you rate the impact of artificial intelligence on the spread of unreliable or fake news?

As shown in Table 2, there are no significant linear correlations among the variables *Age*, *How familiar are you with the use of artificial intelligence in media content creation?*, *In your opinion, how reliable are news articles created using artificial intelligence?*, and *How would you rate the impact of artificial intelligence on the spread of unreliable or fake news?*

Table 2 Correlations

	1	2	3	4
Age	-			
How familiar are you with the use of artificial intelligence in media content creation?	-.133	-		
In your opinion, how reliable are news articles created using artificial intelligence?	-.125	.250**	-	
How would you rate the impact of artificial intelligence on the spread of unreliable or fake news?	.018	.278**	-.050	-

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Authors' calculation

COCLUSION

The media industry is facing significant challenges posed by the implementation of artificial intelligence (AI), both in the transformation of traditional journalism and in the ongoing pursuit of greater audience reach. A key focus of current research activities is to bring innovative approaches closer to media professionals and the academic community, approaches that could be integrated into media literacy education. Personalization has become an expected norm, while the collection and analysis of data on media consumers is increasingly viewed by editors and journalists as an essential practice for maintaining a competitive advantage. The authors argue that journalists and editors have not lost their traditional role as "gatekeepers." Instead, they must adapt to a new, dynamic, evolving, and decentralized reality continually shaped by artificial intelligence. The findings of this study revealed that respondents are not well acquainted with the use of AI in the creation of media content. Among different educational groups, respondents holding a Doctor of Science degree demonstrated slightly greater awareness of AI applications in media. AI-generated news content was generally rated by respondents as lacking in reliability. Furthermore, they perceive artificial intelligence as a major contributor to the dissemination of unreliable or false information. This concern was more prominently expressed by female respondents and those with a Doctor of Science degree. Participants largely agreed that AI will *partially* replace journalists in the future. Regarding content quality, respondents believe

that artificial intelligence tends to *reduce* the overall quality of media outputs. This study points to potential directions for future research concerning the role and positioning of artificial intelligence in journalism, as well as the growing importance of ethics in the field. The observed limitations largely stem from a constrained understanding of how AI is applied in media operations and how it affects the professionalization of journalism.

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