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From Media Literacy to AI Literacy: Developing Students' Critical Digital Judgment in Higher Education

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Abstract

The advent of generative AI technology has transformed the context within which university students seek, assess, generate, and distribute information. In this paper, I report on qualitative exploratory research conducted on 22 social science students enrolled at public and private universities in Punjab, Pakistan. The research examines their perceptions of media literacy, AI literacy, and critical digital judgment in higher education settings. The data were analysed through thematic analysis, which generated five themes: media literacy as fact-checking, trust in AI for convenience, difficulty identifying AI-generated content, uncertainty about ethical AI use, and the need for practical classroom guidance. These themes show that although students used AI tools for academic support, their understanding of reliability, authorship, algorithmic influence, and responsible use remained uneven. Specifically, the paper examines the way students assess information generated by AI technologies, perceive the role of algorithms, and make ethical decisions related to AI technology in academia. Based on the findings of this research, this paper argues that AI literacy should not be viewed as a distinct technical ability, but rather as an extension of media literacy. Thus, I introduce critical digital judgment as a pedagogical approach that connects media literacy and AI literacy, covering source judgment, algorithmic judgment, ethical judgment, and creative judgment.

Keywords: AI literacy, media literacy, critical digital judgment, higher education, generative AI.

1. Introduction

The modern media landscape is different from before due to the advent of digital platforms, algorithms that recommend media items, and generative artificial intelligence (AI). Students today receive media information not only from regular media or social networks but also from AI-produced texts, pictures, videos, summaries, and automatic replies. Such changes can be viewed as part of a broader phenomenon whereby digital platforms become ever more dominant in organizing access to information, social interaction, and communication (van Dijck et al., 2018).

At the same time, artificial intelligence becomes an inseparable part of the learning environment at universities, even though its pedagogical potential is still poorly recognized (Zawacki-Richter et al., 2019). The emergence of such technologies has complicated information assessment tasks. In media literacy discussions of the past, the main issue was whether individuals could get, analyze, assess, and create media information responsibly (Hobbs, 2010). However, now students have to understand how digital information is generated, whether it was modified using

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artificial intelligence, what types of biases existed in its production process, and whether they can rely on it for research or personal decisions.

Media literacy has always been viewed as one of the core responses to the impact of media on learning, identity formation, cultural experience, and involvement in public life. According to D. Buckingham (Buckingham, 2003), instead of shielding young people from media influence, media education should teach them to analyze processes of media text production, circulation, interpretation, and application in society. These statements continue to be relevant; however, the nature of students' engagement with media is different today. Not only do learners read and watch messages sent through media channels but also use online platforms, create digital content, and, in many cases, collaborate with media using artificial intelligence technology.

AI literacy has become a relatively new but significant educational topic recently. D. Long and B. Magerko (Long, Magerko, 2020) describe AI literacy as the ability to evaluate the functioning of AI technologies, engage in dialogue and collaboration with AI technologies, and employ these technologies as a means of performing various tasks. This description is helpful since it broadens the understanding of AI literacy from simply learning about technology to evaluating its impacts on decision-making, communication, judgement, and creativity. In colleges and universities, this concept is crucial since learners have begun using generative AI software to search, write, summarize, translate, brainstorm ideas, and create content for their studies.

Increased applications of generative AI to learning have posed new challenges regarding issues of authorship, accuracy, bias, plagiarism, ethical responsibility, etc. Large language models, in particular, bring distinct educational potential and challenges in terms of explaining, feedback, and writing support; they can, however, contribute to the production of misinformation, overreliance on technology, and changes in the nature of assessment (Kasneci et al., 2023). The discussion around GPT-based systems also reveals how fluent machine-generated texts can be seen as meaningful and authoritative even while displaying notable weaknesses when it comes to reasoning, grounding, and explainability (Floridi, Chiriatti, 2020).

UNESCO guidelines for the use of generative AI in education and research stress the importance of putting people first, regulating appropriately, and developing learners' and educators' competences in relation to these emerging technologies (Miao, Holmes, 2023). These considerations are clearly related to the objectives of media education. Insofar as media literacy involves teaching children to interrogate sources, interpretations, intentions, and credibility, AI literacy involves applying such questioning strategies to machine-generated and algorithmic outputs. In other words, AI literacy should be approached not as a distinct technical competence, but as an extension of media literacy.

In this paper, I propose that the shift from media literacy to AI literacy should be analyzed with regards to critical digital judgment. The idea of critical digital judgment suggests that students must assess digital media content in terms of its reliability, authorship, influence of algorithms on content, ethics, and contextual significance. While some may associate critical digital judgment with spotting misinformation and determining the presence of artificial intelligence behind the text, such an approach to critical digital judgment would not suffice. Instead, critical digital judgment implies asking deeper questions about the nature of knowledge production, the effect of digital on how individuals perceive the reality around them, and responsible use of AI-based applications. The paper draws upon the context of higher education which requires students to act independently, process complicated information and actively engage in academia. Traditionally, media literacy, digital literacy, and AI literacy were considered distinct areas and thus required different approaches to learning. This paper attempts to combine all of them and offer new pedagogical perspectives for higher education. In particular, I analyze critical digital judgment as a link between media literacy and AI literacy, allowing students to engage with the media in AI-mediated environments.

The following are the research questions which guided the article:

Q1: How does one incorporate media literacy to counter the issues of generative AI in higher education?

Q2: What are some of the types of critical judgment in the digital age which students require in order to judge information created via AI?

Q3: What are some of the ways in which educators could use to foster students' understanding of AI through media literacy?

Through posing these research questions, the article adds to the existing discussions on media education in the sense that there is need for inclusion of AI literacy in media education.

Media Literacy in Higher Education: Media literacy has emerged as a field of educational practice due to the increased influence of media on the way learners perceive knowledge, society, identity, and participation. Speaking about media literacy in general, we mean learners' competence in accessing, analyzing, evaluating, producing, and communicating different types of messages.

According to R. Hobbs (Hobbs, 2010), digital and media literacy can be viewed as competencies, which enable people to make decisions, analyze information, communicate, and participate actively in civic and social life. It is useful to apply this definition when discussing media literacy of university students as people who must not only use information, but also analyze, produce, and communicate information through digital means.

Media literacy in the context of higher education goes beyond the mere mastering of the technical aspects of digital literacy. Media literacy also implies a critical awareness of media messages and their creation, distribution, and interpretation. According to D. Buckingham (Buckingham, 2003) media education needs to help learners realize media messages in terms of their production, representations, language, and audience perception. This implies asking questions about media messages as to how they are created and why, what values they embody, and how various target audiences understand them. Such issues play a pivotal role in modern education because contemporary learners regularly consume media messages in news, social media, video clips, podcasts, and blog formats.

Media literacy has also been associated with civic participation. According to P. Mihailidis (Mihailidis, 2018), media literacy must now be refocused on its civic nature, particularly in settings where there is distrust, polarization, and disinformation in the media space. This issue is pertinent in higher education since the media behaviors of students cannot only be academic; they can also be social and political. The current media environment is different from what previous theories of media literacy had envisaged. It is no longer only messages that come from journalists, institutions, advertisers, or even from ordinary citizens. The media environment is becoming one where messages come from automated systems of artificial intelligence. Therefore, media literacy needs to go beyond source evaluation and media representations.

Digital Literacy and Critical Thinking: Whereas media literacy referred to people's understanding of various media types and the messages they carried, digital literacy took into consideration their knowledge of searching, evaluating, creating, and communicating information using digital technologies. University digital literacy is associated with successful learning experiences, good employability prospects, and responsible online participation. However, digital literacy goes beyond knowledge of digital devices or platforms and includes such factors as judgment, evaluation, interpretation, ethical understanding, and more. According to R. Hobbs (Hobbs, 2010), digital literacy and media literacy help people think critically, communicate effectively, and be creative and civic-minded. In higher education, these competencies become even more important since students have to use different sources and analyze the credibility, relevance, and reliability of the information found.

Thus, digital literacy overlaps with media literacy in the aspect that both require students to question information. This is because digital literacy confidence among students did not imply critical competence. Students knew how to use different social networks, search engines, and AI-based applications. But this did not necessarily mean that students understood the way platforms functioned, misinformation spread, or AI impacted the perception of credibility of the information found there. Consequently, higher education should focus on helping students acquire critical digital judgment. There is also an assumption that the youth are naturally digital literate. However D. Boyd (Boyd, 2014) notes that young people actively used networked technologies, but still needed to learn such concepts as privacy, credibility, identity, and effective participation in digital environments. This fact is particularly valuable in terms of university students since their active use of digital technology does not imply their digital literacy skills yet.

AI Literacy as an Emerging Educational Need: the importance of AI literacy increases along with the spread of artificial intelligence in education, communication, professional spheres, and everyday use. In this sense, AI literacy is a cluster of abilities allowing people to evaluate technologies, cooperate with them, and use them as necessary tools for different goals. This description of AI literacy is relevant since it shows the critical nature of this phenomenon: apart

from being practical and helping students use new technologies, it requires the development of evaluation skills and the ability to question and analyze existing technologies.

According to D.T.K. Ng et al. (Ng et al., 2021), AI literacy consists of several components, including knowledge about AI technologies and their application, evaluation of technologies, and the consideration of ethical problems associated with their use. It means that AI literacy is not a purely technical skill. It involves various aspects that include social, educational, and ethical ones. Therefore, in terms of education, students need to remember that although AI-generated content appears fluent and convincing, it may contain inaccuracies, biases, and irrelevant information. In particular, students should pay attention to AI generative technologies that can create any type of content, from essays and summaries to images, translations, feedback, and so on. On one hand, students may find it useful to receive academic support by using AI tools. On the other hand, the mentioned technology creates serious risks related to biases, inventions, the decrease of independent judgments, and the blurring of boundaries between assistance and authorship.

Generative AI, misinformation, and synthetic media: generative AI technologies have reinforced previous concerns raised in discussions related to media education. Issues addressed by media literacy included misinformation, propaganda, marketing messages, stereotyping, media ownership, and digital engagement. Those issues are crucial in the media literacy discussion and have to be considered in the context of generative AI, but now the challenge for students is becoming harder. Texts, images, audio, and video files can be produced and edited in such a way that the student cannot establish the source, author, intent, and credibility of the message.

As mentioned above, one of the issues covered in the media literacy literature is misinformation. In the context of generative AI, it became even more challenging due to the quick and easy creation and sharing of false or misleading information. This aspect shows that the importance of the media literacy framework is growing rather than decreasing.

The UNESCO guidance on generative AI in education and research provides an understanding of the necessity of taking a human-centred, ethical, and regulated approach towards AI usage in education (Miao, Holmes, 2023). In particular, it is emphasized that educational institutions must build the human capacity needed to work with generative AI. From the media literacy perspective, the issue is relevant as well. When working with digital media sources, it is not enough to detect false information as such. Misinformation might be created in the form of summaries, fabricated references, images, and videos. Thus, critical digital judgement is vital for today's students since they should be able to establish whether information can be traced, verified, ethically produced, and used in an academic context.

From media literacy to AI literacy: it would be incorrect to consider the inclusion of AI literacy in media studies as a replacement for media literacy. On the contrary, AI literacy complements media literacy rather than rendering it redundant. The traditional questions of media literacy include: who created this message, why, which techniques were used, which values were embodied, and how might the target audience interpret it? Media literacy in the context of generative AI needs to include additional questions: was it created by humans or algorithms or both; what was its underlying data, algorithm, or platform? Is it verifiable? What were the hidden biases? Which ethical responsibility lies with the user who shares or uses it? These issues resonate well with ongoing discussions related to algorithmic power and platform society. As J. van Dijck et al. (van Dijck et al., 2018) point out, the online digital platforms do not only circulate information. Rather, they control the process of visibility, communication, and value construction. As such, AI literacy should necessarily include the awareness of how AI-driven algorithms affect the way students see, think, and communicate. Therefore, in accordance with the ideas expressed in this article, the introduction of AI literacy in media studies should be approached from the angle of critical digital judgment. In turn, critical digital judgment will help reconcile media literacy issues with AI literacy ones, including the questions of representation, reliability, and interpretation. It is important for higher education because AI technologies are extensively used in students' academic and daily lives without any guidance on how to interact with them properly.

Conceptual framework: in this regard, the concept of critical digital literacy can be seen as a possible link between media literacy and AI literacy from a theoretical perspective. R. Hobbs (Hobbs, 2010) explains media literacy refers to the acquisition of competencies required to access, analyze, evaluate, create, and communicate media messages. On the other hand, AI literacy involves the need for individuals to gain skills regarding understanding, criticizing, and applying artificial intelligence (Long, Magerko, 2020). The problem of AI literacy arises at the university

level because students come into contact with not only media products produced by people but also those developed by AI systems independently or together with people, see Figure 1 below.

Digital criticality requires that there is an ability among the students to make wise decisions concerning the content of the digital world and any AI-generated data. It is important to note that such assumptions are not just limited to the application of digital tools and technology. In this regard, the student has to be informed about the origin of the content, its credibility, algorithms, biases, and ways in which AI can be applied ethically. In this particular instance, the student is supposed to understand that even though it may be persuasive and credible, AI-generated data can be misleading, biased, unverifiable, and unethical.

The theoretical framework is based on four essential elements, namely source criticism, algorithm criticism, ethical criticism, and creative criticism.

Source judgment: first, the issue that should be addressed while teaching the skills of critical thinking in AI environments relates to source evaluation. While training media literacy, the students were required to identify the origins of a message, its purposes, and evidence of statements made within it. All of the information stated above is still relevant in the AI environment; however, the latter makes the collection of data much more complicated. The information created by AI may lack references to the author, origin point, or process used during creation. Students may receive knowledge offered by chatbots, automatically created by summarizing software, and generated by AI for posting on the Internet without disclosing its origins.

This way, when evaluating the quality of AI-generated information, one needs to check whether it is sourced by credible sources and can be supported by evidence. Meanwhile, it should be noted that AI-generated information may not necessarily be true only due to its eloquence and certainty with which the claims are made. According to D. Long and B. Magerko (Long, Magerko, 2020), AI literacy includes the ability to critically evaluate AI technologies and products. Therefore, when using AI in the university setting, one needs to validate AI-generated content against academic sources.

Algorithmic judgment: the second aspect involves algorithmic judgment. Unlike traditional distribution of information, digital media and AI systems not only distribute but also curate, recommend, filter, and generate content. It becomes apparent that the inclusion of digital technology's role regarding visibility, attention, and authority should be considered when educating students about media. Another way to understand this aspect is through the idea of platform society because it helps recognize the role played by platforms when shaping public values such as privacy, precision, safety, fairness, and responsibility (van Dijck et al., 2018).

In other words, for students, algorithmic judgment entails becoming aware of the fact that digital spaces are technologically created and engineered. In order to explain the term algorithmic judgment within the context of student learning, it is important to note that this definition presupposes an understanding of the idea that this notion entails acknowledging the influence of different factors of digital spaces on what users see online. This is especially important because students may perceive search engine results, posts on social media, and machine-generated responses as unbiased and impartial. At the same time, digital environments can be influenced by numerous factors, including training data, business interests, human interactions, design decisions, and more. As D.T.K. Ng et al. (Ng et al., 2021) state, AI literacy includes awareness, utilization, evaluation, and consideration of AI ethics. Algorithmic judgment is one of the main components of the latter. In media studies, algorithmic judgment builds on the tradition of asking questions about ownership, representation, and power structures when analyzing media.

Ethical judgment: we must discuss the issue of ethical judgment. Using generative AI technology in an educational context brings up many ethical questions concerning fairness, transparency, authorship, academic integrity, and responsibility. Students may use these applications to develop ideas, refine their writing skills, summarize scholarly sources, translate texts, and generate text. However, not all forms of generative AI use are the same. Some may help students learn and others may undermine students' independence or academic standards.

Students' ability to make an ethical decision regarding generative AI use implies their capacity to distinguish between legitimate ways of using these applications and those that might be unethical, irresponsible, and counterproductive for students' learning. While informing learners about the acceptable use of these technologies is essential, it will not suffice; the ability to distinguish when, where, and how these technologies should be used is equally important.

The latest policy recommendations of UNESCO regarding the use of generative AI in education and research call for a human-centered and responsible approach to generative AI applications based on ethics, governance, and education. Moreover, Floridi and Chiriatti emphasize that ethical issues raised by generative AI applications, such as GPT, concern our ability to distinguish between machine and human production and its implications for our understanding and responsibility. This strengthens the argument that students need to learn to make ethical decisions related to the use of technology. It should be noted that ethical judgments and media literacy complement each other as both of them involve students' reflections on their responsibility, power, and consequences.

Creative judgment: The fourth dimension of AI media literacy concerns creative judgement. Creating media content has been an essential component of media literacy throughout its history (Hobbs, 2010). With the advent of generative AI, the process of creation becomes associated with collaboration with machines. In particular, students can use AI technology to engage in any kind of ideation, editing, visualisation, design, production, and so on. On the one hand, this process offers new possibilities for learning, but on the other hand, it creates new threats to the originality of the product and its intellectual property. The fourth dimension plays a crucial role in the context of generative AI due to the blurry border between assistance and authorship. According to E. Kasneci et al. (Kasneci et al., 2023), large language models can assist in learning and creativity, but using these systems requires the consideration of factors like reliability, transparency, and educational purposes.

Creative judgment means students' ability to use digital technologies not as a substitute but as a means for supporting and facilitating their own intellectual work. It implies making decisions about the usage of certain tools and approaches in a creative or academic process. For instance, it is necessary to decide how to use an AI system for generating potential ideas, evaluating them, connecting them to the studied concept, criticising, revising and so on. The importance of this aspect lies in the fact that AI media literacy should not be limited by the fear of potential misuse but also should comprise productive and creative application of these systems. Creative judgment assists in maintaining academic voice among students in higher education institutions.

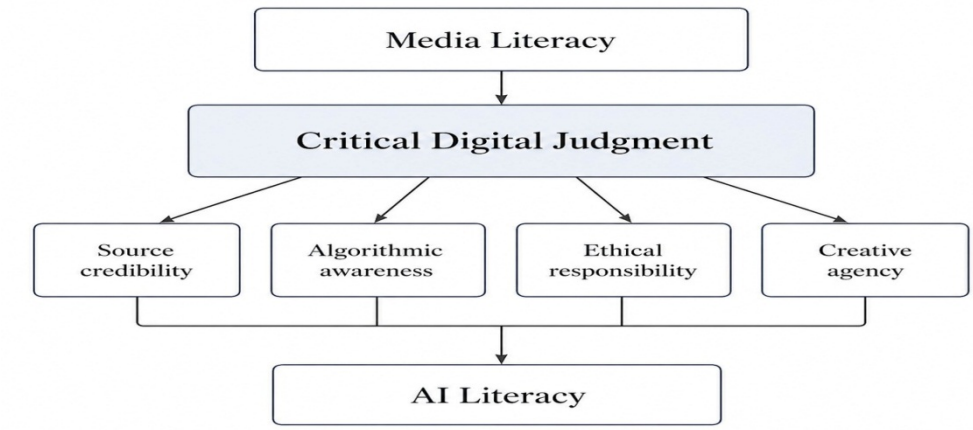

Fig. 1. Conceptual Framework of the Study

Table 1. Summary of Conceptual Framework

Dimension	Main Question	Educational Focus
Source judgment	Where did this information come from, and can it be verified?	Credibility, evidence, reliability
Algorithmic judgment	How have platforms or AI systems shaped this content?	Algorithms, visibility, bias, platform power
Ethical judgment	Is this use of AI fair, transparent, and responsible?	Academic integrity, responsibility, transparency

Dimension	Main Question	Educational Focus
Creative judgment	How can AI support, but not replace, student thinking?	Authorship, originality, agency

The model in Table 1 offers the theoretical foundation for this paper. It does not see AI literacy as being separate from the concept of media literacy. Rather, it views AI literacy as an expansion of the idea of media literacy to include the use of AI in a learning environment. The central theme of this model is that colleges and universities should do more than educate their students in using AI.

2. Materials and methods

The current research employed a qualitative exploratory design for investigating how university students perceived the transition from media literacy to AI literacy and formed critical judgments towards AI-generated content and digitally mediated information. The qualitative paradigm was justified since the objective of the study did not lie in assessing the quantitative level of AI literacy among university students, but rather in exploring students' perceptions, concerns, and decision-making strategies in regard to media and generative AI technologies. The qualitative paradigm is beneficial when there is a need to explore people's interpretation and meaning-making process within a particular social and academic context (Creswell, Poth, 2018). As the use of generative AI by students is still emerging and can be impacted by various individual, organizational, and socio-cultural factors, the exploratory approach helped address this issue appropriately.

Research context and participants: the experiment was carried out in the context of higher education. The subjects in the experiment were university students who utilized digital media technology and had at least some exposure to generative artificial intelligence tools like ChatGPT, Gemini, Copilot, or any other software that may be similar. The subjects chosen for the experiment were students majoring in the fields of education, media, communications, and social sciences, since these types of students interacted with digital media and information. A purposive sampling method was employed to select appropriate subjects for the experiment. 22 university students participated in the experiment. This sample size was ideal for conducting a qualitative experiment because it allowed for gathering rich data yet provided a manageable scope of analysis. Data saturation was achieved as new data started to exhibit repetitive patterns. The inclusion criteria were as follows:

1. Participants should be enrolled in a higher education institution.
2. Participants should have experience of using digital media for academic or everyday information.
3. Participants should have at least basic awareness or use of generative AI tools.

Participants should be willing to share their views voluntarily.

Data collection: the data were gathered using the semi-structured interview technique. This type of interview was chosen since it enabled the researcher to adhere to an already established question set but still gave the participants room to elaborate on their opinions freely. Semi-structured interviews were well-suited to investigating novel issues in education, including students' awareness of AI-generated information.

The duration of each interview was about 25–35 minutes. Interviews were done either face-to-face or via the Internet depending on the participant's availability. Audio recordings of the interviews were made with the participants' permission and subsequently transcribed for analysis. If recordings could not be made, comprehensive notes were taken immediately after each session.

The questions in the interview guide were organized according to the study's research concerns. These included media literacy, AI literacy, credibility, algorithms, academic integrity, and ethical uses of AI technology. The guiding questions include:

1. How do you understand the term media literacy?
2. How do you understand the term AI literacy?
3. Have you used generative AI tools such as ChatGPT or similar applications? If yes, for what purposes?
4. How do you decide whether AI-generated information is accurate or reliable?
5. What difficulties do you face when identifying fake, biased, or AI-generated content?
6. Do you think AI-generated content affects students' critical thinking? Why or why not?

7. What do you consider ethical or unethical use of AI in academic work?
8. What kind of guidance should universities provide to help students use AI responsibly?
9. How can media literacy education be updated for the age of generative AI?

These questions were intended to generate discussion rather than restrict participants to fixed answers. Follow-up questions were asked where necessary to clarify meanings or explore examples in greater depth.

Data analysis: the analysis of the data followed the approach of thematic analysis. The use of thematic analysis was suitable for this research since it would enable the identification, organisation, and interpretation of patterns of meaning in the qualitative data. According to V. Braun and V. Clarke (Braun, Clarke, 2006), thematic analysis refers to a flexible technique that enables one to identify and report on themes in data. The use of thematic analysis was also justified in this research due to the flexible nature of the approach despite taking a systematic approach to qualitative data (Braun, Clarke, 2021).

The analysis followed the six phases of thematic analysis proposed by V. Braun and V. Clarke (Braun, Clarke, 2006):

1. Familiarization with the data through repeated reading of interview transcripts.
2. Generating initial codes related to students' views, experiences, and concerns.
3. Searching for possible themes across the coded data.
4. Reviewing themes to ensure they are coherent and supported by the data.
5. Defining and naming themes in relation to the research questions.
6. Writing the final analytical narrative.

The analysis was both inductive and conceptually informed. It remained open to themes emerging from participants' responses, but it was also guided by the conceptual framework of critical digital judgment developed in this article. In particular, attention was given to four dimensions: source judgment, algorithmic judgment, ethical judgment, and creative judgment.

Trustworthiness of the Study: in order to enhance the credibility of the study, a number of strategies were employed. The first strategy is matching the interview questions with the research questions and the conceptual framework. The second is maintaining thorough documentation of the coding process and theme identification. The third strategy is incorporating certain extracts from respondents' answers into the findings. Finally, reflexivity is maintained throughout the study regarding personal assumptions, especially since both AI literacy and media literacy are emerging subjects in education.

L.S. Nowell et al. (Nowell et al., 2017) maintain that credibility in thematic analysis can be achieved by documenting the coding process, engaging in reflexivity, and being transparent in going from data to themes. In compliance with the recommendations, the paper provides sufficient information on the data collection and analysis procedures.

Ethical Considerations*:* the investigation adhered to the established ethical standards of conducting research with human subjects. All participants were briefed regarding the goals of the study, their voluntary status, and freedom to leave the process anytime before analyzing the collected data. Informed consent was received before conducting the interviews. Names of participants or their institutional affiliations were not included in the published article. Instead, they were identified by using pseudonyms or participant codes like P1, P2, and P3.

All interview materials were handled discreetly and properly secured. No extraneous personal data was collected during this research process. Because the subject of the investigation related to students' academic conduct and use of AI, it was imperative not to accuse participants of unethical behavior. On the contrary, interviews centered on the subject matter in terms of their understanding, experiences, dilemmas, and need for education.

Methodological Limitations: the study had some limitations. The first limitation is that the sample size used in the study was not only small but also not representative of all university students. Second, the data used in this study was based on self-reporting by the students, which may not accurately capture their practices. Third, due to the fact that the field of generative AI technology is fast evolving, there is a possibility that the opinions held by students and policy adopted by institutions might shift over time.

3. Discussion

The results indicate that students' transition from media literacy to AI literacy is neither even nor complete and that it involves a certain level of uncertainty. The participants showed themselves

to be proficient users of social media and artificial intelligence-based applications, yet proficiency with digital technologies does not necessarily imply any level of critical thinking. This statement is consistent with the argument made by B. Boyd (Boyd, 2014) against the myth of "digital natives", which implies that the usage of digital devices on a daily basis does not mean that users understand how those digital devices operate critically. This conclusion plays an essential role in media studies as it highlights the necessity to provide learners with the opportunity to critically analyze the process of information production.

Another key discovery is that the concept of media literacy is frequently understood by students as fact-checking. While such an approach is valuable, it is insufficient as media literacy deals not only with issues related to checking facts but also includes questions concerning representation, production, ideology, audiences, and power relations (Buckingham, 2003). With respect to AI-mediated interactions, such knowledge becomes all the more important as the development of dis-/misinformation online has already demonstrated that media literacy should deal not only with individual capacities for checking facts but also with larger issues of circulation, emotional impact, spectacle, and trust (Mihailidis, Viotty, 2017; Wardle, Derakhshan, 2017). While students need to examine whether certain information is true or false, they should also try to establish the source of the information and the underlying biases and interests behind its creation.

Moreover, the results indicate that the students might be able to trust AI due to its convenience, speed, and ease of use. The increasing use of generative AI in the daily routines of the academic environment is evident in the findings. Students could apply AI for tasks such as summarizing reading materials, improving language proficiency, developing creative ideas, translating texts, and completing assignments. Nevertheless, this trust comes with an element of distrust since the students were aware that AI might provide false and untrustworthy information. Nonetheless, the participants did not necessarily possess the necessary knowledge and skills to fact-check AI-generated content.

Another problem is that of the challenge students may find in discerning AI content. While previously, in media literacy classes, it was stressed for students to consider the author, source, purpose, and evidence, these points continue to be relevant, but in the case of generative AI, they become harder to consider. Text written by AI may not necessarily have a clear author. AI-generated images and videos may be realistic. Summarized articles may leave out context or make dubious claims as definite truths. Therefore, students will require better source evaluation, in which they can assess and validate information.

This discussion further reinforces the need for algorithmic judgment. The learning experiences of the students are dependent upon search engines, social media filters, recommendation algorithms, and AI-generated answers. The information that the students view is impacted by the decisions made by these processes about what is relevant and believable.

D.T.K. Ng et al. (Ng et al., 2021) posit that AI literacy consists of four competencies that include understanding, engaging with, evaluating, and reflecting about AI and ethics-related issues associated with technology. Algorithmic judgment is thus important in this study because it allows the students to realize that information in the digital realm is not neutral.

Another important discovery is the presence of ethical ambiguity in students' perceptions of AI use for academic purposes. While some students might feel unsure about whether the use of AI can be ethical, unethical, or even cheating, other students might believe that using AI is equivalent to checking spelling and grammar or conducting searches on the Internet. The presence of such ethical ambiguity means that institutions cannot merely warn students against using AI for academic assignments. Instead, institutions must offer students guidelines that differentiate using AI as an aid from using AI as a replacement for students' critical thinking skills.

Thus, the current article suggests treating AI literacy not as something that stands by itself and as a fully independent literacy domain but as an expansion of media literacy. The reason behind this claim lies in the fact that media literacy is already well-developed enough to raise issues associated with credibility, authorship, representation, audience, and power. Meanwhile, AI literacy raises more issues associated with automation, data, algorithms, synthetic content, and human responsibility in relation to this process. As such, it becomes possible to talk about developing critical digital judgment based on media literacy and AI literacy. The main value of the current paper lies in suggesting that critical digital judgment can be regarded as a link between these two domains of literacy. Such judgment implies having the following four interconnected skills. First, the students have to be able to make source judgments. Second, they have to be able to make algorithmic judgments. Third, they

need to form ethical judgments in their decision-making related to AI. Finally, they need to develop creative judgments as they apply AI in educational contexts.

This suggests that for higher education, the literacy of students should not only comprise learning how to write the prompt and effectively utilize AI technology. There must be a more profound pedagogical effort involved, whereby the comparison of both AI and human-generated work needs to be made, verifying the results from AI by referring them to academic literature and discussing the possible ethical problems, biases, etc. With this approach, AI literacy may become an important part of promoting critical thinking, active involvement in, and participation within digital media environments in a manner that is democratically based. In this regard, the article also contributes to current discussions about AI in higher education. According to earlier reviews, it was seen that the existing research in this area mostly concentrated on technologies themselves, whereas the involvement of educators, the aspect of pedagogy and critical understanding were largely overlooked (Zawacki-Richter et al., 2019).

The results also indicate that media education should have an important place in the era of generative AI. Instead of viewing generative AI as an alien technology that disrupts society, media education could employ its traditional modes of criticism to assist students in comprehending the communication mediated by AI. These include considering who generates knowledge, how authority is formed, how audiences are manipulated, and how power functions via media technologies. Generative AI will not answer these questions but rather intensifies their relevance. In summary, it can be said that this analysis indicates that the future of media literacy education in colleges and universities is contingent upon its capacity to react to AI-based modes of communication and knowledge creation. In addition to gaining access and mastering new technology, students require critical judgment skills to assess information, recognize the impact of algorithms, harness AI appropriately, and retain their intellectual freedom. This is where media education may play an important part in contemporary higher education.

Pedagogical implications: findings and discussions show that higher education has to adopt a holistic approach to media literacy and AI literacy. While students are currently making use of digital media and generative AI, they still lack awareness regarding the credibility of information, the role of the author, the effect of algorithms, and the ethical implications of AI technology. Consequently, universities cannot approach AI literacy as an entirely technical training process but should incorporate it into existing curricula for media studies, digital literacy, and academic writing.

Integrating AI literacy into media literacy education: the first implication of incorporating AI literacy into media literacy curricula is that the former needs to be taught alongside the latter. Media literacy enables students to evaluate the sources of information, modes of representation, audiences, meanings, and power structures. All these areas of inquiry can be applied to AI-generated and algorithmically structured content.

For instance, if students are analyzing a news story, social media post, or online image, they could also consider whether AI played a role in the creation, distribution, or interpretation of that content. This would allow students to understand that AI is not just a technology but also a component of today's media landscape.

Moving beyond tool-based training: the second implication is that higher education institutions should go beyond learning about how to utilize AI as a tool. Most workshops around AI emphasize practical applications of the technology such as prompting, generating text, summarizing readings, and increasing productivity. These abilities used to be important, but today they are insufficient. Students must learn the limitations, potential harm, and ethics associated with the use of AI.

Questions related to AI literacy might include: Is there a possibility of verifying this result? What kinds of underlying biases did the model assume? What data is absent from it? Was the work critically edited by the student after using AI? Is it appropriate to use AI in the given academic setting?

Designing classroom activities for critical digital judgment: implication number three would be that the teacher must incorporate in class some exercises that will make the learners practice the skill of making critical judgments on matters involving digital technologies. Instead of just informing learners of the dangers associated with the abuse of artificial intelligence, teachers can integrate some exercises in class.

Developing ethical guidance for students: fourthly, universities need to provide guidance about the use of AI tools. Many students did not know whether it is right to use AI tools in brainstorming, editing, translating, paraphrasing, and writing. If policies regarding the use of such

tools by students are not explicit or are punitive, students will be discouraged from using these tools. Guidance is needed to distinguish acceptable usage from academic dishonesty. Guidance also promotes transparency; for instance, students can be required to indicate the use of such tools in their papers.

Supporting teachers' AI and media literacy: implication number five is that teachers must be supported as well. It is impossible for students to gain critical digital discernment when their teachers lack knowledge of the role of generative AI, media literacy, and academic integrity. Training programs for teachers must aim to provide them with skills related to knowing about AI, evaluating AI-produced content, creating suitable assignments, and engaging in conversations on ethics and AI with their students.

This is significant because the topic of AI literacy is more than a problem for students alone. It is a matter of pedagogy and curriculum as well.

Reframing assessment in the age of AI: implication number six is about assessment. In case students are required to simply copy and paste their information, then artificial intelligence will easily do most of the job for them. This means that colleges and universities will have to change the design of their assessments in such a way that they become reflective, process-oriented, orally explained, contextualized, and personally critiqued. This type of assessment could involve requiring students to provide a reflective account of how they used artificial intelligence, contrast the artificial intelligence outputs against academic literature, criticize an AI answer, or show how they edited and enhanced AI-produced work.

4. Results

Overview of Findings: it has been concluded that there was a substantial lack of awareness about both media literacy and AI literacy among students. Despite their knowledge about digital media platforms and the utilization of AI software, students lacked the ability to evaluate AI-generated information critically. There have been identified five categories of results: Media literacy as simple fact-checking, trust in AI due to convenience, inability to identify AI-generated information, ethical issues related to AI application, and guidance required in class setting, see Figure 2.

The conclusions can be drawn from the above findings that the process of students' transformation from media literacy into AI literacy is far from automatic. Although students consider themselves advanced users of modern technologies, they still need some training which would foster the development of their critical judgment skills. The results are consistent with the research undertaken by scholars that highlight that being confident in digital environments does not mean being critical (Hobbs, 2010; Ng et al., 2021).

Theme 1: Media literacy understood mainly as fact-checking: a significant finding was the narrow focus with which many of the participants viewed media literacy. Participants often viewed media literacy as being able to tell if something was false, if information was verified to be true or misleading in the case of information online. Of course, it was obvious from this finding that the students realized the importance of accuracy or authenticity but could not understand media literacy broadly enough.

This is because the way participants defined media literacy entailed phrases such as "checking the sources", "to determine whether something was real", or "verification using Google". It was evident from these phrases that media literacy was seen by participants in the context of being able to verify whether something was true or false. However, media literacy goes beyond just verification, and includes such aspects as representation, production of messages, consumption of messages, ideologies, and power relations (Buckingham, 2003).

In an era when students are exposed to information provided by machines, such a limited perception of media literacy became increasingly problematic.

Theme 2: AI Tools trusted for convenience but questioned for accuracy: another interesting finding was that students employed AI generative technologies due to their speediness, availability, and utility for academic purposes. Specifically, the interviewees mentioned using AI to brainstorm ideas, summarize texts, correct grammar, translate language, create presentations, and grasp complex topics. Such data demonstrated that generative AI became an integral part of students' learning routines. At the same time, some interviewees pointed out the lack of accuracy of AI-generated content. They stated that AI technologies could provide inaccurate information, unverifiable answers, or questionable suggestions. Such information revealed some skepticism

toward the effectiveness and reliability of such tools, even though students acknowledged them as convenient solutions. Such observations are in accordance with the notion of AI literacy. D. Long and B. Magerko (Long, Magerko, 2020) argue AI literacy involves evaluating technologies in terms of their effectiveness. At higher education institutions, the issue relates to understanding the potential pitfalls of AI-generated content. Students should comprehend that fluent responses cannot be taken as valid answers since they can contain factual errors, personal bias, omitted information, or false references.

Theme 3: Difficulty in identifying AI-generated and synthetic content: the third theme concerned students' trouble in recognizing the difference between authentic and AI-generated information. They expressed that AI-generated text, images, and videos were getting hard to recognize as artificial since AI creations became highly advanced. At the same time, social media exacerbates the problem because content spreads rapidly and often with little context as to who created it. This issue is particularly relevant to media literacy because synthetic media undermines the very premise of authorship and verifiability. One may no longer be sure that a piece of news is accurate if it looks professional, flows well, and seems convincing but is not grounded in any trustworthy facts. Such an issue makes it necessary to develop algorithmic literacy. Students need to understand that digital content was not created in a vacuum but by algorithms, recommendation systems, design, and other mechanisms. That way, students will learn to think about where content comes from and if its claims can be verified independently. D.T.K. Ng et al. (Ng et al., 2021) emphasize the importance of evaluation as one of the key components of AI literacy along with knowing and using AI. Thus, one needs to teach students how to evaluate digital information and determine if something is AI-generated.

Theme 4: Uncertainty about ethical AI Use in academic work: the fourth theme indicated the ambiguity regarding the acceptance of AI use within the academic community. The first group of students perceived AI tools as a tool for checking grammar or searching the internet, while the second group viewed such applications as an unethical way of completing assignments or writing papers. Such ambivalence can be attributed to a lack of pedagogical guidance in the field of AI. The students asked multiple questions concerning the acceptability of using AI for brainstorming ideas, paraphrasing content, translating texts, editing essays, and writing assignments. These questions indicate that academic integrity in the era of AI should not be confined to prohibiting AI usage; rather, students must receive guidance on the role of transparency, ownership, responsibility, and collaboration.

The UNESCO recommendations for generative AI use in education and research highlight the importance of responsible and human-centred approaches to implementing artificial intelligence in educational institutions (Miao, Holmes, 2023). This conclusion is consistent with UNESCO's recommendations since students require ethical reasoning in addition to technical skills when using AI tools in the learning process.

Theme 5: Students need practical classroom guidance, not only warnings: theme 5 revealed that students needed practical advice on how to employ AI ethically. The warning-type advice, such as "do not use AI" or "AI is dangerous," was not helpful. On the contrary, classroom exercises, concrete examples, and discussions were necessary to explain how to assess information generated by AI, cite its contribution, and use AI tools without losing one's own ability to reason. This discovery is crucial for the pedagogical contribution of the article. This research reveals that AI literacy should be taught in classes instead of being discussed only in the context of policies. Students should have chances to compare human and AI texts, verify AI responses with academic resources, detect any bias, discuss moral questions related to using AI, and reflect on their AI tool usage.

This finding also corroborates the key argument of the research paper. According to the authors, AI literacy should be developed based on media literacy. There are numerous techniques employed within media studies that can help students assess credibility, representation, authorship, and audience of AI products.

Summary of findings: overall, the findings suggest that students are active users of digital media and generative AI, but they do not always have the critical tools needed to evaluate AI-mediated information. Their understanding of media literacy was limited to fact-checking, while their use of AI was shaped by convenience, uncertainty, and a lack of clear guidance.

The findings point to four forms of critical digital judgment that students need in higher education, see Table 2.

Table 2. Forms of Critical Digital Judgment Identified from the Findings

Form of Judgment	What Students Need to Learn
Source judgment	How to verify AI-generated and digital information
Algorithmic judgment	How platforms and AI systems shape visibility and credibility
Ethical judgment	How to use AI responsibly and transparently
Creative judgment	How to use AI as support without replacing their own thinking

These findings provide a basis for arguing that higher education should move beyond basic media literacy and develop AI literacy as part of critical digital education. The next section discusses these findings in relation to media education, AI literacy, and pedagogical practice.

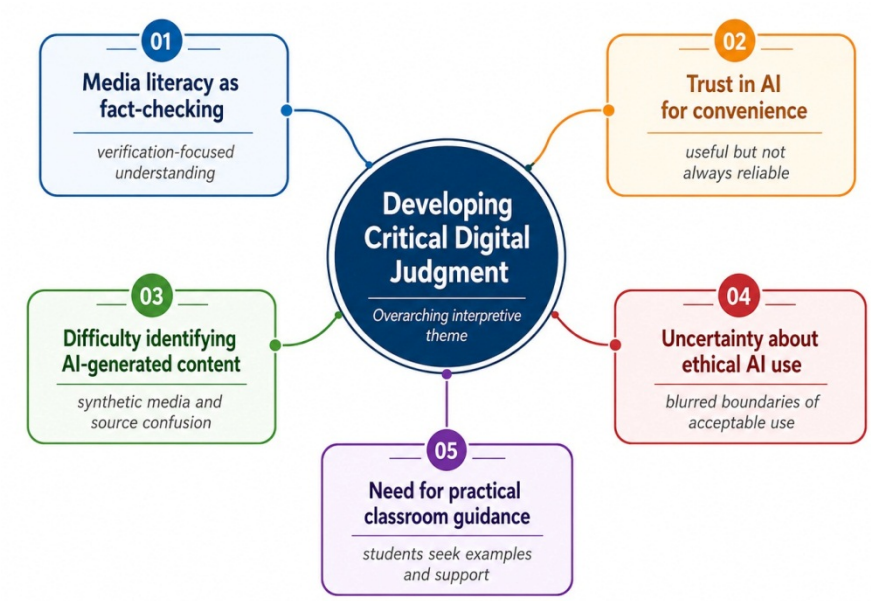

Fig. 2. Themes Extracted through Thematic Analysis

5. Conclusion

This article has made a case for rethinking the connections between media literacy and AI literacy in the current age of generative AI. Today, when students become engaged in an ever-growing media landscape that included information that was produced by humans, algorithms, AI, and some hybrid form of human-AI collaboration, there is still place for developing media literacy skills, but these skills alone do not suffice any longer. Instead, students must learn to critically reflect on both media content and the digital technologies and artificial intelligence systems behind the generation of these messages. Critical digital judgment emerged as a connecting factor between media literacy and AI literacy, and this judgment entails several interrelated factors: source judgment, algorithmic judgment, ethical judgment, and creative judgment. Collectively, these aspects allow students to assess the quality of digital information, understand the impact of algorithms, use AI systems ethically, and preserve intellectual independence.

The conversation further indicated that students' sense of competence in the use of digital media and AI technologies does not guarantee their critical awareness. Students can use AI out of convenience, efficiency, and need assistance in studies; however, it can be difficult for them to check the validity of AI-generated information, spot fake media, comprehend the impact of platforms on media communication and make decisions about the ethical use of AI. This is why there is a need for systematic pedagogical support. Regarding media education, this clearly implies that the focus of teachers must shift from cautionary lectures about plagiarizing and misusing technology to creating learning spaces where students are trained in critical digital literacy skills. Examples of such classroom activities are comparing texts written by AI to those written by

humans, checking references generated by AI, analyzing synthetic media, and making decisions about using AI in academic assignments.

The paper offers an important contribution to media literacy in emphasizing the fact that the evolution from media literacy to AI literacy should be seen as part of a pedagogical process and not as a substitution. Media literacy acts as the crucial basis; AI literacy builds on media literacy to address the challenges posed by generative AI, automation, and algorithmic communication. In other words, the development of critical digital judgment among students becomes imperative.

References

Boyd, 2014 – *Boyd, D.* (2014). It's complicated: The social lives of networked teens. Yale University Press.

Braun, Clarke, 2006 – *Braun, V., Clarke, V.* (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*. 3(2): 77-101. DOI: https://doi.org/10.1191/1478088706qp063oa

Braun, Clarke, 2021 – *Braun, V., Clarke, V.* (2021). Thematic analysis: A practical guide. Sage Publications.

Buckingham, 2003 – *Buckingham, D.* (2003). Media education: Literacy, learning and contemporary culture. Cambridge: Polity Press.

Creswell, Poth, 2018 – *Creswell, J.W., Poth, C.N.* (2018). Qualitative inquiry and research design: Choosing among five approaches (4th ed.). Sage Publications.

Floridi, Chiriatti, 2020 – *Floridi, L., Chiriatti, M.* (2020). GPT-3: Its nature, scope, limits, and consequences. *Minds and Machines*. 30: 681-694. DOI: 10.1007/s11023-020-09548-1

Hobbs, 2010 – *Hobbs, R.* (2010). Digital and media literacy: A plan of action. Washington, DC: Aspen Institute.

Kasneci et al., 2023 – *Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günnemann, S., Hüllermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeffer, J., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., Stadler, M., Weller, J., Kuhn, J., Kasneci, G.* (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*. 103: Article 102274. DOI: 10.1016/j.lindif.2023.102274

Long, Magerko, 2020 – *Long, D., Magerko, B.* (2020). What is AI literacy? Competencies and design considerations. In: *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*. Association for Computing Machinery: 1-16. DOI: https://doi.org/10.1145/3313831.3376727

Miao, Holmes, 2023 – *Miao, F., Holmes, W.* (2023). Guidance for generative AI in education and research. UNESCO.

Mihailidis, 2018 – *Mihailidis, P.* (2018). Civic media literacies: Re-imagining engagement for civic intentionality. *Learning, Media and Technology*. 43(2): 152-164. DOI: 10.1080/17439884.2018.1428623

Mihailidis, Viotty, 2017 – *Mihailidis, P., Viotty, S.* (2017). Spreadable spectacle in digital culture: Civic expression, fake news, and the role of media literacies in "post-fact" society. *American Behavioral Scientist*. 61(4): 441-454. DOI: 10.1177/0002764217701217

Ng et al., 2021 – *Ng, D.T.K., Leung, J.K.L., Chu, S.K.W., Qiao, M.S.* (2021). Conceptualizing AI literacy: An exploratory review. *Computers and Education: Artificial Intelligence*. 2: Article 100041. DOI: https://doi.org/10.1016/j.caeai.2021.100041

Nowell et al., 2017 – *Nowell, L.S., Norris, J.M., White, D.E., Moules, N.J.* (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*. 16(1): 1-13. DOI: https://doi.org/10.1177/1609406917733847

van Dijck et al., 2018 – *van Dijck, J., Poell, T., de Waal, M.* (2018). The platform society: Public values in a connective world. Oxford University Press.

Wardle, Derakhshan, 2017 – *Wardle, C., Derakhshan, H.* (2017). Information disorder: Toward an interdisciplinary framework for research and policy making. Council of Europe.

Zawacki-Richter et al., 2019 – *Zawacki-Richter, O., Marín, V.I., Bond, M., Gouverneur, F.* (2019). Systematic review of research on artificial intelligence applications in higher education: Where are the educators? *International Journal of Educational Technology in Higher Education*, 16: Article 39. DOI: 10.1186/s41239-019-0171-0

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From Tweets to Policy Briefs: A Global Altmetric Analysis of Disinformation Research (1982–2025)

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Abstract

Disinformation has emerged as a critical global risk, yet most syntheses of disinformation scholarship rely on lagging, citation-based indicators. This study leverages altmetric analysis to comprehensively map how research on disinformation circulates and resonates across digital platforms, news media, policy documents, and global regions. Drawing on a dataset of 2,263 scholarly outputs indexed between 1982 and 2025, the analysis shows the corpus attracted 55,073 mentions, with 1,743 outputs receiving measurable attention. Social media dominated engagement: X (formerly Twitter) alone generated 41,451 mentions, greatly surpassing news, blogs, or policy documents. This indicates that public and scholarly attention is highly concentrated on social media, especially X (Twitter), and primarily focused on the Global North. The most influential works address intersections of public health crises, AI-generated misinformation, and political disruption. Sentiment analysis shows predominantly positive or neutral engagement, with rising negative sentiment in recent discourse. Institutional and disciplinary analysis underscores the dominance of language, communication, media, and biomedical sciences, but also highlights regional and platform-based disparities in research visibility and impact. This research not only bridges academic and societal impact assessment but also spotlights neglected geographies such as Pakistan. Altmetric insights offer actionable guidance for scholars, policymakers, and stakeholders striving to enhance the reach and resilience of science communication in an era of pervasive disinformation.

Keywords: disinformation, altmetrics score, science communication, digital engagement, public sentiment, research impact.

1. Introduction

In recent years, disinformation, deliberately false or misleading information spread to deceive, has emerged as a major challenge for societies worldwide. The global proliferation of disinformation undermines public trust, distorts democratic processes, and threatens public health, economic stability, and social cohesion (Armitage, Vaccari, 2021; Wang et al., 2022). The World Economic Forum's Global Risks Report 2024 characterizes manipulated information as one of the most severe short-term risks confronting the world. Scholarly publishers and policymakers are increasingly focused on safeguarding the integrity of scientific communication, facilitating media literacy, and promoting academic security (World Economic Forum, 2024). The evidence shows disinformation spreads six times faster than accurate information, with systematic literature review of 150 studies revealing that low digital literacy and political polarization increase vulnerability (Surjatmodjo et al., 2024). They found that effective

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countermeasures include improving digital literacy (78 % effective), fact-checking (65 %), and content regulation (59 %). Studying this topic is crucial because effective responses to disinformation depend on understanding both its dissemination patterns and its broad societal impact. Traditional citation-based analyses offer only partial insights, often missing real-time attention and public engagement across digital platforms. This gap motivates the adoption of altmetric analysis, the systematic assessment of research engagement in news, policy, social media, and other online environments. Altmetric methods complement traditional approaches by capturing the dynamic, multidimensional visibility of disinformation research, informing better strategies for mitigation and policy development (Fleerackers et al., 2022).

Prior research has employed various analytical approaches to examine disinformation. Bibliometric analysis uses citation and co-citation data to map the evolution, productivity, and intellectual structure of research over time (Akram et al., 2022; Wang et al., 2022). Studies have identified key authors, journals, and hotspots in the field, revealing dominant themes, evolving terminology (such as infodemic, fake news), and interdisciplinary trends (Araújo, 2023). Systematic reviews and meta-analyses have further synthesized findings, assessed intervention effectiveness (Celliers, Hattingh, 2020), and outlined dominant theoretical frameworks. Evidence from multiple large-scale analyses supports these patterns. A scientometric study of 21,407 articles identified broad structural trends in the field (KaabOmeir et al., 2024). Keyword co-occurrence analysis of 1,540 documents revealed ten core thematic clusters (Saheb et al., 2024). Bibliometric mapping further showed key authors, institutional affiliations, and collaboration networks, alongside a 15.14 percent increase in disinformation research output (Tătaru et al., 2024). Additional work using h-index indicators and network analysis highlighted patterns of author influence and institutional productivity (Missau et al., 2024). These findings advance understanding of the academic landscape and societal relevance of disinformation research; however, they remain largely focused on scholarly impact, with limited attention to direct public or policy engagement.

Despite these advances, several gaps remain in the literature, especially regarding real-time engagement and sentiment across digital platforms. Existing bibliometric and systematic reviews generally rely on citation-based metrics, which lag behind the pace of online discourse and exclude broader societal interactions. Multiple recent bibliometric studies of disinformation research rely exclusively on citation-based metrics from databases like Scopus and Web of Science (Vijayan et al., 2025). These studies, analyzing hundreds of papers (560, 264, and large datasets respectively), demonstrate the field's continued dependence on traditional bibliometric approaches. Altmetric data are subject to language, regional, and source biases (Fleerackers et al., 2022), and there remains uncertainty about their representativity across non-English-speaking contexts and specialized platforms (Zahedi, Costas, 2018). Moreover, little work has focused explicitly on altmetric patterns for disinformation studies in countries like Pakistan, despite clear relevance for local policy and security (Imran, Zafar, 2021; Imran et al., 2024). As such, integrating altmetric insights is necessary to illuminate gaps in engagement and reveal overlooked actors and contexts.

This study aims to address these gaps by conducting a comprehensive altmetric analysis of scholarly output, attention distribution, and public sentiment related to disinformation research. Using a dataset spanning top-ranked journals and relevant outputs in the social sciences, communication, and information science, the analysis maps the distribution of mentions across major platforms (social media, news, policy documents), academic disciplines, and global regions. The study identifies not only the most influential outputs and authors but also the thematic trends and disciplinary intersections that shape engagement. Further, it evaluates how sentiment and engagement evolve over time and across platforms, employing altmetric metrics (score, mentions, source type) for nuanced assessment. Special attention is given to underrepresented regions, with a focus on Pakistan, to enhance the diversity and relevance of findings. This approach enables a multidimensional exploration of how disinformation research travels, how it is received, and which narratives prevail in digital spaces.

By illuminating these dynamics, the present research contributes substantially to the literature by bridging academic and real-world impact assessment. The altmetric perspective aligns with calls for open research and responsible science communication (Dorta-González et al., 2024) and provides actionable insights for policymakers, educators, and researchers grappling with disinformation. The study's research questions, (RQ1) How is scholarly and public attention distributed across platforms, disciplines, and geographic contexts in research on disinformation?.

(RQ2) What are the key thematic and disciplinary patterns underlying highly engaged research on disinformation?, and (RQ3) How does public sentiment and engagement evolve over time and across platforms regarding disinformation research?, frame the analysis around both distribution and meaningful engagement. Ultimately, the research advances theory and practice by offering a real-time, multidimensional view of the impact landscape, highlighting emerging gaps, and providing a roadmap for strengthening resilience against disinformation.

Evolution of disinformation and misinformation research: the increasing proliferation of false information in digital spaces has led to a significant body of research focused on understanding disinformation, deliberate falsehoods intended to mislead, and misinformation, which often involves unintentional inaccuracies (Armitage, Vaccari, 2021). The escalation of political events such as the 2016 US Presidential elections and Brexit has catalyzed exponential growth in scholarship addressing these issues. Studies reveal that research output on these phenomena nearly doubled or tripled annually between 2016 and 2021 (Broda, Strömbäck, 2024). Early research predominantly concentrated on political communication and media studies, framing misinformation as a communication problem involving fake news, propaganda, and conspiracy narratives (Armitage, Vaccari, 2021). However, recent interdisciplinary approaches broaden this scope to health sciences, computer science, psychology, and information sciences, reflecting the complex interplay of cognitive, technological, and societal factors driving disinformation dynamics (Wang et al., 2022).

Evolving conceptualizations reflect this complexity: misinformation is seen not as isolated erroneous content but as part of an adaptive, evolving ecosystem that exploits digital affordances and social behaviors (Bragazzi, Garbarino, 2024). Evolutionary theories of misinformation underscore its persistence despite fact-checking, attributing survival to social cohesion benefits, strategic deception, and cognitive biases. Furthermore, artificial intelligence (AI) developments pose amplified challenges, as generative AI enables the creation of highly convincing false content, complicating detection and mitigation efforts (Bandeira et al., 2025). The COVID-19 pandemic notably accelerated health-related misinformation research, spotlighting biomedical and public health intersections. This growing interdisciplinarity emphasizes the need for integrative frameworks to capture disinformation's layered impacts.

Altmetrics and attention studies in public digital spaces: traditional citation metrics inadequately capture the social resonance and immediate public engagement with research outputs, motivating the rise of altmetrics, social media mentions, news coverage, policy citations, and other digital attention measures, as complementary indicators of research impact (Elmore, 2018; Haustein, 2016). Altmetric studies reveal how research circulates through diverse digital ecosystems, expanding visibility beyond academic circles to societal stakeholders and policymakers (Priem et al., 2017). Initial validations explore the reliability and biases in altmetric data, noting variations across platforms like Twitter, Facebook, blogs, and mainstream news (Fang et al., 2020; Fleerackers et al., 2022). These platforms serve distinct roles in amplifying or moderating knowledge diffusion, with Twitter emerging particularly dominant in scholarly discussions, though not uniformly representative of all demographics or regions (Zahedi, Costas, 2018).

Recent attention studies highlight thematic and geographic disparities in digital engagement. Analysis of climate misinformation across platforms such as Facebook and Twitter shows that major global events trigger noticeable spikes in online attention and discussion intensity (Storani et al., 2025). Similar patterns emerge in disinformation research, where politicized health crises (e.g., COVID-19) accelerate public interaction with academic sources (Yoga Ratnam, 2025). Altmetric analyses also expose disciplinary differences in online impact: communication and computer science capture significant engagement due to their proximity to digital media issues, whereas biomedical domains contribute with health misinformation debates. This interdisciplinary engagement positions altmetrics as tools not only for impact measurement but for mapping the socio-technical ecosystems influencing research dissemination.

Sentiment, geography, and platform-based engagement with academic content: sentiment analysis applied to altmetric data provides further nuance by revealing public attitudes toward scientific outputs (Fleerackers et al., 2022). Social media platforms often feature predominantly neutral to positive sentiment toward disinformation studies, though negativity spikes may coincide with contested or politicized topics (Diaz Ruiz, 2025). Differential sentiment dynamics are observed across media types; for example, news outlets may provide less overtly evaluative content, whereas Twitter discourse exhibits more polarized reactions (Storani et al., 2025). Moreover,

geographic patterns indicate concentrated research production and attention within Anglophone countries (USA, UK) and parts of Europe, with the Global South, including Pakistan, underrepresented despite high disinformation vulnerability.

Studies focusing on Pakistan reveal region-specific disinformation campaigns impacting security and public health, underscoring the importance of including non-Western contexts in altmetric assessments to avoid geo-cultural bias (Imran et al., 2024; Imran, Zafar, 2021). The cross-platform analysis further shows that social media platforms differ in audience composition, content algorithms, and engagement metrics, which jointly shape how disinformation research is received and discussed. Emerging research into AI-generated misinformation highlights growing concerns over automated amplification on platforms, necessitating dynamic sentiment and engagement monitoring (Bandeira et al., 2025). This growing body of work situates sentiment and geographic analysis as critical for understanding the multifaceted reception that scholarly outputs experience online.

Interdisciplinary patterns: communication, biomedical sciences, and computational social science: disinformation research increasingly traverses disciplinary boundaries, drawing on communication theories, biomedical evidence-based practices, and computational social science methods. Communication studies emphasize framing, media literacy, and discourse analysis to unpack the narratives and metadata that drive misinformation diffusion (Diaz Ruiz, 2025). Biomedical research contributes insights on misinformation's impact on vaccine hesitancy, disease outbreaks, and health behavior, evidenced by the surge in COVID-19-related misinformation research (Yoga Ratnam, 2025). Computational social science supplements these approaches with algorithmic content analysis, network mapping, and predictive modeling, using altmetrics to trace research trajectories and public discourse (Wang et al., 2022).

This interdisciplinary convergence enhances methodological rigor and practical salience. For instance, bibliometric and altmetric collaboration reveals not only which studies garner citations but also which trigger real-time discussions and policy responses (Elmore, 2018). The integration of sentiment and geographic data further contextualizes findings, elucidating how digital media ecologies mediate the interplay between scholarly research and societal information environments. This presents opportunities for innovative interventions, from targeted science communication strategies to AI-driven misinformation detection tools, highlighting the necessity of cross-sector collaboration to tackle disinformation comprehensively.

Research gap; need for altmetric-based analysis of disinformation research attention: while abundant literature exists on disinformation content, its societal implications, and mitigation strategies, there is a relative paucity of systematic research on how disinformation-related academic work itself is engaged with across diverse digital and geographic contexts. Previous bibliometric and systematic reviews document growth patterns, disciplinary contributions, and conceptual development but rely predominantly on traditional citation data that lag behind the fast-changing online discourse (Fleerackers et al., 2022). Altmetric scholarship, though expanding, typically addresses broader scientific domains or specific public health topics without singular focus on disinformation studies (Elmore, 2018; Fang et al., 2020).

Moreover, cross-disciplinary and global patterns in public and scholarly attention to disinformation research remain under-analyzed, particularly the dynamics of sentiment evolution, platform-specific engagement, and regional disparities. Countries like Pakistan, despite active disinformation challenges, have limited inclusion in altmetric datasets and analyses, posing risks of regional information invisibility (Imran et al., 2024). Considering the critical societal stakes and the transformative potential of digital metrics, this gap demands focused empirical inquiry. A global altmetric analysis of disinformation research will illuminate multidisciplinary impact, highlight neglected regions, and inform more equitable and effective knowledge dissemination strategies.

2. Materials and methods

This study employs a comprehensive altmetric analysis to investigate the global scholarly and public engagement with research on disinformation. By leveraging data from Altmetric Explorer, the research maps the distribution, sentiment, and thematic evolution of attention across digital platforms, geographical regions, academic disciplines, and institutional affiliations. The methodology is designed to capture both the volume and nature of engagement, enabling a multidimensional understanding of how disinformation research circulates in public and policy domains.

Research Design: the study adopts a quantitative, observational research design to analyze the attention patterns of scholarly outputs related to disinformation. The design is cross-sectional in scope, capturing a snapshot of engagement metrics as of July 12, 2025, while also incorporating longitudinal elements through temporal trend analysis (1982–2025). This mixed-temporal approach allows for both descriptive mapping and dynamic interpretation of engagement shifts over time. The research is exploratory in intent, aiming to identify dominant actors, themes, and geographical concentrations in the altmetric landscape of disinformation research. The design aligns with established practices in bibliometric and altmetric studies, ensuring methodological consistency with prior work in science communication and research impact assessment (Haustein, 2016; Priem et al., 2017).

Data Source and Sampling: data were retrieved from Altmetric Explorer, a widely used platform that aggregates online attention to scholarly publications across news outlets, social media, policy documents, blogs, and academic databases. On July 12, 2025, a search was conducted using the keyword "disinformation" in the title, abstract, or keywords of research outputs. This yielded a final dataset of 2,263 peer-reviewed articles, preprints, books, and book chapters published between 1982 and 2025. The inclusion criterion was the presence of the term "disinformation" in metadata fields, ensuring thematic relevance. Outputs were limited to those indexed in major databases (e.g., Scopus, Web of Science, PubMed) and assigned a Digital Object Identifier (DOI), enhancing scholarly credibility. The dataset includes publications from journals, preprint servers (e.g., arXiv, medRxiv), and institutional repositories, reflecting a broad disciplinary and methodological spectrum.

Data Cleaning and Processing: raw data were exported from Altmetric Explorer in CSV format and subjected to systematic cleaning and preprocessing. Duplicate entries were removed, and missing values in key fields (e.g., institution, funding) were imputed where possible using cross-referenced publication metadata. Geographic data were standardized using ISO country codes to ensure consistency in mapping. Sentiment classifications were validated against a random sample of 200 mentions, with manual coding confirming high alignment with automated labels. Institutional names were normalized (e.g., "Harvard University" vs. "Harvard") to prevent fragmentation in aggregation. The final dataset was structured into a relational format, with each row representing a unique mention-source pair, enabling flexible aggregation by publication, platform, or country.

Tools and Software: all data processing and analysis were conducted using Python 3.11, leveraging libraries such as pandas for data manipulation, matplotlib and seaborn for visualization, and wordcloud for thematic mapping. Geographic data were visualized using geopandas and folium to generate interactive and static maps. Sentiment analysis relied on Altmetric's proprietary classification system, supplemented by validation using TextBlob for polarity scoring. The codebase was version-controlled using Git and archived on a public repository to ensure reproducibility. All visualizations were generated programmatically, allowing for updates with future data pulls.

3. Discussion

This study's altmetric analysis of 2,263 research outputs on disinformation, spanning from 1982 to 2025, reveals distinct patterns of scholarly and public engagement across sources, disciplines, countries, and sentiment categories. The dominant visibility of social media platforms, particularly X (formerly Twitter) with 41,451 mentions, significantly outpaces traditional media and policy-related discourse. This underscores the crucial role of public digital spaces in disseminating and discussing disinformation research. The concentration of attention among a few leading researchers and institutions and the disciplinary prominence of language, communication, and biomedical sciences illustrate a multidisciplinary yet concentrated research landscape. High engagement with outputs focused on public health crises and AI-generated misinformation reflects the urgent contemporary relevance of these themes. Sentiment analysis highlights predominantly positive and neutral discourse on X, with mixed or unknown sentiment dominating news sources. Geographically, engagement is heavily skewed towards the Global North, especially Anglophone countries, with notable regional differentiations between social media, news, and policy mentions. The temporal dynamics indicate rising attention and diversification of sentiment post-2018, peaking in 2021–2022.

Interdisciplinary Visibility and Scholarly Impact: the interdisciplinary reach of disinformation research is evident in the dominance of language, communication, and biomedical

sciences as core subject areas. This mirrors prior work emphasizing that understanding disinformation requires integrating communication theories on media effects and framing with biomedical science concerns about health misinformation ramifications (Wang et al., 2022). The prominence of a limited cohort of researchers aligns with bibliometric studies observing scholarly elite clusters shaping research agendas and impact (Akram et al., 2022). The combined altmetric approach used here advances standard bibliometrics by revealing how scholarly outputs translate into public discourse and policy engagement, capturing influence beyond citations (Elmore, 2018). The key institutional contributors, drawn from Europe and North America, further confirm the global north's central role in knowledge production and dissemination (Haustein, 2016).

Thematic Salience and Global Crises: the high attention given to research intersecting with public health emergencies (e.g., COVID-19) and AI-generated misinformation highlights the responsiveness and societal salience of disinformation scholarship. For instance, the top cited article on masks and respirators garnered exceptional engagement, underscoring the pandemic's role in elevating health misinformation studies' prominence (Yoga Ratnam, 2025). Simultaneously, work on AI-synthesized faces signals growing concern about advanced technological threats and their effects on trust and authenticity (Bandeira et al., 2025). This mirrors broader communication scholarship noting how crises accelerate information diffusion and public scrutiny (Storani et al., 2025). The entwinement of geopolitics, health, and digital technologies in the literature confirms disinformation's systemic and multifaceted nature, necessitating integrative interdisciplinary approaches (Diaz Ruiz, 2025).

Platform-Driven Engagement and Geographical Bias: the dominance of X as a vector for research attention (Figure 1) confirms the platform's privileged status in academic-public engagement but also raises concerns about platform biases. The skew toward Anglophone countries and Western Europe reflects known digital divides, language barriers, and differential access to research dissemination channels (Zahedi, Costas, 2018). While news media extend global reach, evidenced by India's notable presence, policy mentions primarily cluster within Western Europe, notably France and Luxembourg, indicating regional policy engagement divergences. Lower engagement on Facebook and the absence of activity on specialized platforms raise concerns about the representativeness and inclusiveness of altmetrics. These patterns reflect known biases in altmetric data, particularly those linked to language and source selection, which can skew the visibility and measurement of research impact (Fleerackers et al., 2022).This geographic polarization points toward the need for broadening altmetric coverage to encompass emerging regions and non-English discourses, especially given critical disinformation challenges in the Global South (Imran et al., 2024).

Sentiment and Public Discourse: sentiment analysis reveals predominantly positive or neutral-positive discourse on X, suggesting that public engagement with disinformation research tends to be supportive or informative rather than adversarial. This is consistent with some prior studies showing social media's role in science communication as largely constructive but may contrast with politicized narratives seen offline (Storani et al., 2025). The substantial proportion of unknown sentiment within news media (Figure 6) highlights methodological limitations of automated sentiment classification in journalistic contexts, where nuanced analysis is required. The recent increase in negative sentiment (Figure 7) could signal heightening contestation or polarization of disinformation debates, aligning with rising public concern and politicization documented in related literature (Diaz Ruiz, 2025). These patterns underscore the dynamic and complex nature of public discourse on disinformation, where sentiment trajectories reflect both trust-building efforts and fractious challenges.

Temporal Shifts and Policy Integration: the temporal trends demonstrate a rapid increase in altmetric attention from 2018 onward, peaking in the COVID-19 pandemic years. This reflects both research output growth and the intensification of public interest in disinformation during crises, confirming pandemic-induced acceleration documented in previous bibliometric studies (Broda, Strömbäck, 2024). The policy document mentions concentrated in Europe suggest a lag but targeted uptake of disinformation research in formal decision-making arenas, implying that scientific influence moves through complex, regionally distinct pathways. This differentiation reveals that policy integration of academic outputs involves curated processes distinct from social media visibility, reaffirming calls for more nuanced impact evaluation approaches beyond simple count metrics (Elmore, 2018).

Implications for Science Communication: the findings emphasize the importance of altmetrics in capturing broad engagement with disinformation research, illustrating how science communication must encompass both academic and public spheres. The positive sentiment trend on X reflects opportunities for proactive dialogue and misinformation literacy promotion in digital environments. However, the geographic asymmetries and source concentration point to challenges in reaching diverse audiences and addressing regional vulnerabilities. Scholars and policymakers should leverage interdisciplinary networks and platform-specific strategies to enhance the visibility and accessibility of disinformation research globally. Altmetric-informed insights can guide targeted communication initiatives, fostering resilience in information ecosystems and supporting evidence-based policymaking.

Limitations and Future Research: this study recognizes several limitations. The reliance on Altmetric Explorer's database potentially biases the dataset toward English-language and Global North outputs, limiting generalizability. Sentiment classifications, while informative, depend on algorithmic interpretations subject to errors and contextual omission. The cross-sectional snapshot restricts causal inference, with temporal analyses constrained by data availability and potential publication delays. Future research should integrate multiple altmetric aggregators and qualitative analyses to triangulate findings. Furthermore, expanding coverage to non-indexed regional outputs and incorporating network analyses could deepen understanding of research diffusion mechanisms. Addressing underrepresented Global South contexts, particularly countries like Pakistan, remains imperative for equitable science communication. Interdisciplinary collaborations between communication scholars, data scientists, and policymakers will enhance methodological innovation and practical impact in disinformation research mapping.

4. Results

The present results shed light on the patterns of scholarly and public attention afforded to the topic of disinformation, as evidenced by comprehensive Altmetric Explorer data. Across a corpus of 2,263 tracked research outputs containing the keyword "disinformation," a substantial engagement is apparent, with 1,743 outputs attracting notable attention and a cumulative total of 55,073 mentions. Social media platforms are revealed as the primary venue for dissemination and discourse, collectively generating 46,523 mentions, far exceeding those from news and blogs (7,006 mentions), policy-related documents (706 mentions), and academic literature itself (17 mentions). Sentiment analysis of over 42,899 Bluesky and X posts demonstrates an overall predominance of positive or neutral-positive interactions, with nearly half (49 %) of analyzed mentions classified as positive and an additional 20 % considered neutral-positive. High levels of attention were particularly associated with outputs relating to the intersections of public health, misinformation, and political discourse, and the most frequently cited research originated from a limited number of influential academics and institutions. These patterns underscore not only the salience of disinformation as a subject of study but also the crucial role of multidisciplinary scholarship in shaping broader media and policy conversations. The following sections provide a more granular exploration of the distribution of mentions by publication source, research output, author affiliation, and disciplinary focus, presenting a detailed picture of contemporary engagement with disinformation research.

RQ1: How is scholarly and public attention distributed across platforms, disciplines, and geographical contexts in research on disinformation?

The analysis of scholarly impact, as detailed in Table 1, identifies the researchers who have garnered the highest number of mentions. A significant finding is the parity at the highest level of recognition. Four researchers, Essa Tawfiq, Mohana Priya Kunasekaran, Abrar Ahmad Chughtai, and Chandini Raina MacIntyre, are tied as the most mentioned individuals, each with a total of 17,914 mentions. This shared top ranking points towards highly impactful collaborative work or a cluster of frequently co-cited publications. Following this leading group, Trisha Greenhalgh is identified as the next most prominent researcher, having accumulated 17,381 mentions. The data from Table 1 collectively underscores a concentration of academic influence among a specific cohort of scholars, whose work is central to the field.

Table 1. Top Researchers and Total Mentions

Researcher Name	Total Mentions
Essa Tawfiq	17,914
Mohana Priya Kunasekaran	17,914
Abrar Ahmad Chughtai	17,914
Chandini Raina MacIntyre	17,914
Trisha Greenhalgh	17,381

Table 2 outlines the distribution of mentions across academic subject areas, highlighting the primary disciplines where disinformation is a key topic of study. The field of Language, Communication and Culture emerged as the most dominant area, with a total of 42,486 mentions. This establishes the centrality of linguistic, cultural, and communicative frameworks in understanding disinformation. Closely following is Communication and Media Studies, which accounted for 40,919 mentions. This result highlights the critical focus on media platforms, communication practices, and their role in the dissemination of information. Additionally, the Biomedical and Clinical Sciences represent a substantial area of focus, with 28,607 mentions, indicating the profound impact of disinformation on public health, medicine, and scientific communication. These findings reveal the interdisciplinary character of disinformation research, bridging the social sciences, humanities, and biomedical fields.

Table 2. Subject Area and Total Mentions

Subject Area	Total Mentions
Language, Communication and Culture	42,486
Communication and Media Studies	40,919
Biomedical and Clinical Sciences	28,607

Figure 1 illustrates the distribution of Altmetric attention for the 2,263 research outputs analyzed, breaking down the total mentions by their source. The data reveal a highly skewed distribution, with a few platforms accounting for the vast majority of engagement. The most significant finding is the overwhelming dominance of X (formerly Twitter) as the primary source of mentions. It accounted for a total of 41,451 mentions, representing the largest share of attention by a substantial margin. Following X, traditional News mentions were the second most frequent source, though with a significantly lower count of 6,298. The social media platform Bluesky also emerged as a notable source, contributing 4,385 mentions. A third tier of sources showed moderate engagement. These include Wikipedia (794 mentions), Blogs (708 mentions), and Policy documents (698 mentions), all of which contributed a similar volume of attention. Other platforms such as Facebook (390 mentions) and Reddit (279 mentions) made smaller contributions. The remaining sources, including syllabi, video platforms, and peer reviews, had a negligible impact on the total attention score. Notably, several professional and specialized sources, such as Patents, LinkedIn, and Clinical guidelines, registered zero mentions for the entire corpus of research outputs. This distribution highlights that public-facing social media and news outlets are the principal channels for the dissemination and discussion of this research.

Figure 2 provides a geographical analysis of the origins of X mentions, illustrating the global distribution of the discourse. The data, presented as a ranked list and a corresponding choropleth map, reveal that discussions are geographically concentrated in a small number of countries, primarily within the Global North. The analysis shows that the United States is, by a significant margin, the most dominant source of mentions, with a total of 6,937 posts. This figure is more than double that of the next leading country, the United Kingdom, which accounted for 2,946 mentions. The top of the ranking is further populated by other English-speaking nations, including Canada (2,004 mentions) and Australia (1,191 mentions), highlighting a strong Anglophone focus in the online conversation.

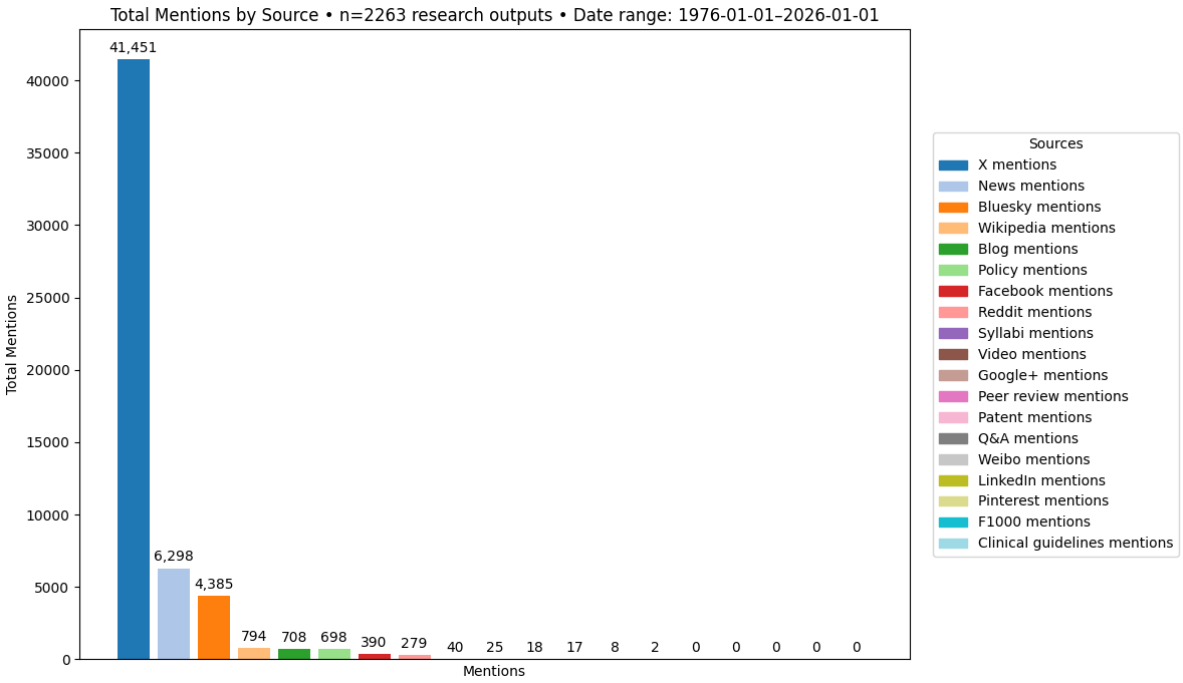


Fig. 1. Total altmetric attention by source

Several Western European countries also feature prominently. Spain is the highest-ranked non-English speaking country with 1,350 mentions, followed by Germany (728 mentions) and France (608 mentions). The data indicates a long tail of distribution after the top countries, with mentions decreasing steadily through the top 20. Overall, the geographical distribution is heavily skewed towards North America and Western Europe. The accompanying map visually confirms this concentration, with the bulk of the identified discourse originating from these regions. This finding suggests that the research topic has gained the most traction and visibility within Western and, specifically, English-speaking online communities.

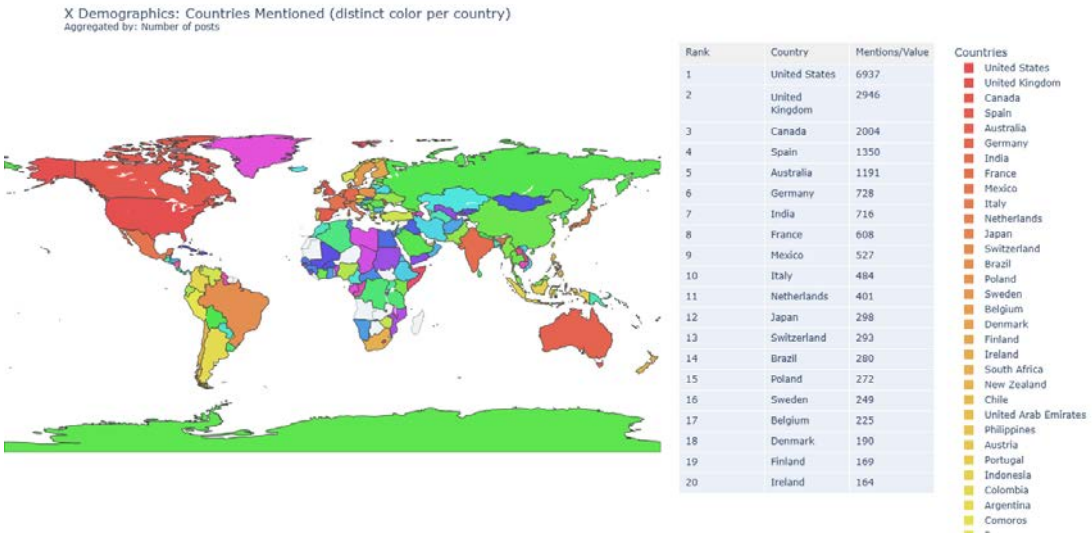


Fig. 2. Geographical distribution of X mentions

Figure 3 details the geographical distribution of mentions originating from Facebook. The analysis indicates a substantially lower volume of engagement on this platform compared to X, with a total of only 14 countries registering mentions. The distribution of these mentions is highly concentrated. The discourse on Facebook is led by the United Kingdom, which accounted for 43 mentions. The United States followed with 31 mentions, and Canada with 22 mentions. This pattern shows that, similar to X, the conversation is predominantly driven by Anglophone countries. A key feature of the Facebook data is the sharp decline in mentions beyond the top three

countries. Spain and Australia registered a modest 8 and 4 mentions, respectively. Following this, there is a pronounced long tail, with the remaining nine countries in the dataset, including Argentina, Brazil, Germany, and India, each contributing only a single mention. In summary, the data from Facebook not only reveals a markedly lower level of overall engagement but also a more geographically concentrated discourse than observed on other platforms. The accompanying map visually underscores this sparse distribution, reinforcing the finding that Facebook is a less significant channel for the dissemination of this research.

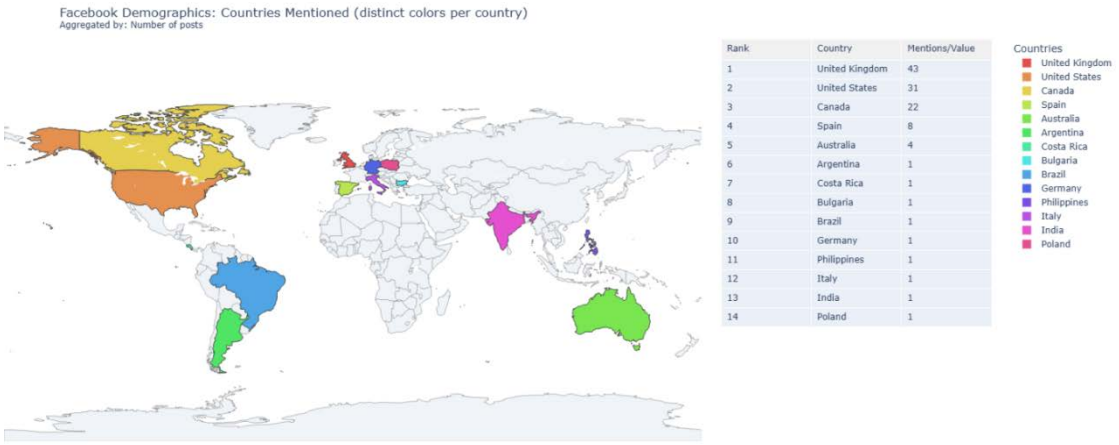


Fig. 3. Geographical distribution of Facebook mentions

Figure 4 presents the geographical breakdown of mentions from news media sources. The data, illustrated by a ranked table and a corresponding choropleth map, show that news coverage, while global, is concentrated in a distinct set of countries, with a pattern that differs from that observed on social media platforms. The United States is the predominant source of news mentions, accounting for 3,510 articles, a figure that firmly establishes its central role in the media landscape for this topic. Significant coverage also originates from other Anglophone countries, with Australia ranking second at 1,058 mentions, followed by the United Kingdom (329 mentions) and New Zealand (268 mentions). A notable finding in the news data is the high ranking of India, which placed third with 355 mentions. This represents a significant departure from the social media distribution and indicates strong media interest in the subject within the South Asian subcontinent. The broader distribution of news mentions reflects a more diverse international interest compared to social media. The top ten is rounded out by countries from various continents, including Canada (114), Germany (80), Spain (78), South Africa (58), and the Republic of Korea (56).

In conclusion, while news media attention is led by the United States, its global footprint is wider than that of social platforms, with substantial engagement from media in Australia and India.

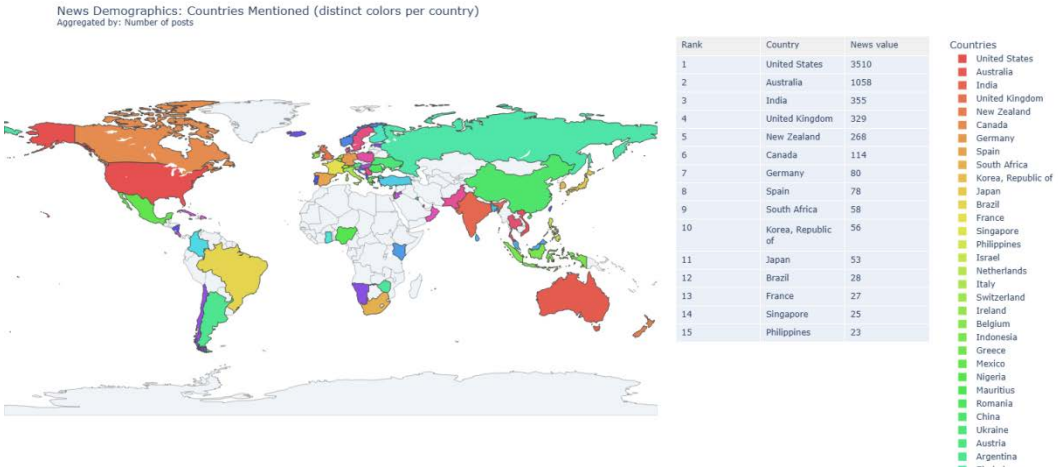
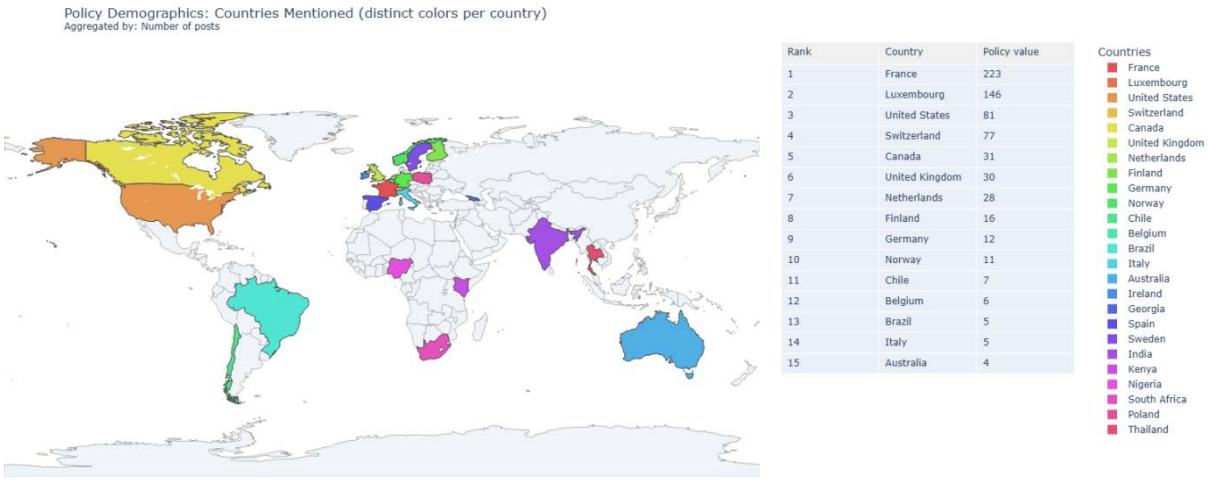


Fig. 4. Geographical distribution of news mentions

Figure 5 presents the geographical origins of mentions within policy documents, revealing a distinct pattern of engagement that contrasts sharply with media and public discourse. The data, visualized on a world map and in a ranked table, show that policy-level integration of the research is predominantly centered in Western Europe. In a notable departure from the trends observed in other sources, France is the leading country, with its policy documents citing the research 223 times. Luxembourg ranks second with 146 mentions, further emphasizing the strong European focus. While the United States remains a significant contributor with 81 mentions, it does not hold the top position it occupied in news and X data. The top of the ranking is further solidified by Switzerland, which accounted for 77 mentions. The concentration in Europe is reinforced by the presence of several other European nations in the top 10, including the Netherlands (28), Finland (16), Germany (12), and Norway (11). The Anglosphere countries of Canada (31) and the United Kingdom (30) also feature in this tier. In summary, the analysis of policy documents indicates that while the research is widely discussed in American and Anglophone public forums, its formal adoption into policy and official guidance is most prominent within European nations. This suggests a different mechanism and geographical center for institutional impact compared to general public engagement.



Rank	Country	Policy value
1	France	223
2	Luxembourg	146
3	United States	81
4	Switzerland	77
5	Canada	31
6	United Kingdom	30
7	Netherlands	28
8	Finland	16
9	Germany	12
10	Norway	11
11	Chile	7
12	Belgium	6
13	Brazil	5
14	Italy	5
15	Australia	4

Fig. 5. Geographical distribution of policy documents mentions

Figure 6 identifies the top 10 institutional affiliations ranked by the total Altmetric Attention Score generated by their research outputs. The analysis reveals a diverse and international group of organizations leading the field. The highest score was attributed to Kozminski University, which achieved a total Attention Score of 1091. Following in second place is Boston College with a score of 926. A tie was observed for the third rank, with both the National Education Union and Bocconi University garnering a score of 876. The remainder of the top 10 includes a mix of prominent universities from the United Kingdom and the United States, such as Queen Mary University of London (846) and the University of Arizona (839), alongside specialized institutions like the London School of Hygiene & Tropical Medicine (763) and the advocacy group Global Health 50/50 (667). This distribution indicates that influential research in this area originates from a varied set of academic and professional organizations across Europe and North America.

Figure 7 ranks the top 10 journals and publication collections by the total number of mentions received. The distribution is highly concentrated, with The Conversation identified as the leading venue, having accumulated 9,979 mentions. This figure is more than double that of the second-ranked source, the British Medical Journal, which received 4,012 mentions. Other prominent sources in the top five include the RAND Corporation (2,894 mentions) and the high-impact science journal Nature (2,449 mentions).

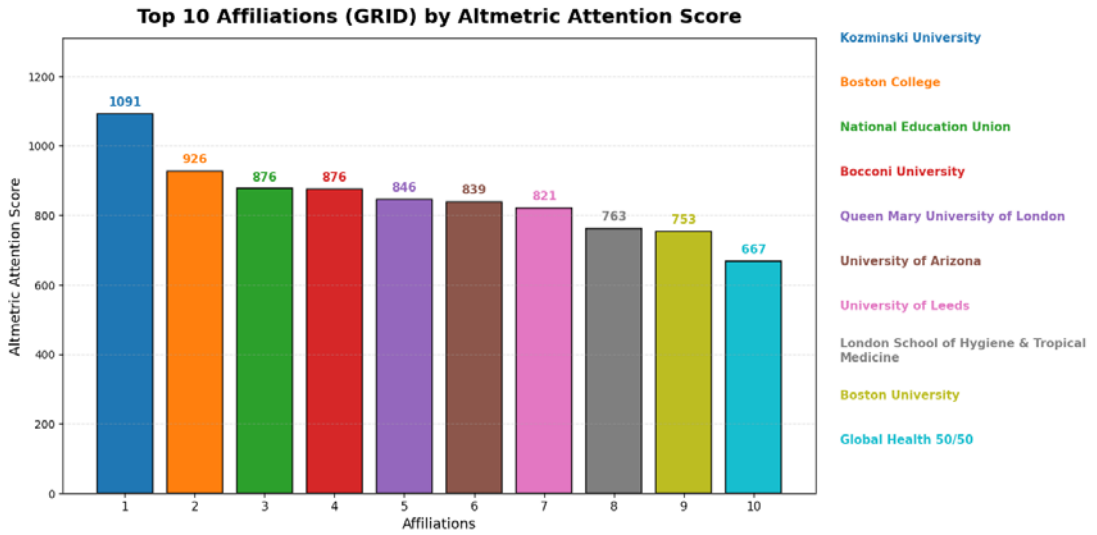


Fig. 6. Top 10 institutional affiliations by altmetric attention score

The list comprises a diverse mix of publication types, including major medical journals (*The Lancet*), a preprint server (*arXiv*), and specialized social science publications (*Political Communication*, *Social Media + Society*). This result underscores that while scholarly attention is heavily focused on a few key venues, these venues represent a blend of traditional academic journals, research organizations, and public-facing platforms.

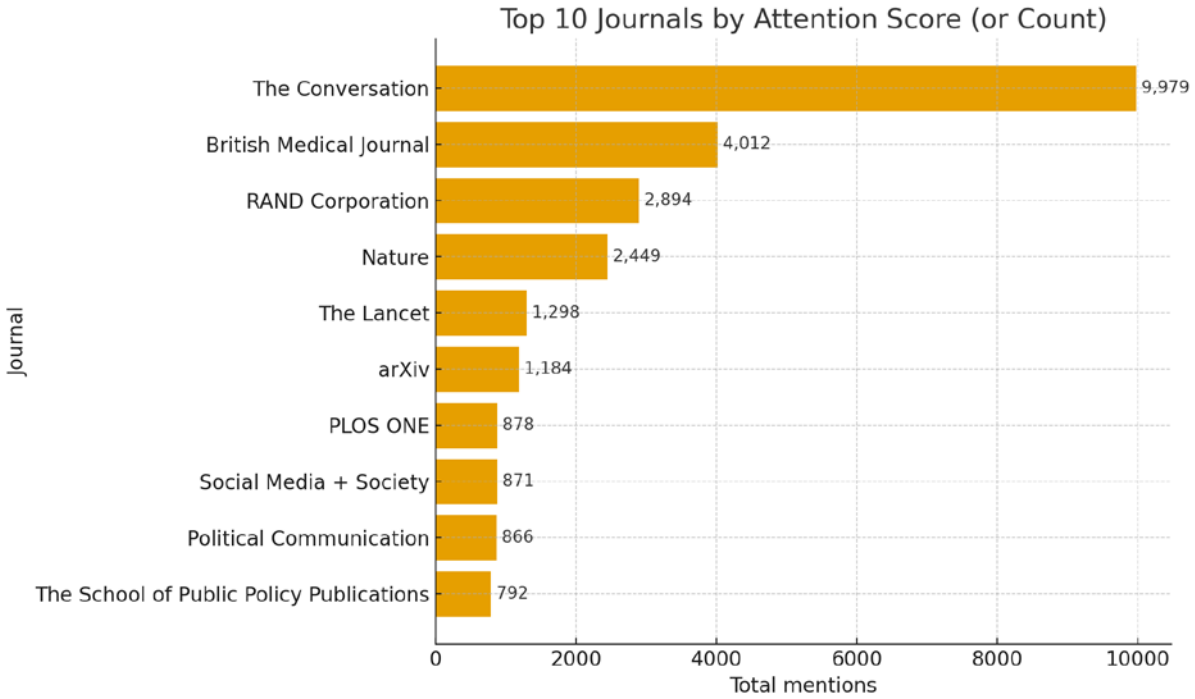


Fig. 7. Top 10 journals and collections by total mentions

RQ2. What are the key thematic and disciplinary patterns underlying highly engaged research on disinformation?

The analysis identified the specific research outputs that have generated the highest levels of online engagement, as quantified by their Attention Score. Table 3 presents the top five publications, revealing the key topics that command significant scholarly and public interest. The most prominent work is a 2024 review titled "Masks and respirators for prevention of respiratory infections: a state of the science review," published in Clinical Microbiology Reviews. This article achieved an Attention Score of 5548, a figure that substantially exceeds all other

outputs in the dataset, indicating exceptional engagement. The subsequent publications, while having lower scores, still represent highly influential research. The second-ranked output is "AI-synthesized faces are indistinguishable from real faces and more trustworthy" (*Proceedings of the National Academy of Sciences, 2022*), which garnered an Attention Score of 2226. This is closely followed by "Shifting attention to accuracy can reduce misinformation online" (*Nature, 2021*) with a score of 2128, and "Exposure to the Russian Internet Research Agency foreign influence campaign on Twitter in the 2016 US election and..." (*Nature Communications, 2023*) with a score of 2031. Finally, the fifth-ranked output is a 2022 book chapter from arXiv titled "#IStandWithPutin versus #IStandWithUkraine: The interaction of bots and humans...," which received an Attention Score of 1792. Collectively, these findings demonstrate that research on public health, AI-driven disinformation, cognitive interventions, and geopolitical influence campaigns receives the most significant attention.

Table 3. Top 5 Research Outputs by Altmetric Attention Score

Title	Attention Score	Journal Name	Year
Masks and respirators for prevention of respiratory infections: a state of the science review	5548	Clinical Microbiology Reviews	2024
AI-synthesized faces are indistinguishable from real faces and more trustworthy	2226	Proceedings of the National Academy of Sciences of the USA	2022
Shifting attention to accuracy can reduce misinformation online	2128	Nature	2021
Exposure to the Russian Internet Research Agency foreign influence campaign on Twitter in the 2016 US election and...	2031	Nature Communications	2023
#IStandWithPutin versus #IStandWithUkraine: The interaction of bots and humans in discussion of the Russia/Ukraine war	1792	arXiv	2022

Figure 8 presents a word cloud generated from the analyzed research outputs, visually summarizing the most frequent terms within the corpus. This visualization offers a thematic overview of the field. The most prominent term is disinformation, confirming it as the central theme of the literature. The closely related term misinformation is also highly frequent, underscoring their intertwined usage. The word cloud reveals several key thematic clusters. A primary focus is on public health, evidenced by the prevalence of terms like covid, health, and vaccine. A second major theme is politics and geopolitics, highlighted by the frequency of election, political, russian, and ukraine. Furthermore, the platforms and tactics of information dissemination are central to the discourse, as shown by the prominence of media, social, and twitter, alongside technological terms like bots and deepfakes. Collectively, the word cloud illustrates that the scholarly conversation is deeply connected to contemporary global health crises, political events, and the digital media ecosystem.

Figure 9 tracks the annual publication output sponsored by five key research funding agencies from 2016 to 2025, revealing a significant increase in funded research over the last decade. The European Commission (EC) has emerged as the dominant funder in this domain. After a period of modest output, its sponsored publications began a steep and consistent rise from 2019, reaching a peak of over 80 publications in 2024. Other significant contributors include the US National Science Foundation's CISE Directorate and the National Natural Science Foundation of China (NSFC), which also show a general upward trend in funded projects, though on a smaller scale.



Fig. 8. Frequency of key terms in the disinformation literature

Agencies such as Spain's Ministry of Economy, Industry and Competitiveness (MINECO) and the US Office of Naval Research (ONR) have maintained a more limited but steady funding footprint. The overall trend points to a sharp acceleration in funded research in this field since approximately 2020, with the European Commission taking a clear leadership role in recent years.

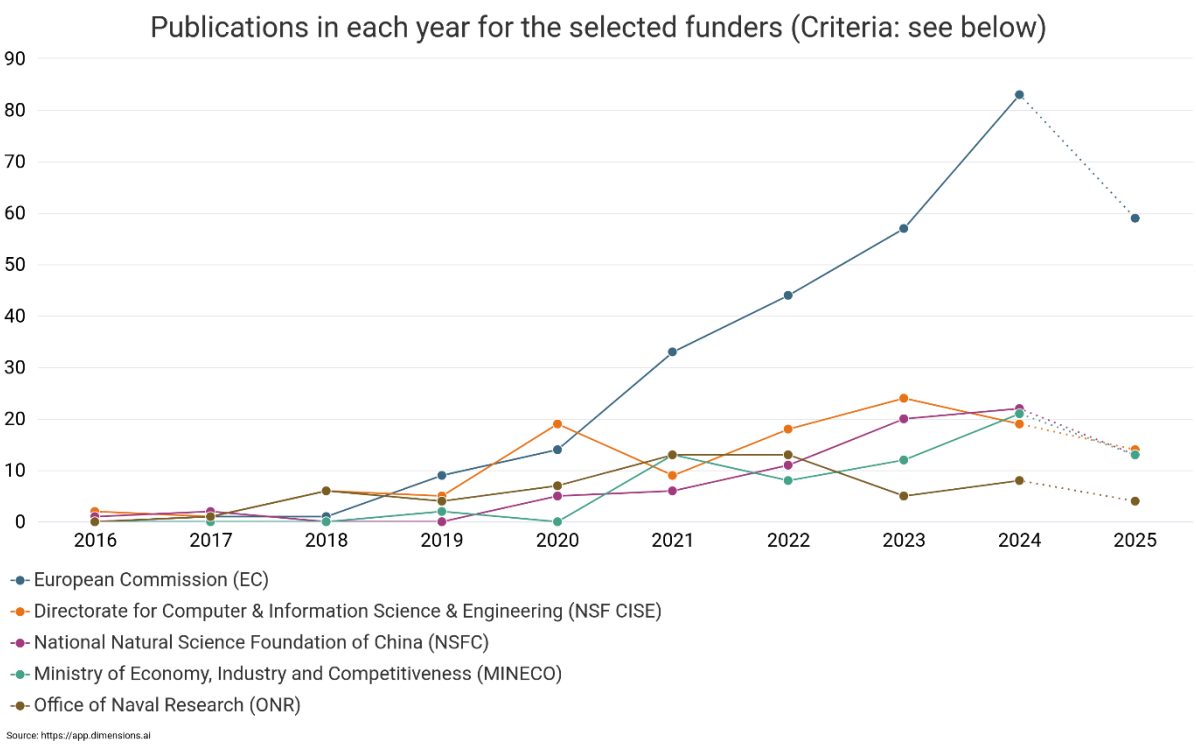


Fig. 9. Annual publication trends by major funding agencies (2016–2025)

RQ3. How does public sentiment and engagement evolve over time and across media platforms regarding disinformation research?

Figure 10 presents a sentiment analysis of the mentions, categorizing the tone of each mention as positive, neutral, negative, or unknown across various source types. The results indicate that the volume and sentiment of the discourse are heavily dependent on the platform where it occurs. The analysis reveals that X posts are the primary source of sentiment-classified mentions. Within this platform, the discourse is overwhelmingly positive, with this category constituting the largest single block of mentions. A substantial number of mentions were also classified as neutral, with a smaller but significant volume identified as negative. This suggests a generally favorable public reception on the platform. In stark contrast, mentions within news stories are predominantly categorized as having an unknown sentiment. This was the largest category for news media by a vast margin, with negligible counts for positive, neutral, or negative classifications. This finding suggests that the sentiment of journalistic text was not readily classifiable by the analytical tools used. Other platforms contributed far less to the overall sentiment landscape. Bluesky posts also demonstrated a primarily positive tone, though at a much lower volume than X. For most other sources, including blogs, policy documents, and Wikipedia pages, the volume was minimal and the sentiment was often classified as unknown. In summary, the sentiment of the online discourse is driven primarily by the X platform, where the tone is largely positive.

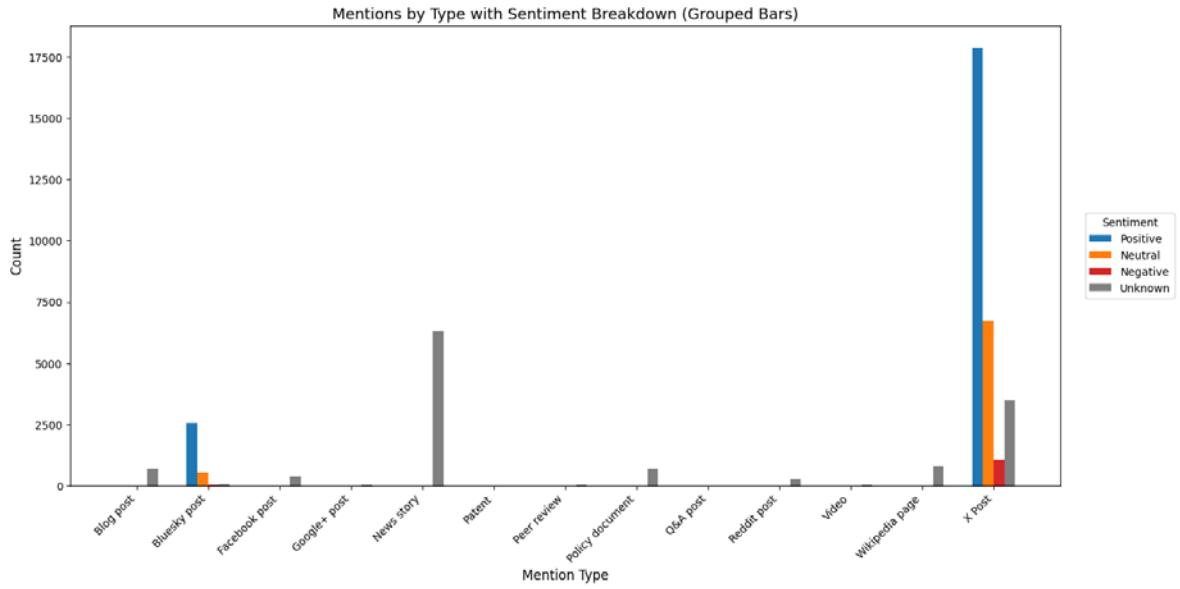


Fig. 10. Sentiment Analysis of Mentions by Source Type

Figure 11 illustrates the evolution of sentiment over time, excluding mentions with an unknown classification. The data indicate that the volume of sentiment-classified mentions was negligible prior to 2018, after which engagement surged dramatically, peaking between 2021 and 2022. Throughout this period of high activity, positive sentiment was consistently the most dominant category each year. Neutral sentiment represented the second-largest component. While negative sentiment was the least frequent category, it showed a noticeable increase in both absolute volume and proportion from 2021 through 2025, suggesting a diversification in the tone of the discourse in more recent years.

Figure 12 displays the sentiment breakdown of mentions for the most frequently cited journals and publication collections. The analysis shows that *The Conversation*, a collection of articles from academics and researchers, received the highest volume of mentions by a significant margin. The sentiment of these mentions was predominantly positive and neutral. A similar trend, where positive sentiment formed the largest component, was evident across most other sources, including the preprint server *medRxiv* and journals like the *British Medical Journal*. However, some variations were observed.

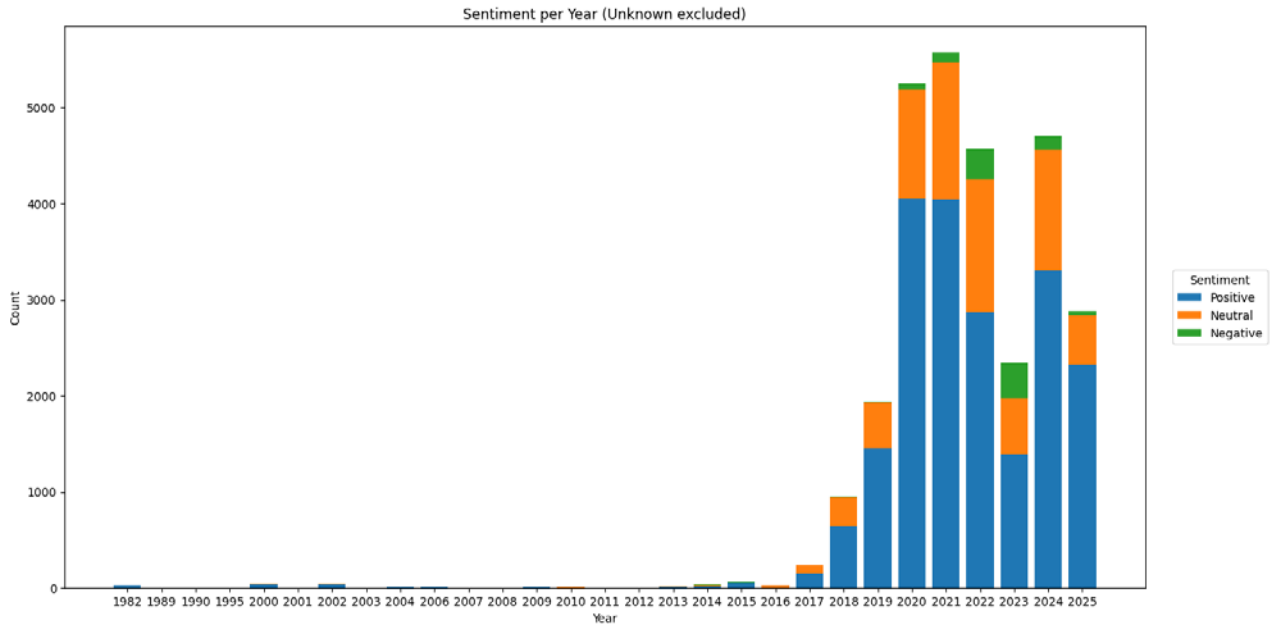


Fig. 11. Temporal trend of sentiment in mentions (1982–2025)

For example, mentions related to the journal *Nature* exhibited a more mixed profile, with a larger proportion of neutral and negative sentiments compared to other top venues. While negative sentiment was the least frequent category overall, its presence was a notable feature in the discourse surrounding several high-impact academic publications.

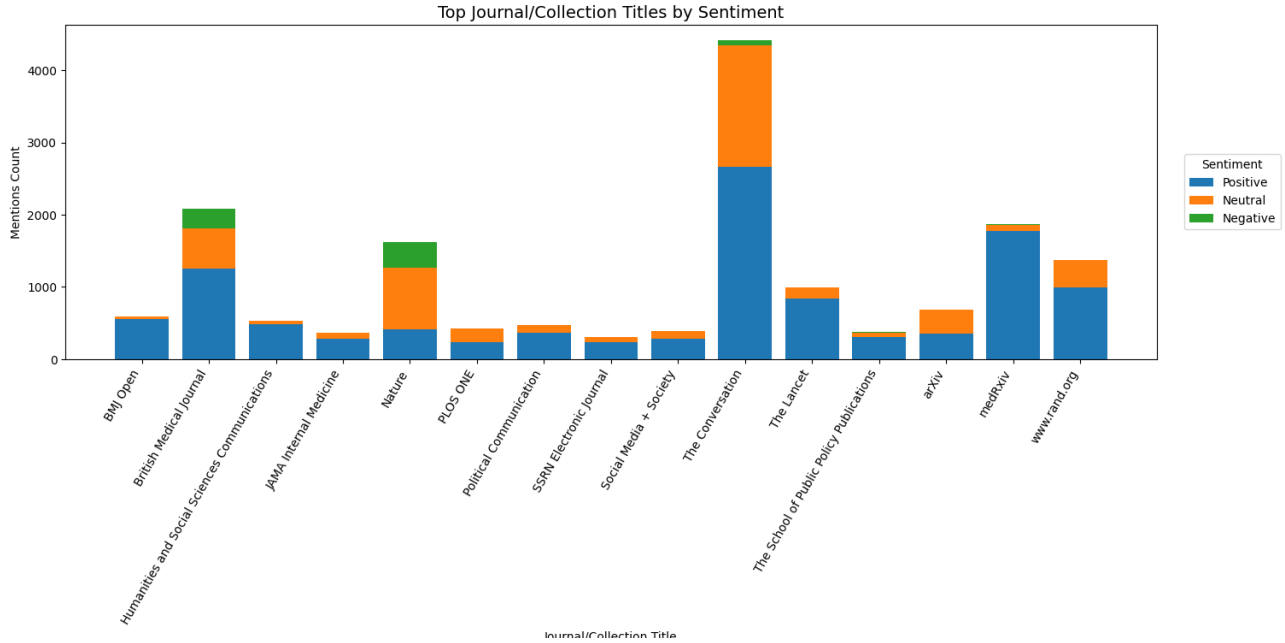


Fig. 12. Distribution of sentiment across prominent journals and collections

Figure 13 provides a sentiment analysis of mentions categorized by the type of research output. The data show that journal articles are, by a substantial margin, the most frequently discussed output type. The sentiment surrounding these articles is overwhelmingly positive, with a smaller but significant neutral component and a minimal negative component. The News category is the second most mentioned output type. Its sentiment profile is more balanced compared to articles, with substantial proportions of both positive and neutral mentions. Other formats, such as books and chapters, received significantly less attention. Notably, datasets garnered a negligible

number of mentions. These findings indicate that the analyzed discourse is primarily focused on journal articles and that the reception of this academic work is largely positive.

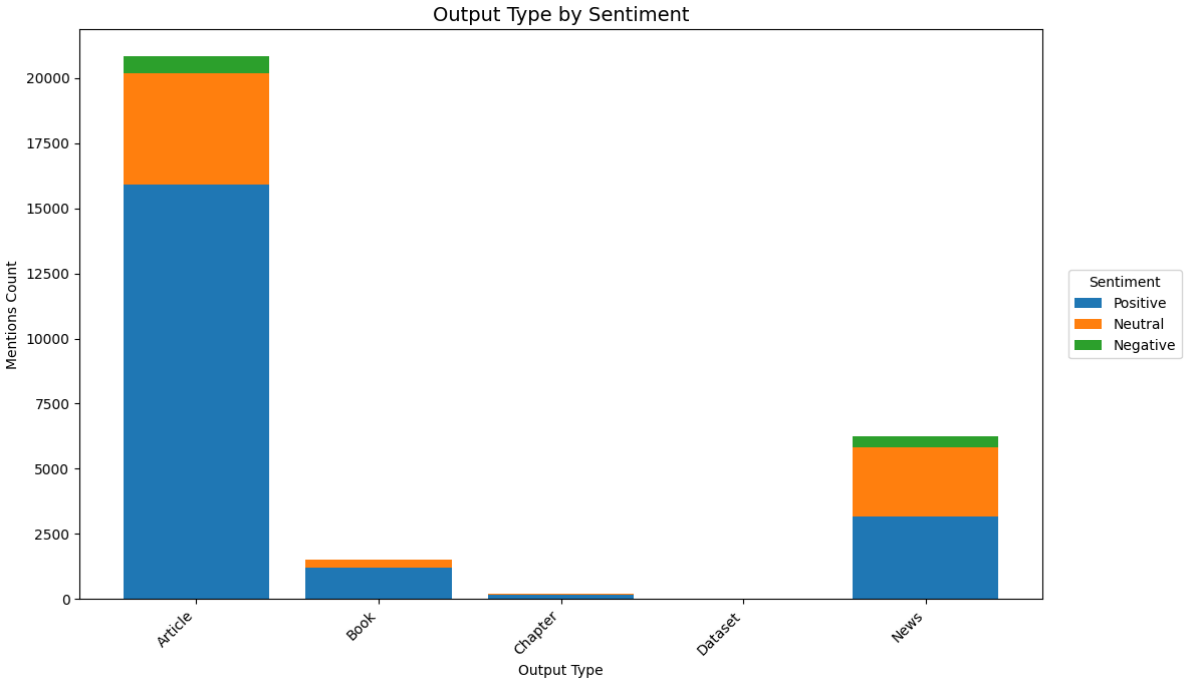


Fig. 13. Sentiment breakdown by research output type

5. Conclusion

This paper concludes that an altmetric lens is indispensable for evaluating disinformation scholarship as a socially embedded, fast-moving domain where influence is often expressed through immediacy, visibility, and cross-sector uptake rather than through slow citation accrual alone. By positioning online attention as an empirical object of study, the analysis demonstrates how disinformation research operates as "public-interest knowledge" that travels through heterogeneous arenas, professional communities, civic debate, and institutional knowledge infrastructures, each governed by distinct norms of amplification, interpretation, and legitimization. In doing so, the study advances a more realistic model of impact for communication- and policy-relevant science: one that treats dissemination pathways, attention economies, and interpretive communities as integral components of research influence, rather than as peripheral "after-effects" of publication.

The study further concludes that strengthening the societal value of disinformation research requires deliberate recalibration of research-to-public pipelines, especially where structural asymmetries constrain whose scholarship is discoverable, translated, and actionable. The evidence base developed here implies that equitable impact is not a passive outcome of producing rigorous work; it depends on sustained investments in multilingual communication, regionally grounded partnerships, and impact architectures that connect scholarly outputs to the institutions that govern education, health, media, and security. Accordingly, future progress in the field should be judged not only by growth in scholarly production, but by whether knowledge is reaching the communities most exposed to disinformation harms and whether it is being converted into locally legible resources, capacity building, and policy-relevant guidance.

Declaration of Use of AI: During the preparation of this work, the author(s) used Grammarly to assist with language refinement and structural editing of the manuscript. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

References

Akram et al., 2022 – *Akram, M., Nasar, A., Arshad-Ayaz, A.* (2022). A Bibliometric Analysis of Disinformation through Social Media. *Online Journal of Communication and Media Technologies*. 12(4): e202242. DOI: https://doi.org/10.30935/ojcmt/12545

Araújo, 2023 – *Araújo, C.A.Á.* (2023). Disintermediation of information: A new phenomenon of study for information science. *Annals of Library and Information Studies*. 70(4): 189-196.

Armitage, Vaccari, 2021 – *Armitage, R., Vaccari, C.* (2021). Misinformation and disinformation. In: Tumber, H., Waisbord, S. (eds.). *The Routledge Companion to Media Disinformation and Populism*. Routledge: 38-48. DOI: https://doi.org/10.4324/9781003004431

Bandeira et al., 2025 – *Bandeira, A., Gonçalves, L.H., Holl, F., Shaibu, J.U., Gonçalves, M.L., Payinda, R., ... Mackey, T.* (2025). Viewpoint on the intersection among health information, misinformation, and generative AI technologies. *JMIR infodemiology*. 5(1): e69474.

Bragazzi, Garbarino, 2024 – *Bragazzi, N., Garbarino, S.* (2024). Understanding and combating misinformation: an evolutionary perspective (Preprint). *JMIR Infodemiology*. DOI: https://doi.org/10.2196/65521

Broda, Strömbäck. 2024 – *Broda, E., Strömbäck, J.* (2024). Misinformation, disinformation, and fake news: lessons from an interdisciplinary, systematic literature review. *Annals of the International Communication Association*. 48(2): 139-166.

Celliers, Hattingh, 2020 – *Celliers, M., Hattingh, M.* (2020). A Systematic review on fake news themes reported in literature. *Responsible Design, Implementation and Use of Information and Communication Technology*. 12067: 223. DOI: https://doi.org/10.1007/978-3-030-45002-1_19

Diaz Ruiz, 2025 – *Diaz Ruiz, C.* (2025). Disinformation on digital media platforms: A market-shaping approach. *new media & society*. 27(4): 2188-2211.

Dorta-González et al., 2024 – *Dorta-González, P., Rodríguez-Caro, A., Dorta-González, M.I.* (2024). Societal and scientific impact of policy research: A large-scale empirical study of some explanatory factors using Altmetric and Overton. arXiv.org. [Electronic resource]. URL: https://arxiv.org/abs/2403.06714

Elmore, 2018 – *Elmore, S. A.* (2018). The Altmetric Attention Score: what does it mean and why should I care? *Toxicologic pathology*. 46(3): 252-255.

Fang et al., 2020 – *Fang, Z., Costas, R., Tian, W., Wang, X., Wouters, P.* (2020). An extensive analysis of the presence of altmetric data for Web of Science publications across subject fields and research topics. *Scientometrics*. 124(3): 2519-2549. DOI: https://doi.org/10.1007/s11192-020-03564-9

Fleerackers et al., 2022 – *Fleerackers, A., Nehring, L., Maggio, L.A., Asura Enkhbayar, Moorhead, L., Alperin, J.P.* (2022). Identifying science in the news: An assessment of the precision and recall of Altmetric.com news mention data. *Scientometrics*. 127(11): 6109-6123. DOI: https://doi.org/10.1007/s11192-022-04510-7

Haustein, 2016 – *Haustein, S.* (2016). Grand challenges in altmetrics: heterogeneity, data quality and dependencies. *Scientometrics*. 108(1): 413-423.

Imran et al., 2024 – *Imran, M., Rashid, J., Naseeb, J.* (2024). Strategic Communication in Countering Disinformation Campaigns in Pakistan. *Pakistan Social Sciences Review*. 8(2): 312-319.

Imran, Zafar, 2024 – *Imran, S., Zafar, M.A.* (2021). Propaganda Warfare: Indian Disinformation Campaign against Pakistan. *Global Strategic & Security Studies Review*. 6(2): 32-46.

KaabOmeir et al., 2024 – *KaabOmeir, F., Khademizadeh, S., Seifadini, R., Balani, S.O., Khazaneha, M.* (2024). Overview of Misinformation and Disinformation Research from 1971 to 2022. *Journal of Scientometric Research*. 13(2): 430-447. DOI: https://doi.org/10.5530/jscires.13.2.34

Missau, 2024 – *Missau, L.D.* (2024). The role of social sciences in the study of misinformation: a bibliometric analysis of Web of Science and Scopus publications (2017–2022). *Tripodos*. 56: 01-01. DOI: https://doi.org/10.51698/tripodos.2024.56.01

Priem et al., 2021 – *Priem, J., Taraborelli, D., Groth, P., Neylon, C.* (2011). Altmetrics: A manifesto. [Electronic resource]. URL: http://altmetrics.org/manifesto

Saheb et al., 2024 – *Saheb, T., Sidaoui, M., Schmarzo, B.* (2024). Convergence of artificial intelligence with social media: A bibliometric & qualitative analysis. *Telematics and Informatics Reports*. 14: 100146. DOI: https://doi.org/10.1016/j.teler.2024.100146

Storani et al., 2025 – *Storani, S., Falkenberg, M., Quattrociocchi, W., Cinelli, M.* (2025). Relative engagement with sources of climate misinformation is growing across social media platforms. *Scientific Reports*. 15(1): 18629. DOI: https://doi.org/10.1038/s41598-025-03082-9

Surjatmodjo et al., 2024 – *Surjatmodjo, D., Unde, A.A., Cangara, H., Sonni, A.F.* (2024). Information pandemic: a critical review of disinformation spread on social media and its implications for state resilience. *Social Sciences*. 13(8): 418. DOI: https://doi.org/10.3390/socsci13080418

Tătaru et al., 2024 – *Tătaru, G., Domenteanu, A., Delcea, C., Florescu, M. S., Orzan, M., Cotfas, L.* (2024). Navigating the Disinformation Maze: A Bibliometric Analysis of Scholarly Efforts. *Information*. 15(12): 742. DOI: https://doi.org/10.3390/info15120742

Vijayan et al., 2025 – *Vijayan, V., Thomas, T., Nellanat, P.D.* (2025). Mapping fake news and misinformation in media: A two-decade bibliometric review of emerging trends. *Insight – News Media*. 8(1): 734. DOI: https://doi.org/10.18282/inm734

Wang et al., 2022 – *Wang, S., Su, F., Ye, L., Jing, Y.* (2022). Disinformation: A Bibliometric Review. *International Journal of Environmental Research and Public Health*. 19(24): 16849. DOI: https://doi.org/10.3390/ijerph192416849

World Economic Forum, 2024 – World Economic Forum. The Global Risks Report 2024 (19th ed.). World Economic Forum. 2024. [Electronic resource]. URL: https://www3.weforum.org/docs/WEF_The_Global_Risks_Report_2024.pdf

Yoga Ratnam, 2025 – *Yoga Ratnam, K. K.* (2025). Generative artificial intelligence in public health research and scientific communication: A narrative review of real applications and future directions. *Digital Health*. 11: 20552076251362070.

Zahedi, Costas, 2018 – *Zahedi, Z., Costas, R.* (2018). General discussion of data quality challenges in social media metrics: Extensive comparison of four major altmetric data aggregators. *PLOS ONE*. 13(5): e0197326. DOI: https://doi.org/10.1371/journal.pone.0197326

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Artificial Intelligence Literacy in the Media Pedagogies: A Mixed-Method Approach

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Abstract

In this study, we examine perceptions and levels of literacy related to Artificial Intelligence (AI) within media pedagogies, focusing on how media instructors understand and integrate AI tools into teaching, research, and content production. A mixed-method approach was employed, constituting surveys of media faculty members and semi-structured interviews with academic Heads of Departments of universities in Islamabad and Rawalpindi. The Technology Acceptance Model (TAM) was used as a theoretical framework to examine media faculty's adoption of AI based on perceived usefulness and ease of use of AI tools to understand engagement levels. The findings demonstrate moderate to high levels of AI literacy among the faculty members while they were also conscious of its ethical issues. The findings also suggest that use of AI does have consequences on critical thinking and originality. While at the administrative level, the study found that the infrastructure, training and governance are weak, relying on informal norms and adaptive strategies of faculty. The study suggests that policy guidelines and joint efforts within institutions are essential in improving AI literacy in media pedagogies to enable graduates to have appropriate capabilities to operate in an AI-driven media industry.

Keywords: artificial intelligence (AI), media pedagogies, AI Literacy, critical thinking, higher education.

1. Introduction

The integration of Artificial Intelligence (AI) into every field is inevitable, and journalism and media studies are no exception (Adefioye, 2024; Tiernan et al., 2023). In the past few years, not only has it affected how news is written, edited, and disseminated to the public, but it has also determined the appropriate medium to use, and it is now being used to cross-check news as well (Hollanek et al., 2025). Internationally, many media schools are now offering courses related to AI tools such as data-driven storytelling, content automation, algorithmic filtering, etc., while also emphasizing the need for a critical understanding of the risks that come with these tools, such as a lack of transparency or other ethical challenges (Biagini, 2025; Borchardt et al., 2024). Pakistan's pedagogical environment, despite having a strong foundation in traditional media departments, media curricula often lack the interdisciplinary approaches required for AI-driven content creation and struggle to help students develop a skill set in the era of AI (Chandio et al., 2024). This leads to a significant gap between technological advancements and curricular adaptation. Despite the proliferation of AI tools, digital media, and journalism, most media departments at universities in Pakistan lack established frameworks for AI literacy, leaving students behind in the rapidly evolving demands of the industry (Ahmed et al., 2025; Kulsoom et al., 2025). Furthermore, a study

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among university students revealed that students frequently used AI-assisted tools but lacked understanding of algorithmic influence and ethical considerations. Lack of institutional support, faculty resistance, and the absence of national policy on this further inhibit the effective use of AI (Rafi, Junaid, 2025).

The future of artificial intelligence in the education sector is promising, with potential to transform the higher education system and traditional learning systems through improving the speed of basic tasks by restructuring administrative duties, grading, scheduling, etc., along with reducing human error (Chadha, 2024; University Canada West, 2025). AI has also significantly helped students with disabilities, special needs, and language barriers by providing personalized, instant communication tailored to their specialized learning needs (Kumar et al., 2023). Pakistani universities are gradually incorporating courses in Artificial Intelligence and Digital Media into their curriculum to ensure that future graduates are equipped with the basic skill set needed in the media industry. Recent scholarship reflects the importance of interdisciplinary approaches, adaptive strategies, continued research to address future concerns, and to improve AI literacy by focusing on prompt literacy and prompt engineering, AI-driven educational methodologies, and ethical use of generational AI. Here, the integration of media information literacy (MIL) within the context of generative AI (GenAI) and misinformation has become increasingly relevant in educational and professional settings. While workshops have been an effective tool in encouraging AI literacy among media educators, the findings indicate an increased need for structured training, modules, collaboration, and practical application in the curricula to reinforce learning outcomes (Chianese, Ranieri, 2024). Pakistani universities are gradually incorporating courses in Artificial Intelligence and Digital Media into their curriculum to ensure that the graduates are equipped with the basic skill set needed in the media industry (HEC, 2026).

Moreover, faculty play an important role in integrating this shift toward greater AI use into journalism and media education. As per a study conducted in Turkey, journalism schools have already begun embedding AI into their curricula, but many programs still treat it as an elective topic with limited practical orientation (Demir et al., 2025; Demir, Kaplan, 2026). Similarly, another study found that managerial and infrastructural support strongly influences the success of AI adoption in African media organizations, a finding equally relevant to educational institutions (Kioko, et al., 2022; Zawacki-Richter et al., 2019). Faculty innovation must therefore be complemented by administrative backing, funding, and professional training. Research shows that AI holds the potential to enhance pedagogy by providing avenue for personalized learning, but educators report concerns like reduced critical thinking, lack of leadership development and indifference and disengagement among students (Saeed et al., 2023; Shankar et al., 2025). Moreover, it also showed that AI literacy plays a substantial role in providing effective learning experiences and improving skills such as problem-solving and critical thinking among younger students.

Artificial intelligence has become a transformative technology in recent years across educational institutions worldwide, redefining how knowledge is produced, distributed, and consumed. Its growing integration into curriculum design, pedagogical practices, and research design is an indicator of a transition to technology-enhanced learning environments. Although AI tools in the higher education sector are recognized as essential, faculty involvement and AI literacy in the educational sector of Pakistan remains under-explored, particularly in the field of media. Furthermore, empirical studies systematically examining the role of faculty awareness, integration, and ethical considerations in AI adoption have yet to be conducted.

Thus, the proposed study aims to examine AI literacy and its application in media academia through a mixed-methods approach that constitutes a survey questionnaire and semi-structured interviews to systematically assess faculty awareness, usage, and ethical involvement with AI. It aims to establish a systematic framework for AI literacy in media studies and to provide an in-depth analysis of pedagogical adaptation, institutional support, and ethical challenges that ensure the responsible and meaningful use of AI in higher education.

The current study aims to assess the level of AI literacy among faculty of media studies and its impact of their research and teaching practices. Moreover, this study attempts to investigate how media faculty members integrate AI technologies into media teaching and identify the institutional mechanisms that promote or limit them. Lastly, it addresses the ethical issues that AI-based methodologies raise in the field of media and research and how these challenges are addressed within educational and policy frameworks of the institution.

In a developing country such as Pakistan, where adoption of AI technologies in higher education is still at an early phase, knowing the factors such as AI literacy of the faculty, the patterns of adoption, and comprehension of ethical engagement can help fill in the gaps in AI literacy, along with supporting the faculty in using AI tools more effectively in their teaching. Theoretically, this paper will analyze the interaction and adoption of new AI technologies in education by faculty in media academia through the Technology Acceptance Model (TAM). The study emphasizes the introduction and adoption of AI tools in Pakistani higher education, highlighting factors such as usefulness, ease of use, and peer-driven adoption. This method provides further insight into the broader issue of introducing innovation into the education system, which continues to formulate policies and support systems in the context of digital transformation. This study seeks to present practical recommendations to improve AI adoption and ensure responsible, productive AI integration in the media-academia at the university level, by identifying institutional challenges and implementers. Moreover, this paper employs a mixed-methods design, including a survey of media faculty and semi-structured interviews with HODs, to provide an in-depth perspective on AI literacy levels.

Beyond an academic perspective, this paper also examines other ethical issues, such as bias, misinformation, and intellectual property, that are likely to arise from the implementation of AI in academia. As digital ethics policies in Pakistan are in their early stages, the widespread adoption of AI by faculty with limited awareness and guidance could lead to unpleasant consequences. This study aims to raise awareness of these problems and promote the use of clear ethical principles by institutions, creating institutional-level guidelines and training courses to implement responsible AI use in higher education in Pakistan. Thus, it contributes to the bigger discussion of how the developing nations could use AI technologies without compromising their ethical and practical viability in media academia. AI adoption in Pakistan's developing educational system is still in its early phases. Thus, investigating factors such as AI literacy among faculty, adoption patterns and ethical awareness in its use can aid in integrating AI more effectively while considering its ethical dimension.

2. Materials and methods

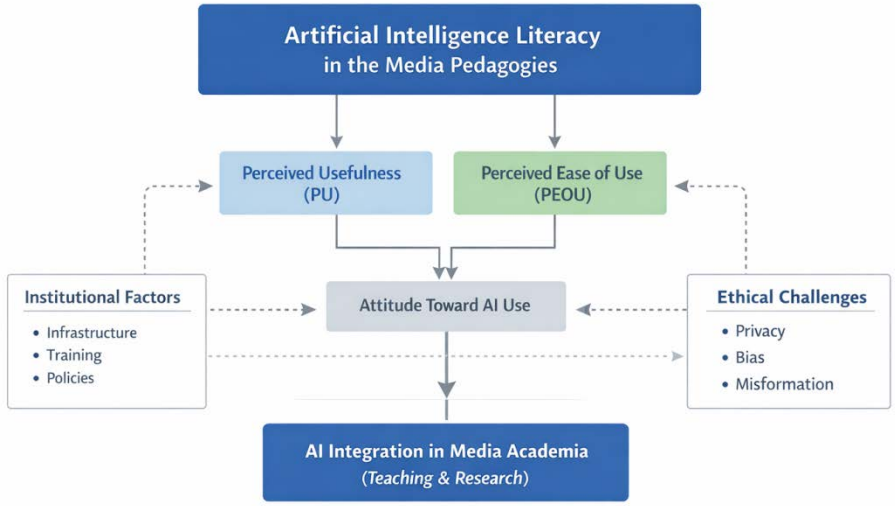
The research employed a mixed-method approach utilizing quantitative surveys and semi-structured qualitative interviews to gather an overall view of AI literacy and integration in media academia. Triangulation enhanced the validity of the results by comparing faculty opinions with quantifiable data on AI adoption and utilization. The sample consisted of 100 faculty members from media studies and mass communication departments. Qualitative interviews with Head of Departments (HODs) of media departments were conducted to investigate institutional views, ethical issues, and pedagogical problems in the implementation of AI in media curricula. For quantitative surveys, 100 respondents were selected among the media studies and mass communication faculty of 10 universities in Islamabad and Rawalpindi.

Convenience sampling was employed for the quantitative phase: media faculty members from ten public and private universities in Islamabad and Rawalpindi were approached based on accessibility and willingness to participate. HODs of media departments were selected while focusing on individuals with experience in AI-related curriculum development and policy formation. The survey instrument gathered information on several variables, including AI Integration in Media Academia, Faculty Awareness, Pedagogical Adaptation, Ethical Engagement, Institutional Policies, and Technology Acceptance Constructs. The descriptive statistics were employed to analyze the engagement patterns of the faculty, levels of AI literacy, and patterns of adoption using SPSS. Thematic coding and triangulation of interview transcripts were conducted in accordance with the guidelines of V. Braun and V. Clarke (Braun, Clarke, 2006) to reveal faculty attitudes, institutional issues and ethical issues in AI integration. Qualitative data were also processed using NVivo with Braun and Clarke's framework.

This study uses the Technology Acceptance Model (TAM) by Fred D. Davis to examine media faculty's adoption of AI based on perceived usefulness and ease of use of AI tools to understand engagement levels. By providing insight into how lecturers see the benefits and constraints of AI, TAM helps adopt a critical perspective on factors that may promote or impede AI integration. It also explains how it formulates interpretations of behavioral intentions and provides more insight into whether lecturers will be willing to adopt AI technologies in their tailored learning processes (Davis, 1989).

According to the theoretical framework described above, the proposed conceptual framework explores how AI Literacy, the Technology Acceptance Model (TAM) constructs of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), institutional elements, and ethical aspects relate within media pedagogical practices in higher education. This framework offers a systematic approach to learning about faculty interactions with AI. It aligns with research aims to assess existing AI literacy, discuss AI technology integration, and examine ethical issues.

The core idea behind conceptual framework as illustrated in *figure 1* is that AI Literacy is a determining factor in terms of faculty engagement with AI technologies. As stated by A. Ayyoub (Ayyoub et al., 2025) and D. Ng et al. (Ng et al., 2021), AI literacy is the capacity to *Know*, *Understand*, *Use and Apply AI*, and *Evaluate and Create*; it is posited to have a direct impact on both the perceived usefulness and perceived ease of use of AI tools among the faculty of media studies. Greater AI literacy would help faculty be more receptive to the benefits AI can provide in improving teaching and research practices (increasing PU) and reduce the perceived difficulty and hassle of using AI tools (increasing PEOU) (Al-Abdullatif, 2024; Ayyoub et al., 2025).



Artificial Intelligence Literacy
in the Media Pedagogies
Perceived Usefulness
(PU)
Perceived Ease of Use
(PEOU)
Institutional Factors
• Infrastructure
• Training
• Policies
Attitude Toward AI Use
Ethical Challenges
• Privacy
• Bias
• Misformation
AI Integration in Media Academia
(Teaching & Research)

Fig. 1. Conceptual framework

Perceived Usefulness (PU), the notion that the application of a particular system can lead to job performance, is especially pertinent to the media faculty, particularly regarding its positive impact on teaching performance, research performance, and overall academic output (Haq et al., 2025). For example, AI tools might be viewed as helpful for removing unproductive processes,

personalizing the learning process, or, in media research, handling complex data (Chen et al., 2024). Instead, Perceived Ease of Use (PEOU) describes how effortless the use of AI systems is perceived to be. In media pedagogy, it would mean the intuitiveness of AI software, the presence of convenient interfaces, and the general ease of implementing AI applications within current work processes (Al-Abdullatif, 2024). TAM postulates that PU, as well as PEOU, are direct foretellers of how an individual intends to utilize technology.

3. Discussion

AI is fundamentally reshaping the higher education sector at every level but beyond enhancing teaching, it facilitates adaptative learning, automation and individualized education while complicating assessments for students (Demir et al., 2025; Gardner et al., 2021; Grassini, 2023; Liu, Zhang, 2024). Students appreciate the structured and logical organization of AI writing but criticize a lack of originality and personality, requiring human intervention for refined writeups (Wang et al., 2024). While AI provides accessible personalized educational environments, ethical and data privacy issues are still a concern (Cena et al., 2026; Laupichler et al., 2022; Porayska-Pomsta et al., 2023; Tan, Chen, 2025). Acknowledging AI's benefits, challenges and conscious navigation is required to utilize it at its full potential (Persson, 2024; Wilson, 2025). However, there is disparity in students who can establish ethical use of AI and those who are uncertain regarding boundaries between academic assistance and misconduct exists while describing need for clear institutional guidelines (O'Dea et al., 2025; Johnston et al., 2024). Socio-ecological factors play a pertinent role in defining ethical AI use. Although A. Williams (Williams, 2026) found that students maintain a positive outlook towards AI use in education while viewing it as a necessary skill for the future. On the other hand, C. Costa and M. Murphy (Costa, Murphy, 2025) suggested a bleak view regarding it as superficial imitation of actual thinking which can also obstruct growth of student's intellectual autonomy and critical thinking. Ethical AI use that fosters positive societal participation in the digital world requires redefining of digital literacy in terms of power, culture and ideology to make students more informed users of the technology (Costa, Oliver, 2025). Trikoili et al. (Trikoili et al., 2025) found that solely relying on AI might have strong potential for large-scale grading but is limited in evaluating critical thinking in students, particularly in diverse contexts thus, requiring a human-AI hybrid assessment system.

Academia is widely using AI tools to support various subjects at multiple levels; however, research on their role in teacher professional development is rare, limited, and narrowly focused. There remains an urgent need to support teachers in integrating technological knowledge into their teaching strategies. T. Yusuf et al. (Yusuf et al., 2022) highlighted that AI is valuable to university faculties due to its accessibility, user-friendliness, and diverse functions, which enable it to simplify complex tasks efficiently. However, the actual benefit lecturers receive from AI depends on their awareness of its use and confidence in its utility. A lecturer's effective use of AI depends on their literacy in its adoption and their perception of its usefulness. Therefore, maximizing the use of AI in faculty practices is essential (Fowlin et al., 2025).

Although AI use has become quotidian in the higher educational sector as it facilitates smart tutoring, simulations, predictive analytics and adaptive learning platforms; it can act as an enabler of efficient pedagogy (Burke, Crompton, 2024; Fowlin et al., 2025; Holmes, Porayska-Pomsta, 2022; Zawacki-Richter et al., 2019). However, teachers may not be fully prepared to use these systems as ethical and data privacy concerns remain, warranting a cautious approach to balance innovation with careful planning and ethical awareness (Burke, Crompton, 2024; Petrea, Vieriu, 2025; Tinák, Gálik, 2026). For effective implementation, educational institutions must support these technologies with strong pedagogical and ethical foundations to ensure digital learning remains meaningful. Furthermore, AI chatbots and large language models (LLMs), including ChatGPT, are transforming educational environments by enabling individualized and interactive learning. For instance, generative AI chatbots support self-directed learning and self-assessment, allowing students to assume greater responsibility for their outcomes asynchronously (Shahzad et al., 2024).

Majority of transformational AI tools being used in higher education emerge from commercial entities such as Coursera or Amazon (which hold humongous data sets) rather than the institutions themselves thus leading to decentralization of educational innovation and corporate control (Weller, 2020). Despite delivering efficiency in diverse fields, AI tools also bring concerns about privacy, fairness, and disinformation therefore deserving critical governance models (Dwivedi et al., 2023). The ABCD framework (Advantages, Benefits, Constraints, Disadvantages)

clarifies the smart use of AI technologies, such as improving time efficiency, expanding multilingual options, and enabling new forms of collaboration. This improves accessibility by supporting personalized learning and workflow efficiency. However, implementation requires training, organizational support, and investment. Constraints and risks include misuse, algorithmic bias, plagiarism, and over-reliance on AI (University Canada West, 2025).

Faculty interest and early adoption combined with institutional facilities such as training and collaborations supported by enabling environments are essential for AI integration in pedagogy. This is in conjunction with the faculty's professional development that would enhance pedagogy and in turn learning outcomes. However, a lack of institutional support creates hesitation and resistance among faculty when adapting to new digital tools (Demir et al., 2025; Mah, Groß, 2024; Saira et al., 2025). Initiatives of Professional development that emphasize both ethical literacy and technical expertise while also conducting feedback-based AI training can help and encourage faculty to use AI not only as a technological innovation but also as a transformative pedagogical partner while developing skills (Huynh et al., 2025; Kelley, Wenzel, 2025; Lan et al., 2025). AI literacy can generally be defined as human proficiency across various subject areas of AI that leads to the efficient, purposeful, and ethical use of AI technologies. On a broader level, this encompasses knowledge, skills, awareness, proficiencies, and experience related to AI systems (Benlian, Pinski, 2024). In media pedagogy, AI literacy constitutes not just superficial understanding, but functional literacy required to evaluate AI-generated content, assessing algorithmic bias and applying AI tools strategically in teaching practices (Walter, 2024). To further support this idea, a scale known as the *MAILS* (Meta AI literacy scale) questionnaire was developed, identifying components such as *Use & Apply AI*, *Understand AI*, *Evaluate & Create AI*, and *AI Ethics* as core aspects of AI literacy. These dimensions reflect a complete framework that encourages the teaching faculty to move from passive awareness to active, ethical engagement with AI technologies (Carolus et al., 2023).

As supported by the above-mentioned research, this framework is also applicable in the media context, where AI can reorganize content production, improve user interaction, and foster other narratives, while ensuring that the challenges related to it remain at the forefront (Aithal, Aithal, 2023). Self-management, such as problem-solving with AI, learning about AI technologies, and even regulating emotions regarding AI, is also present in the concept of AI literacy among teachers. It implies that, in addition to the skills related to the application of AI, media teachers can critically reflect on AI's influence on society, ethical concerns, and their adaptability in the AI-driven educational environment (Carolus et al., 2023). This reflective aspect fosters resilience, moral consciousness, and responsiveness in teaching practice amid rapid technological change. It also underlines the role of emotional intelligence and ethical reasoning as core competencies in AI-integrated teaching. Research suggests that AI-driven pedagogies create opportunities through digital skill enhancement and structured training where media students engage with generative AI tools highlighting a gradual pedagogical shift from merely using it as a tool skill to creative and ethical control over its use (Saira et al., 2025; Hagler, Wolfersberger, 2025). In Pakistan, early adopters have integrated AI tools into courses such as media literacy, media production, and content writing, while advancing pedagogy and considering ethical implications. Faculty promotes academic honesty by embedding both course-specific and university-level policies that show a thoughtful approach to integrating AI in teaching and learning (Bairagi, Biswas, 2024).

M. Murray (Murray, 2025) describes Prompt engineering as the art and science of developing accurate and intentional inputs to control large language models (LLMs) to produce accurate and useful outputs. The ability to write effective prompts improves relevance and quality of generated responses thus emphasizing its significance as 21st century literacy (Bansal, 2024; Lo, 2023; Song, 2025; Steinmann, Piazza, 2024). As media teachers, prompt engineering skills may also make a difference in how they apply them when creating content, researching, and even developing everyday teaching resources. LLM's deliver personalized learning and produce diverse content relevant to the educators' field allowing them to deliver discipline-based learning in the most useful way if they are proficient in prompt engineering (Thanasi, Hoxha, 2024). For media instructors, appropriate prompts can assist in obtaining key information or create specific content. Research indicates that implementing strategies to develop effective prompts can help students build confidence with AI and reduce the stress that often accompanies new technology. The three-session clinic contributed significant differences in the first year of teaching education students, making them more AI-literate and more confident (Davila-Moran et al., 2025; Woo et al., 2024). Such

specific assistance might be equally effective with faculty in the media, who would be better prepared to introduce AI into their classes.

The ethical and privacy issues pertaining to AI technology constitute algorithmic bias and training data through which the algorithm inherit biases thus leading to inequality based on gender, race and socio-economic status (Baker, Hawn, 2022). Furthermore, AI tools create ethical loopholes especially regarding plagiarism and misinformation, and the weakening of students' critical thinking skills (Grassini, 2023). M. Kassorla et al. (Kassorla et al., 2024) argues that AI literacy programs in higher education should balance technical skill-building with ethical and critical reflection to foster faculty confidence and innovation in digital teaching environments. With frequent usage of AI in academic tasks, students learn strengths, limitations, and challenges of using AI and develop strategies by revising their prompts to meet academic requirements. Similarly, educators through mastery of prompt engineering can guide students in academic writing through AI and refinement into a personalized human version (Hwang et al., 2023). This practice also helps mitigate the risks of false news and disinformation, as AI literacy and human critical thinking, when supported by effective prompts, can significantly improve the efficiency of content evaluation (Fischer et al., 2022). Thus, prompt engineering in media education is not just a technical skill but also a civic skill that contributes towards the responsible media production, distribution, and consumption.

4. Results

The research employed mixed-methods design, combining survey and interview data to comprehensively answer the research questions. The quantitative strand included survey responses, which were analyzed using SPSS. The descriptive statistical analysis provided information on patterns and trends relevant to RQ1, RQ2, and RQ3 at the statistical level. These descriptive statistics provided a clear picture of practices at the faculty level, institutional support systems, and perceptions of AI literacy and competence. Following this, the qualitative strand was guided by interviews with experts, which were systematically coded and analyzed using NVivo-based thematic analysis. This qualitative research provided a more in-depth situational understanding and went into greater depth when discussing RQ3, the nuanced perspectives of faculty and institutional stakeholders. Such a mixed-methods approach ensured that the study yielded both quantitative and qualitative outcomes, thereby increasing the validity, richness, and triangulation of the research outcomes.

Quantitative Results Based on Statistical Analysis Using IBM SPSS Statistics

RQ1: What is the current state of AL literacy in faculty of media studies and how does it influence teaching practice or research?

Table 1. Descriptive statistics for ai literacy and technical competence

Variable	M	SD	N
AI Literacy and Technical Competence	2.06	0.81	100

The descriptive analysis showed that the faculty members represented a rather high degree of AI literacy and technical competence (M = 2.06, SD = 0.81), especially familiarity with general AI tools and timely literacy. Interaction with media-specific AI tools, however, was relatively less.

Table 2. Descriptive statistics for pedagogical and teaching impact of AI (n = 100)

Variable	M	SD	N
Pedagogical and Teaching Impact of AI	2.33	0.86	100

Faculty perceptions were also moderately positive in terms of their pedagogical impact (M = 2.33, SD = 0.86). There was a consensus among the respondents that AI improves teaching effectiveness, innovation and student engagement. However, more variation has been seen in the perceptions pertaining to critical thinking and creative output of the students, which means that it is optimistically cautious about more profound pedagogic outcomes.

Table 3. Descriptive statistics for ai literacy and pedagogical impact

Dimension	Number of Items	Mean	SD
AI Literacy and Technical Competence	5	2.06	0.81
Pedagogical and Teaching Impact of AI	11	2.33	0.86
Overall, AI Literacy and Pedagogical Integration	16	2.25	0.78

Table 3 summarizes the findings regarding the dissimilarity in the levels of AI literacy and technical competence (M = 2.06, SD = 0.81) in comparison with the perceived pedagogical effect of AI on teaching practices (M = 2.33, SD = 0.86). The total AI literacy and pedagogical integration score suggested that the faculty generally had positive perceptions about AI adoption in media education (M = 2.25, SD = 0.78).

RQ2: How do faculty incorporate AI technologies into media education and teaching factors, and what are the institutional factors that shape their adoption?

Table 4. Descriptive statistics for faculty-level AI integration and adoption practices (n = 100)

Variable	M	SD	N
Faculty-Level AI Integration and Adoption Practices	2.07	0.84	100

The descriptive analysis revealed that the faculty members exhibited moderate to high degrees of AI integration and adoption practices (M = 2.07, SD = 0.84). There was greater consensus on the intentions to learn about new AI tools, attend future AI-related training programs, and recommend AI tools to coworkers. Comparatively less engagement was reported in training students to use AI tools responsibly and in trying new AI platforms in teaching.

Table 5. Descriptive statistics for institutional support and structural factors (n = 100)

Variable	M	SD	N
for Institutional Support and Structural Factors	2.83	0.91	100

The descriptive analysis revealed that perceptions of institutional support and of institutional factors to embrace AI were moderate on average (M = 2.83, SD = 0.91). Faculty expressed less consensus on the accessibility of technical support, access to AI-related training or workshops, and the provision of user-friendly AI tools. On the contrary, departmental support for innovation, institutional support for adoption of AI, and inclusion of AI in the university's strategic educational vision were relatively more acceptable.

Table 6. Summary of faculty and institutional dimensions for RQ2 (n = 100)

Dimension	Items	Mean	SD
Faculty-Level AI Integration and Adoption	7	2.07	0.84
Institutional Support and Structural Factors	9	2.83	0.91

The data show that the faculty respondents have strong personal motivation and a willingness to incorporate AI technologies into media education, as evidenced by their high agreement with statements about experimentation, future use of AI, and professional growth. The composite mean for AI integration at the faculty level indicates active involvement of AI in teaching. However, perceptions of institutional support were significantly lower, with higher mean scores indicating moderate agreement or neutrality regarding access to training, technical infrastructure, and strategic alignment. Institutional technical support and formal training availability were found to be the biggest constraints, which is a structural gap between individual faculty preparedness and institutional capacity. Overall, the results of RQ2 show a clear

inconsistency between faculty interest and institutional support, suggesting that while teachers are ready and eager to use AI in their teaching practices, long-term implementation still requires stronger institutional facilitation and policy alignment.

RQ3: What kinds of ethical challenges arise from using AI-driven methodologies in media studies, and how are they being addressed in educational and policy frameworks?

Table 7. Descriptive statistics for ethical concerns and risks of AI use (n = 100)

Variable	M	SD	N
Ethical Concerns and Risks of AI	1.88	0.77	100

The descriptive analysis indicated a high level of awareness of the ethical issues and the risks that AI use poses to media education among the faculty members (M = 1.88, SD = 0.77). There was strong consensus on plagiarism risks, the potential threats to student originality and academic integrity, the problem of data privacy and consent, and the significance of the timely development of literacy as an ethical and responsible use of AI.

Table 8. Descriptive statistics for institutional and policy responses to ethical AI (n = 100)

Variable	M	SD	N
Institutional and Policy Responses to Ethical AI	2.67	0.86	100

Descriptive analysis revealed that faculty members' responses to ethical AI use were moderate regarding institutional and policy responses (M = 2.67, SD = 0.86). Relatively lower concurrence was also observed regarding the existence of clear institutional policies and formal ethical guidelines for AI use, and relatively high confidence was observed in faculty members' capacity to address ethical issues arising from the incorporation of AI into media courses.

Table 9. Summary of ethical challenges and policy responses (RQ3) (n = 100)

Dimension	Items	Mean	SD
Ethical Concerns and Awareness	4	1.88	0.77
Institutional and Policy Responses	4	2.67	0.86

The results indicate a high level of awareness of the faculty about ethical issues concerning AI-based approaches to media education. The respondents also indicated a high degree of concern on plagiarism, student originality, and data privacy with a mean score of strong consent on all the risk items on the ethical risk list. On the contrary, the views towards institutional and policy responses were relatively less strong. In faculty, a low level of clarity was reported concerning ethical policies and guidelines in AI, as well as moderate consensus that barriers in the policy area limit effective use of AI. Despite a high degree of confidence by the respondents focusing on the ethical issues at the classroom level, the institutional structures can be seen as being underdeveloped in accordance with the standardized and unified ethical AI practices.

Overall, RQ3 indicates that there is an ethics and policy gap in which the faculty awareness and concern are ahead of the accessible institutional protection and policy mechanisms.

Table 10 summarizes faculty perceptions of AI literacy, use, and ethical issues in media education. Across all three research questions, there is a clear trend of faculty members exhibiting high AI literacy, pedagogical preparedness, and ethical awareness. These personal abilities, however, are not accompanied by an institutional equivalent. This asymmetry reflects a structural void that predetermines the way AI-based approaches are incorporated and controlled in media studies courses.

Table 10. Conceptual synthesis of AI literacy, adoption, and ethical challenges in media education (n = 100)

Research Question	Core Construct	Sub-Dimension	No. of Items	Mean	SD	Key Empirical Insight
RQ1 AI Literacy and Pedagogical Integration		AI Literacy and Technical Competence	5	2.06	0.81	Faculty demonstrate strong familiarity with general AI tools and prompt literacy, but lower engagement with media-specific AI applications.
		Pedagogical and Teaching Impact of AI	11	2.33	0.86	AI is perceived as enhancing teaching effectiveness and engagement, with more cautious views regarding students' critical thinking and creativity.
		Overall, AI Literacy and Pedagogical Integration	16	2.25	0.78	Faculty possess functional AI literacy that positively shapes teaching practices.
RQ2 AI Adoption and Institutional Enablement		Faculty-Level AI Integration and Adoption Practices	7	2.07	0.84	Faculty show high motivation, experimentation, and future intent to integrate AI into media education.
		Institutional Support and Structural Factors	9	2.83	0.91	Institutional support, training, and technical infrastructure lag behind faculty readiness and enthusiasm.
RQ3 Ethical Challenges and Governance of AI		Ethical Concerns and Awareness	4	1.88	0.77	Strong faculty concern exists regarding plagiarism, originality, data privacy, and responsible AI use.
		Institutional and Policy Responses to Ethical AI	4	2.67	0.86	Ethical policies and institutional frameworks are perceived as insufficiently clear or consistently implemented.

Notes: All items were measured on a 5-point Likert scale, where lower mean values indicate stronger agreement.

Conceptual Model of AI Literacy, Adoption, and Ethical Governance in Media Education

The model shows how AI literacy can facilitate pedagogical integration and adoption of AI technologies by faculty, and institutional support and ethical issues can impact governance mechanisms that can affect the sustainable and responsible use of AI in media education.

Moreover, since the research questions were exploratory and aimed to map faculty perceptions and institutional practices regarding AI literacy, adoption, and ethical issues, descriptive statistics were deemed adequate. The study did not aim to test causal relationships, group differences, or predictive effects; therefore, no inferential tests were used.

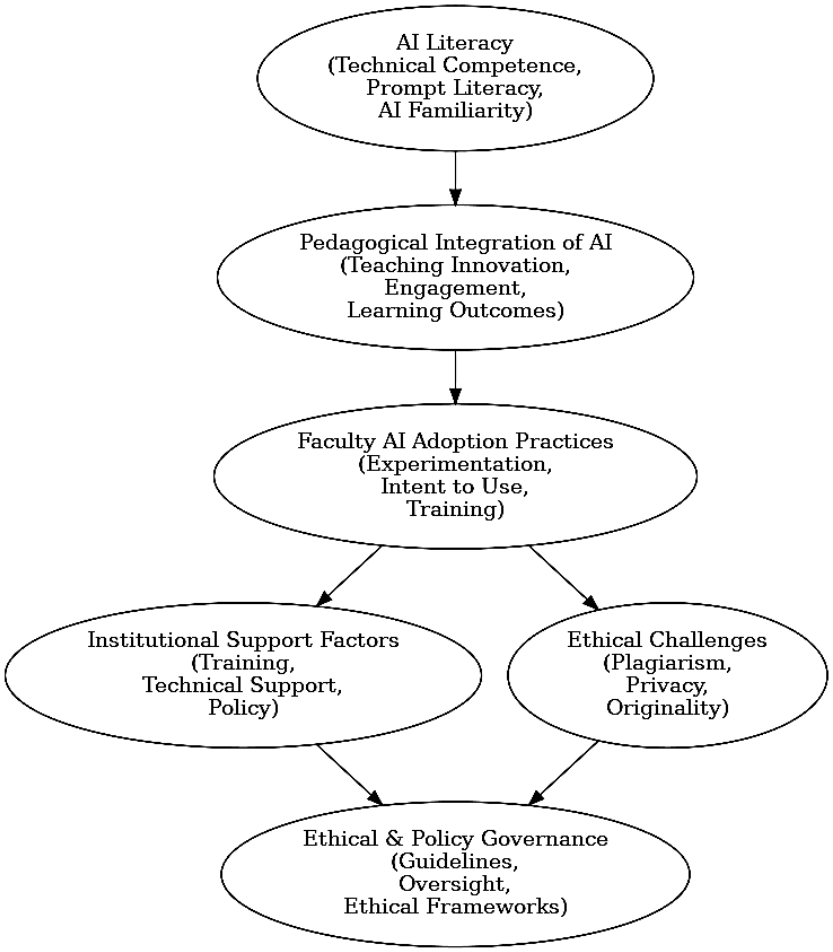


Fig. 2. Conceptual model of AI literacy, adoption, and ethical governance in media education

Computer-assisted Analysis using NVivo 15

The data analysis has been carried out using a two-step process: first, to streamline the data and understand the interviewees' thoughts and perspectives, and then to organize it according to the themes and codes generated to conduct a detailed thematic analysis. Initially, key terms, most repeated phrases, and tones were analyzed using the software, and the visualizations were then integrated into the research to represent the essential and noteworthy outcomes. Furthermore, the outcomes were interpreted, and the study identified meaningful patterns and links that aided data analysis.

NVivo 15 was used to analyze the data and extract key insights, which were presented in meaningful visual representations.

The word cloud depicted in Figure 3 resembles a human head, a visual representation of the most frequently repeated words in the entire data set. The most prominent words include *students*, *ethical*, *tools*, *content*, *faculty*, *research*, *use*, and *media*, which means that the main issues of the participants are connected with the ethical implementation of AI tools in academic settings. The use of terms such as *assignments*, *ChatGPT*, *quizzes*, *training*, and *policies* also suggests that the discourse is student-centered, with the faculty's role in the evolution of AI-assisted learning as

controlling. The pictorial organization supports the thematic focus of ethics, pedagogy, and technological adaptation in media education.

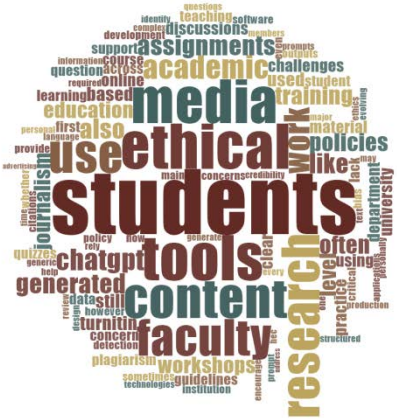


Fig. 3. Word cloud of most frequently used words in data set

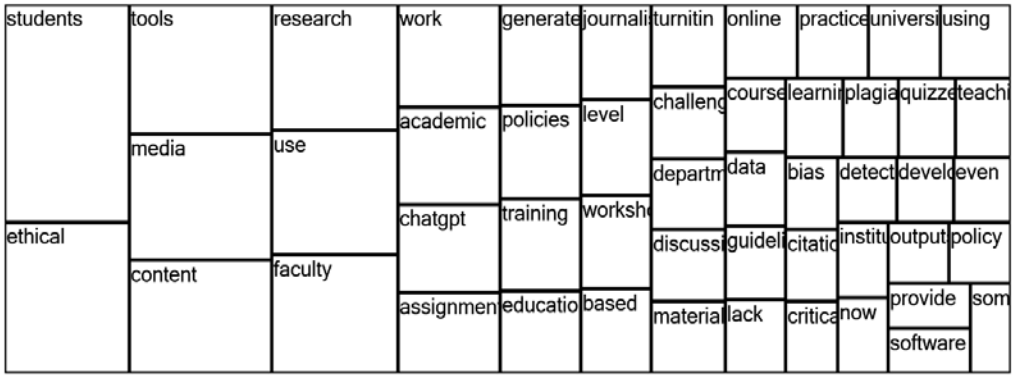


Fig. 4. Tree map of most frequently used words

Figure 4 is a Tree Map, a visual representation of hierarchical data in a structured format, which helps the researcher identify the most frequently used words and those that arose from their expansion. It shows the most frequent words respondents used to discuss the ethical and pedagogical aspects of AI in media education. The most evident keywords are ethical, students, tools, research, media, content, faculty, and use. This suggests that respondents have assigned various terms to describe AI's role in academic settings, particularly regarding student activities, faculty duties, and research integrity. The term ethical underscores that integrity, plagiarism, and transparency are the main considerations in the discussion. The fact that the term students takes first place indicates that respondents consider learners the main consumers of AI tools, which frequently raises questions about originality and excessive use. The word tools underscores the significance of applications such as ChatGPT and Turnitin, which are often used both for assistance and for detection. The common usage of the word research implies that the respondents have a critical perception of the problem of fake references and verification. In the same way, the words media and content refer to the disciplinary context in which AI influences the creation and processing of content. The presence of the term faculty highlights the role of teachers in helping people use AI ethically, whereas the term use itself indicates the widespread use of AI in teaching, student work, and the institution's work in general

Moreover, the tree map suggests that these terms are related, indicating that respondents view AI as both an ethical issue, a pedagogical resource, and a research problem. This stratified presentation highlights how the discussion of AI in media education is framed around student conduct, faculty intervention, and institutional accountability.

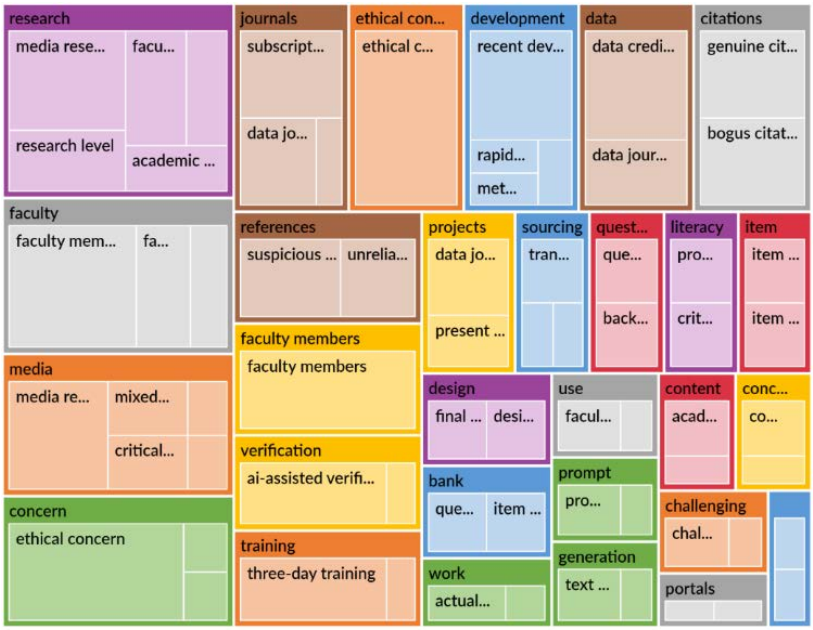
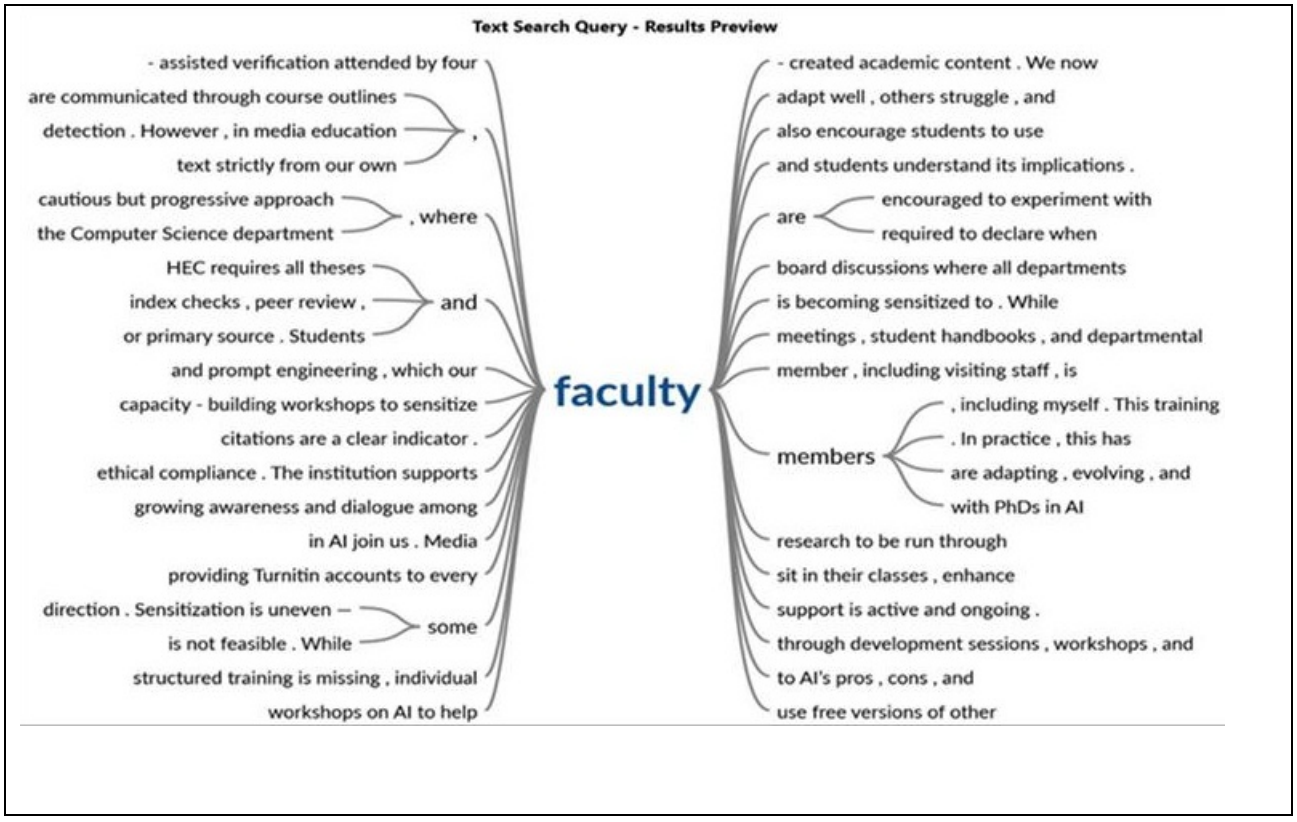
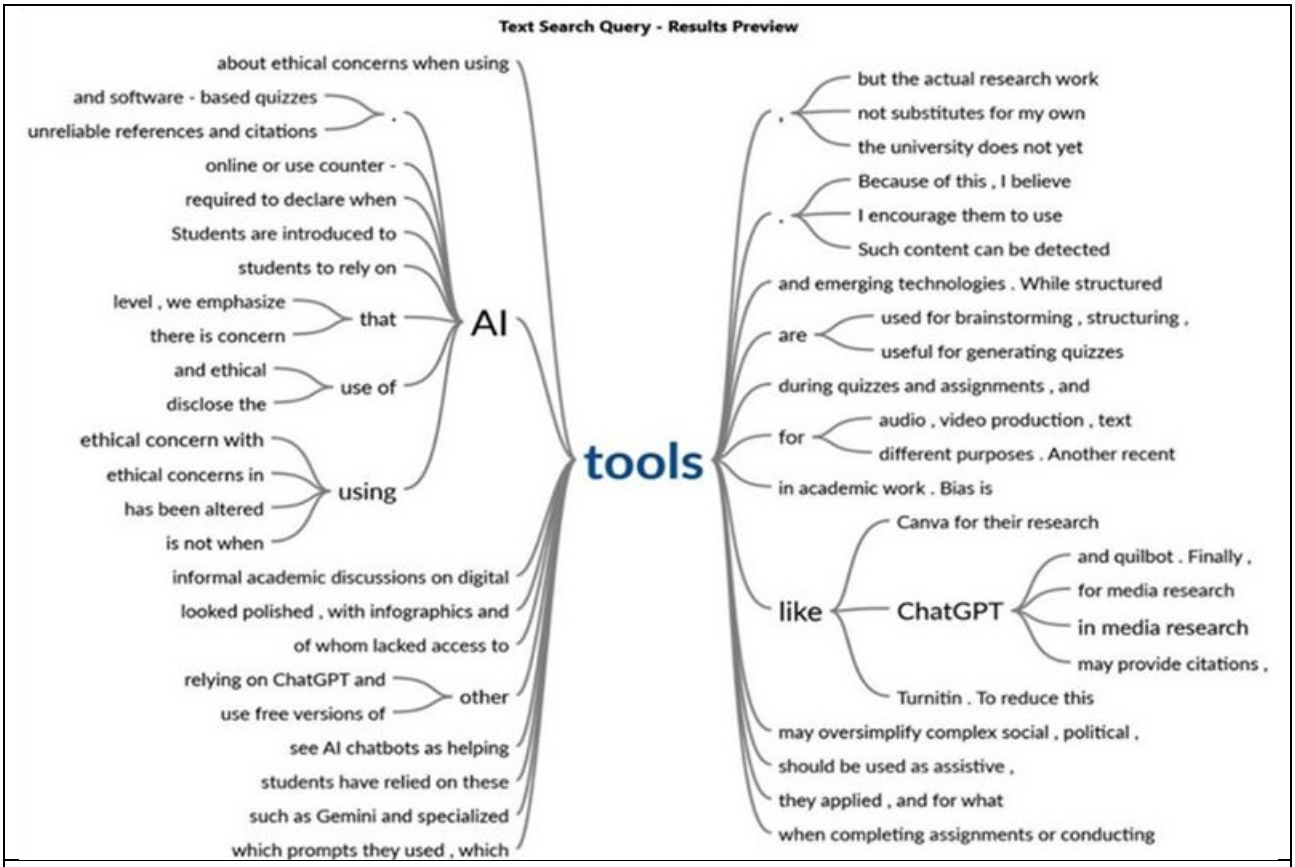


Fig. 5. Auto coded themes and subsequent discussions

Figure 5 is a Coding Reference Hierarchy Chart, a graphical representation of the thematic structure of interview responses, showing the frequency and depth of coded references. The dominance of major categories such as *research*, *faculty*, *media*, *ethical concern*, *citations*, *data*, and *training*, as shown in the chart, is interrelated through layered subthemes. The hierarchical structure shows that these terms are connected by the respondents to outline the ethical application of AI in academic and media settings, with specific interest in the credibility of research, oversight by faculty, and institutional support. Subcategories such as authentic citations, data reliability, AI-assisted identification, and three days of training imply that ethical concerns are not independent but are integrated into work practices, learning methods, and educational institutions.

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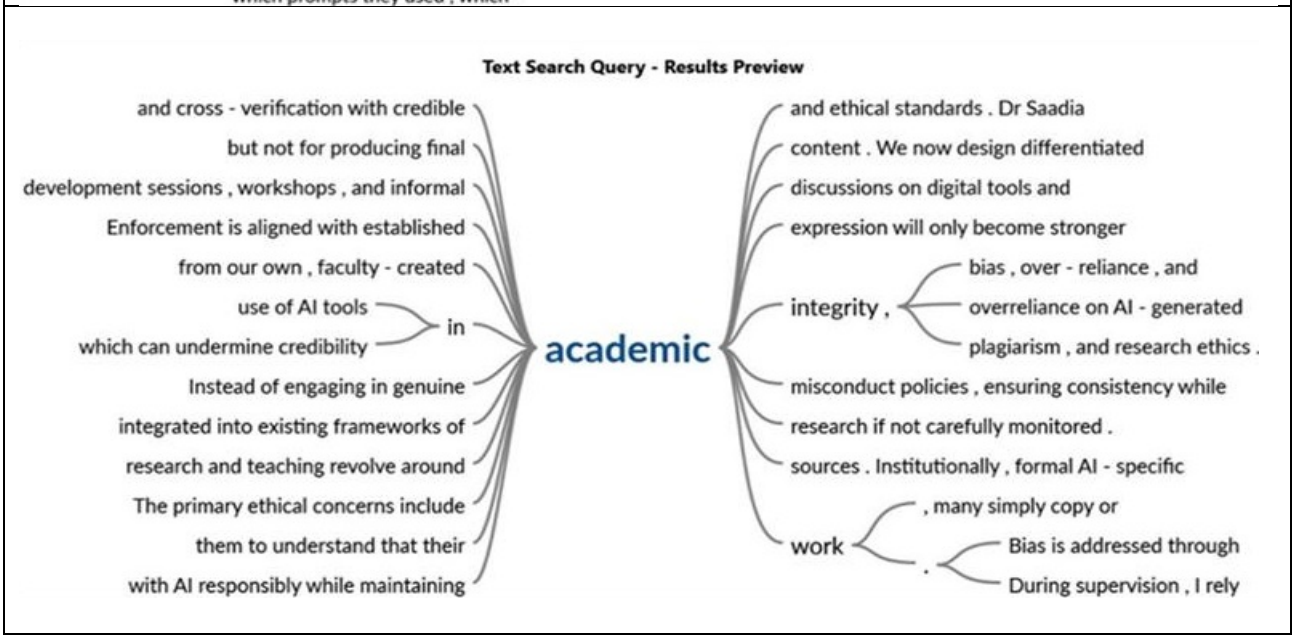
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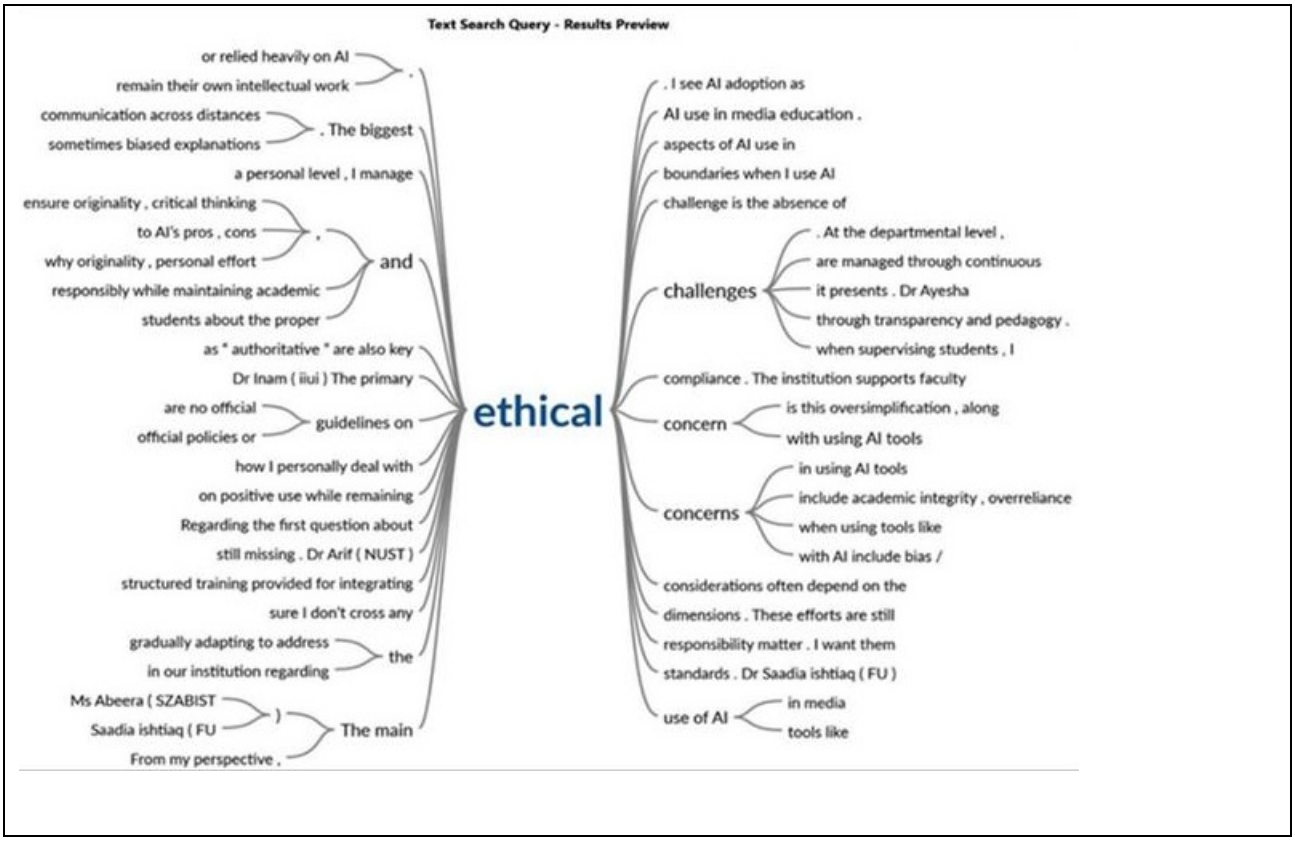

Fig. 6. Word trees of frequently used terms by sampled experts

As the chart demonstrates, there is a systematic interest in integrity, openness, and readiness, and respondents view the integration of AI as a complex, multidimensional issue that must be addressed through coordinated academic and administrative efforts.

Figure 6 is a Word Tree, a visual map of the association branches of commonly used terms in expert responses. This structure assists the researcher in tracing the contextual elaboration of keywords by examining the surrounding phrases to identify discourse and emphasis patterns. It demonstrates how sampled experts have used terms such as academic, tools, ethical, and faculty in relation to AI integration in media education. The academic concept is further divided into the issues of credibility, cross-verification, and responsible application of AI in research and teaching. This shows that respondents have associated various words with the ethical boundaries of academic work, and that they focus on originality, integrity, and structured supervision. The term tools is further expanded to include software-based quizzes, citation reliability, and the student's reliance on artificial intelligence tools such as ChatGPT. Respondents characterize the utility and risks of these tools, indicating that AI may help with brainstorming and structuring, but should not substitute for actual academic work. The word ethical is enclosed with expressions with references to the lack of guidelines, institutional adjustment, and individual responsibility. Experts emphasize the lack of formal policies and the need for organized training to address ethical issues. This indicates that the issue of ethics is very entrenched in the institutional systems as well as in the personal practice of teaching. Finally, the word faculty is linked to the following terms: sensitization, development workshops, and departmental support. The faculty's role in the approach to responsible AI use is changing, with the answer proving inconsistent, yet institutions are increasingly making efforts. Overall, the word trees suggest that the professionals consider the integration of AI a multi-level phenomenon that involves academic standards, technological resources, moral principles, and faculty leadership. The branch structure helps highlight the complexity of AI management in an educational establishment and the need to coordinate a response across policy, pedagogy, and practice levels.

The results reveal that AI literacy among media studies faculty is evolving, though it remains imbalanced, reflecting the nascent state of AI use in media pedagogies. Faculty demonstrated fundamental knowledge of generative AI tools and were aware of their applicability to teaching preparation, research support, and media-related processes such as content ideation and data

management. This aligns with studies indicating that faculty first use AI to improve efficiency and productivity rather than to drive pedagogical change (Aithal, Aithal, 2023; Chen et al., 2024). This perceived usefulness, in the context of the growing importance of automation in journalism and communication, underscores AI's relevance to recent media education.

Despite the engagement, AI literacy was mostly practical rather than critical. Although the faculty perceived the use of AI tools, they had limited knowledge of algorithmic processes, prompt optimization, and evaluative competencies. This aligns with the current literature, which argues that useful AI literacy should be grounded not only in practical skills but also in critical and reflective abilities (Carolus et al., 2023). Verification, transparency, and accountability in media are key aspects of media pedagogy; therefore, low AI literacy can be a limiting factor in becoming a responsible and efficient integrator (Benlian, Pinski, 2024).

According to the Technology Acceptance Model, perceived usefulness was a stronger driver of AI adoption than perceived ease of use. Even in cases where there were usability issues, faculty were prepared to interact with AI where they believed it would positively contribute to teaching or research. This can be attributed to previous conclusions that performance gains tend to be more important than usability issues in higher education (Shahzad et al., 2024). However, challenges with timely formulation and the institution's insufficient training negatively affected perceived ease of use, underscoring the importance of timely literacy and professional development (Walter, 2024).

AI use in media education remained informal and faculty-driven, with minimal integration into the curriculum. Faculty primarily explored AI as an instructional aid, aligning with the literature, which shows that AI adoption often begins at the personal level without institutional support (Katsamakas et al., 2024; Xue, Talin, 2024). However, this fragmented approach limits students' opportunities to develop essential AI skills relevant to media industry demands.

Institutional support is a central predictor of sustainable AI integration. While survey results suggested average preparedness, qualitative data from HODs revealed policy ambiguity and inconsistent implementation. This aligns with the literature emphasizing the need for committed leadership, structured training, and clear policies for effective AI integration in higher education (Biagini, 2025; Katsamakas et al., 2024). AI-use raised ethical concerns in both quantitative and qualitative findings. Faculty identified plagiarism, authorship issues, misinformation, and overreliance on generative tools as significant, with relevance to media studies, given risks such as deepfakes and algorithmic bias. These ethical issues were also highlighted in previous studies on AI-driven education (Huang, 2023; Mouta et al., 2025). The lack of institutional guidelines fostered inconsistent ethical practices, mainly shaped by individual judgment (Biagini, 2025).

Findings reveal that ethical confidence grows with greater AI literacy. Faculty with stronger AI knowledge are better equipped to analyze AI-generated content and act responsibly with students, affirming that ethical engagement is integral to AI literacy (Ghani et al., 2025; Shahzad et al., 2024). This link is especially important in media pedagogy, where public trust and professional responsibility are core values. Results show that AI integration in media pedagogy relies on the interplay of AI literacy, perceived usefulness, institutional support, and ethical awareness. While faculty attitudes toward AI are largely positive, practical integration is hampered by insufficient training, policy gaps, and unequal institutional readiness. These findings underscore the need for a targeted, media-specific AI literacy model that aligns technological advancement with pedagogical objectives and ethical responsibility.

RQ1: The State of AI Literacy and Its Pedagogical Effect.

The quantitative results of RQ1 reveal that AI literacy among media faculty is functional and relatively high, particularly in the context of general-purpose AI tools and prompt literacy. The faculty's familiarity with commonly used AI applications shows that AI is already part of everyday academic life, particularly in research support, writing assistance, and content structuring. This implies that faculty AI literacy is no longer introductory but has advanced to operational competence.

Nevertheless, the findings also demonstrate an apparent imbalance even in AI literacy itself. Although faculty are comfortable with general AI applications, there is limited access to media-specific AI applications, including automated media analytics, content optimization, and AI-assisted production technologies. This implies that accessibility and convenience are shaping faculty AI literacy rather than disciplinary specialization. That is, faculty seem more willing to adopt AI tools that require little technical or curricular reorganization than those that necessitate more fundamental restructuring.

Faculty perceptions are moderately positive regarding pedagogical impact. AI is also perceived to improve teacher performance, learning innovation, and student interest. These results indicate that

faculty members have accepted the usefulness of AI in facilitating customized learning, keeping pace with industry changes, and enhancing teaching and learning efficiency. This aligns well with the theoretical focus on perceived usefulness, as faculty associates associate AI adoption with clear benefits to their teaching practices. Simultaneously, increased, varied responses from students related to critical thinking and creative production indicate a certain level of pedagogical caution in the use of AI.

Faculty appear to distinguish AI as a kind of assistive technology and as a radical pedagogical agent. Though AI is perceived as helpful for efficiency and engagement, its capacity to foster more critical thinking and creative outcomes is approached with greater caution. This indicates concern that overuse or blind reliance on AI can threaten independent thought, particularly in media education, where originality and critical analysis are valued skills. Combined, the results on RQ1 imply that faculty AI literacy positively impacts pedagogical integration; however, this effect is shaped by disciplinary relevance and pedagogical values. Ultimately, the findings demonstrate that faculty fully embrace AI when it enhances, rather than substitutes for, human judgment and creativity. This underscores the pivotal role of informed pedagogical choices in realizing AI's potential in education.

RQ2: Faculty Adoption and Institutional Support in AI Integration.

The results for RQ2 demonstrate a strong discrepancy between institutional readiness and faculty-level adoption. Quantitative findings reveal that faculty are highly motivated to experiment with AI, receive additional training, and increase AI integration in their instruction. The plans to use AI more, propose it to other employees, and participate in future training opportunities indicate a positive, progressive approach to AI-based training. However, despite this eagerness, there seems to be less actual activity in more formalized practices, such as training students in responsible AI use or experimenting with new platforms regularly. This disjunction between intention and action implies that the willingness to embrace AI might not have required institutional support to become fully operational among the faculty. Faculty motivation is not necessarily sufficient to translate into long-term pedagogical innovation.

The most important constraint to this process is the institutional factors. The perception of institutional support is moderate, and the most significant weaknesses were found in technical infrastructure, access to formal training, and access to user-friendly AI tools. Faculty members admit that they recognize departmental support and strategic recognition of AI on a conceptual level but lack the operational support to implement it successfully. This suggests that AI institutional support is typically symbolic but not structural. The difference between faculty preparedness and institutional facilitation indicates a misalignment in the structure.

It seems that faculty are working independently of their institutions, embracing AI on their own rather than as an institutional strategy. The given finding is especially important in the context of the study's conceptual framework, as it implies that institutional factors serve as decisive moderators of the relationship between perceptions and actual AI integration among faculty members. Practically, this mismatch may lead to disjointed and uneven AI implementation at the departmental and institutional levels.

RQ3: Ethical Challenges and Governance of AI.

The RQ3 issue addresses both the quantitative and qualitative results, yielding a deeper, more contextual interpretation. The quantitative findings indicate that faculty have a high degree of ethical awareness of the use of AI. The issues related to plagiarism, originality, data privacy, and responsible, prompt use is well recognized. The faculty is generally aware of the ethical considerations involved in the use of AI in academic tasks, and they appear to feel a sense of personal accountability for these matters in their individual classes. But similarly, this ethical consciousness is not accompanied by equally strong institutional and policy reactions. Faculty views indicate poor transparency regarding formal ethical principles, institutional policies, and standard procedures for AI use. The existence of policy-related obstacles also implies that the current frameworks lack development, are not disseminated fully, or are not sufficiently aligned with faculty demands.

The qualitative results support and elaborate on this meaning. According to interview data, ethical interaction with AI is more negotiated at the individual and departmental levels than at the institutional level. The problems highlighted by the faculty and the HODs include source verification, student work authenticity, misuse of AI-generated citations, and excessive dependence on generative tools. Instead of being addressed through systematic policy mechanisms, these concerns are handled through ad hoc measures, such as increased supervision, manual validation, or informal advice. The results of the visual analyses based on the qualitative data also indicate that the concept of ethics is not viewed as an isolated issue but rather as deeply embedded in pedagogy,

research practices, and the institution's accountability. Faculty are positioned as ethical gatekeepers, responsible for sensitizing students and managing AI-related risks when no institutional guidance is evident. Although this may be seen as an expression of professional independence and moral responsibility, it also reveals a loophole in the institution that vests disproportionate power in individual teachers.

5. Conclusion

This research concludes that the integration of AI into media academia cannot be viewed as a linear process of technological adoption, but rather as a contested domain where individual competence, institutional structures, and ethical frameworks intersect unevenly. Faculty members have already moved from introductory literacy to operational competency and demonstrate motivation and ethical consciousness, whose practices are largely self-managed due to a poor institutional framework. This autonomy may lead to fragmented and inconsistent AI utilization when innovation is based not on a plan but on individual initiative. The lack of institutional support adds an additional ethical responsibility to the faculty and thereby requires them to act as moral gatekeepers in situations where policy is underdeveloped. This imbalance underscores the risk that institutional support remains only symbolic rather than being translated into the structural investment, training, and governance needed to integrate AI sustainably. Lastly, the findings also confirm that a sustainable AI application in media education institutions is not just a faculty problem, but a systems problem expressed at personal, institutional, and ethical levels. Without such a balance, the integration of AI will be disproportional, where convenience will be overvalued at the expense of the disciplinary depth, and the significance of critical and creative pedagogical values, the central concern of media education will be lost.

References

Adefioye, 2024 – *Adefioye, T.* (2024). Artificial intelligence and journalism in Ghana: awareness, adoption, and challenges. *African Journalism Studies*. 45(2): 101-118.

Ahmed et al., 2025 – *Ahmed, S., Sanjrani, H.A., Zaheer, M.Z., Mujahid, K.* (2025). Future of higher education: how AI is revolutionizing teaching, learning, and research. *Social Science Review Archives*. 3(3): 2123-2137. DOI: 10.70670/sra.v3i3.1054

Aithal, Aithal, 2023 – *Aithal, P.S., Aithal, S.* (2023). Optimizing the use of artificial intelligence-powered gpts as teaching and research assistants by professors in higher education Institutions: a study on smart utilization. *International Journal of Management Technology and Social Sciences*. 368-401. DOI: 10.47992/ijmts.2581.6012.0326

Al-Abdullatif, 2024 – *Al-Abdullatif, A.M.* (2024). Modeling teachers' acceptance of generative artificial intelligence use in higher education: The role of AI literacy, intelligent TPACK, and perceived trust. *Education Sciences*. 14(11): 1209. DOI: 10.3390/educsci14111209

Ayyoub et al., 2025 – *Ayyoub, A.M., Khlaif, Z.N., Shamali, M., Eideh, B.A., Assali, A., Hattab, M.K., Barham, K.A., Bsharat, T.R.K.* (2025). Advancing higher education with genai: factors influencing educator AI literacy. *Frontiers in Education*. 10. DOI: 10.3389/feduc.2025.1530721

Baker, Hawn, 2022 – *Baker, R.S., Hawn, A.* (2022). Algorithmic bias in education. *International Journal of Artificial Intelligence in Education*. 32(4): 1052-1092. DOI: 10.1007/s40593-021-00285-9

Bansal, 2024 – *Bansal, P.* (2024). Prompt engineering importance and applicability with generative AI. *Journal of Computer and Communications*. 12: 14-23. DOI: 10.4236/jcc.2024.1210002

Biagini, 2025 – *Biagini, G.* (2025). Towards an AI-literate future: A systematic literature review exploring education, ethics, and applications. *International Journal of Artificial Intelligence in Education*. 35(4): 2616-2666. DOI: 10.1007/s40593-025-00466-w

Biswas, Bairagi, 2024 – *Biswas, M., Bairagi, D.* (2024). AI in journalism and communication teaching: use, challenges and opportunities. *Teaching Journalism & Mass Communication*. 14(1): 11-20. [Electronic resource]. URL: https://www.proquest.com/docview/3134114540?pq-origsite=gscholar&fromopenview=true

Borchardt et al., 2024 – *Borchardt, A., Simon, F.M., Zachrison, O., Bremme, K., Kurczabinska, J., Mulhall, E., Johanny, Y.* (2024). Trusted journalism in the age of generative AI. *European Broadcasting Union*. [Electronic resource]. URL: https://ora.ox.ac.uk/objects/uuid:8c874e2e-34de-4813-ba23-84e6300af110

Braun, Clarke, 2006 – *Braun, V., Clarke, V.* (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*. 3: 77-101. DOI: 10.1191/1478088706qp063oa

Carolus et al., 2023 – *Carolus, A., Koch, M.J., Straka, S., Latoschik, M.E., Wienrich, C.* (2023). MAILS – Meta AI literacy scale: development and testing of an AI literacy questionnaire based on well-founded competency models and psychological change- and meta-competencies. *Computers in Human Behavior: Artificial Humans.* 1(2): 100014. DOI: 10.1016/j.chbah.2023.100014

Cena et al., 2026 – *Cena, E., McParland, A., Toivo, W., Dalton, B., Mundy, M., O'Connor, P.A., Robertson, A.E., Swingler, M., Wilson, P., Duncan, C.* (2026). Studying with GenAI: student views on the opportunities and risks of GenAI in higher education. *Education and Information Technologies*. DOI: 10.1007/s10639-026-13923-3

Chadha, 2024 – *Chadha, K.K.* (2024). Transforming higher education for the digital age: examining emerging technologies and pedagogical innovations. *International Journal of Education and Learning*. 12(2): 44-59. DOI: 10.5678/ijel.2024.12.2.44

Chandio et al., 2024 – *Chandio, S., Memon, S., Ibupoto, N., Rasheed, Z.* (2024). Age of artificial intelligence in pakistani media landscape: challenges and opportunities. *International Journal of Contemporary Issues in Social Sciences*. 3(1): 1546-1555. [Electronic resource]. URL: https://ijciss.org/index.php/ijciss/article/view/484

Chen et al., 2024 – *Chen, X., Hu, Z., Wang, C.* (2024). Empowering education development through AIGC: a systematic literature review. *Education and Information Technologies*. DOI: 10.1007/s10639-024-12549-7

Costa, Murphy, 2025 – *Costa, C., Murphy, M.* (2025). Generative artificial intelligence in education: (what) are we thinking? *Learning Media and Technology*. 1-12. DOI: 10.1080/17439884.2025.2518258

Costa, Oliver, 2025 – *Costa, C., Oliver, M.* (2025). Young people and digital literacy learning: co-producing critical citizenship practices. *Pedagogy Culture and Society*. 1-20. DOI: 10.1080/14681366.2025.2593611

Crompton, Burke, 2024 – *Crompton, H., Burke, D.* (2024). The educational affordances and challenges of chatgpt: state of the field. *TechTrends*. 68(2): 380-392. DOI: 10.1007/s11528-024-00939-0

Davila-Moran et al., 2025 – *Davila-Moran, R.C., Sanchez Soto, J.M., Lopez Gomez, H.E., Silva Infantes, M., Arias Lizares, A., Huanca Rojas, L.M., Cama Flores, S.J.* (2025). Brief prompt-engineering clinic substantially improves AI literacy and reduces technology anxiety in first-year teacher-education students: A pre–post pilot study. *Education Sciences*. 15(8): Article 1010. DOI: 10.3390/educsci15081010

Davis, 1989 – *Davis, F.D.* (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*. 13(3): 319-340. DOI: 10.2307/249008

Demir et al., 2025 – *Demir, M., Miratsky, J., Mishra, P., Nguyen, J., Chan, C.K., Singharoy, A. (2025).* Exploring artificial intelligence tutor teammate adaptability to harness discovery curiosity and promote learning in the context of interactive molecular dynamics. *Cognitive Computation*. 17(5). DOI: 10.1007/s12559-025-10498-y

Demir, Kaplan, 2026 – *Demir, M., Kaplan, M.* (2026). Dijital dönüşüm ofisleri perspektifinden türkiye'de universitelerin dijitalleşme süreci [Digital transformation in turkish higher education: insights from university digital transformation offices]. *Kent Akademisi*. 19(2): 1-29. DOI: 10.35674/kent.1719899 [in Turkish]

Dwivedi et al., 2023 – *Dwivedi, Y.K., Kshetri, N., Hughes, L., Slade, E.L., Jeyaraj, A., Kar, A.K., Koohang, A., Kreps, D., Philip, L., Lal, B.* (2023). So what if chatgpt wrote it? multidisciplinary perspectives on opportunities, challenges, and implications of generative conversational AI for research, practice, and policy. *International Journal of Information Management*. 71: 102642. DOI: 10.1016/j.ijinfomgt.2023.102642

Fischer et al., 2022 – *Fischer, M., Haque, R., Stynes, P., Pathak, P.* (2022). Identifying fake news in Brazilian Portuguese. *Natural Language Processing and Information Systems*. 111-118. DOI: 10.1007/978-3-031-08473-7_10

Fowlin et al., 2025 – *Fowlin, J., Coleman, D., Ryan, S., Gallo, C., Soares, E., Hazelton, N.* (2025). Empowering educators: operationalizing age-old learning principles using ai. *Education Sciences*. 15(3): 393. DOI: 10.3390/educsci15030393

Gardner et al., 2021 – *Gardner, J., O'Leary, M., Yuan, L.* (2021). Artificial intelligence in educational assessment: breakthrough? or buncombe and ballyhoo? *Journal of Computer Assisted Learning*. 37(5): 1207-1216. DOI: 10.1111/jcal.12577

Ghani et al., 2025 – *Ghani, M.M., Mustafa, W.A., Bakhtiar, D.L.S., Khairudin, M.* (2024). A comprehensive study: AI literacy as a component of media literacy. *Journal of Advanced Research in Applied Sciences and Engineering Technology*. 53(2): 112-121. DOI: 10.37934/araset.53.2.112121

Grassini, 2023 – *Grassini, S.* (2023). Shaping the future of education: exploring the potential and consequences of AI and chatgpt in educational settings. *Education Sciences*. 13(7): 692. DOI: 10.3390/educsci13070692

Haq et al., 2025 – *Haq, F.U., Asim, M., Suki, N.M., Zakaria, N., Hussain, S.* (2025). AI adoption and educational effectiveness in emerging higher education institutions: the moderating role of digital literacy and institutional support. *Journal of Information & Knowledge Management*. DOI: 10.1142/s021964922550090x

HEC, 2026 – HEC. HEC stresses NCAI's role in integration of artificial intelligence into academia. 2026. [Electronic resource]. URL: https://www.hec.gov.pk/english/news/news/Pages/HEC-Stresses-NCAI%E2%80%99s-Role.aspx

Hollanek et al., 2025 – *Hollanek, T., Peters, D., Drage, E., Hernandes, R.* (2025). AI, journalism, and critical AI literacy: exploring journalists' perspectives on AI and responsible reporting. *AI & Society*. DOI: 10.1007/s00146-025-02407-6

Holmes, Porayska-Pomsta, 2022 – *Holmes, W., Porayska-Pomsta, K.* (eds.). (2022). The ethics of artificial intelligence in education: practices, challenges, and debates (1st ed.). Routledge. DOI: 10.4324/9780429329067

Huang, 2023 – *Huang, L.* (2023). Ethics of artificial intelligence in education: student privacy and data protection. *Science Insights Education Frontiers*. 16(2): 2577-2587. DOI: 10.15354/sief.23.re202

Huynh et al. 2025 – *Huynh, L., Le, T.H., Dang, B., An, B.T., Vu, C.T., Nguyen, A.* (2025). Mindset matters: fostering teachers' responsible AI use through professional development. *Journal of New Approaches in Educational Research*. 14(1). DOI: 10.1007/s44322-025-00043-y

Hwang et al., 2023 – *Hwang, Y., Lee, J.H., Shin, D.* (2023). What is prompt literacy? an exploratory study of language learners' development of a new literacy skill using generative AI. *arXiv*. [Electronic resource]. URL: https://arxiv.org/abs/2311.05373

Johnston et al., 2024 – *Johnston, H., Wells, R.F., Shanks, E.M., Boey, T., Parsons, B.N.* (2024). Student perspectives on the use of generative artificial intelligence technologies in higher education. *International Journal for Educational Integrity*. 20(1). DOI: 10.1007/s40979-024-00149-4

Kassorla et al., 2024 – *Kassorla, M., Georgieva, M., Papini, A.* (2024). AI literacy in teaching and learning: a durable framework for higher education. *EDUCAUSE*. [Electronic resource]. URL: https://www.educause.edu/content/2024/ai-literacy-in-teaching-and-learning/faculty-altl

Katsamakas et al., 2024 – *Katsamakas, E., Pavlov, O., Saklad, S.* (2024). Artificial intelligence and the transformation of higher education institutions: a systems approach. *Sustainability*. 16(14): 6118. DOI: 10.3390/sustainability16146118

Kelley, Wenzel, 2025 – *Kelley, K., Wenzel, J.* (2025). Advancing artificial intelligence literacy in teacher education through professional partnership inquiry. *Education Sciences*. 15(6): 659. DOI: 10.3390/educsci15060659

Kioko et al., 2022 – *Kioko, S., Booker, L., Chege, J.* (2022). Artificial intelligence adoption and challenges in African newsrooms. *European Scientific Journal*. 18(22): 278-296. DOI: 10.19044/esj.2022.v18n22p278

Kulsoom et al., 2025 – *Kulsoom, A., Shaikh, M.R., Mahmood, S., Khattak, M.S.* (2025). Implications of digital media and AI on academic performance of students in Pakistan. *Journal of Media Horizons*. 6(3): 656-674. [Electronic resource]. URL: https://jmhorizons.com/index.php/journal/article/view/339

Kumar et al., 2023 – *Kumar, A., Nayyar, A., Sachan, R.K., Jain, R.* (eds.). (2023). AI-assisted special education for students with exceptional needs. *IGI Global Scientific Publishing*. DOI: 10.4018/979-8-3693-0378-8

Lan et al., 2025 – *Lan, Y., et al.* (2025). Effective technology integration in higher education: a mixed-methods study of professional development. *Education and Information Technologies*. DOI: 10.1007/s10639-025-13750-y

Laupichler et al., 2022 – *Laupichler, M.C., Aster, A., Schirch, J., Raupach, T.* (2022). Artificial intelligence literacy in higher and adult education: A scoping literature review. *Computers and Education Artificial Intelligence*. 3: 100101. DOI: 10.1016/j.caeai.2022.100101

Liu, Zhang, 2024 – *Liu, M., Zhang, L.J.* (2024). Investigating students' cognitive processes in generative AI-assisted digital multimodal composing and traditional writing. *Computers & Education*. 206: Article 102170. DOI: 10.1016/j.compedu.2023.104977

Lo, 2023 – *Lo, L.S.* (2023). AI governance in education: a stakeholder perspective. *Computers & Education*. 203: 104880. DOI: 10.1016/j.compedu.2023.104880

Lo, 2023 – *Lo, L.S.* (2023). The art and science of prompt engineering: a new literacy in the information age. *Internet Reference Services Quarterly*. 27(4): 203-210. DOI: 10.1080/10875301.2023.2227621

Mah, Groß, 2024 – *Mah, D.K., Groß, C.* (2024). Faculty self-efficacy, perceived benefits, challenges, and professional development needs related to artificial intelligence in higher education. *International Journal of Educational Technology in Higher Education*. 21(42). DOI: 10.1186/s41239-024-00490-1

Mouta et al., 2025 – *Mouta, A., Torrecilla-Sánchez, E.M., Pinto-Llorente, A.M.* (2025). Comprehensive professional learning for teacher agency in addressing ethical challenges of AIED: Insights from educational design research. *Education and Information Technologies*. 30: 3343-3387. DOI: 10.1007/s10639-024-12946-Y

Murray, 2025 – *Murray, M.C.* (2025). Bridging the generative AI literacy gap: A guide to introducing prompt engineering in university courses. *Issues in Informing Science and Information Technology*. 22: Article 010. DOI: 10.28945/5516

Ng et al., 2021 – *Ng, D.T.K., Leung, J.K.L., Chu, K.W.S., Qiao, M.S.* (2021). AI literacy: definition, teaching, evaluation and ethical issues. *Proceedings of the Association for Information Science and Technology*. 58(1): 504-509. DOI: 10.1002/pra2.487

O'Dea et al. 2025 – *O'Dea, X., Bale, R., Chiu, Y.T., Suleymenova, K., Tinker, A., Stoker, R.* (2025). Ethical uses of generative AI in assessment: student perceptions in UK contexts. *Evaluation Review*. 193841X251399712. DOI: 10.1177/0193841x251399712

Persson, 2024 – *Persson, J.* (2024). Artificial intelligence and UK education: research, the redistribution of authority, and rights. *International Journal of Artificial Intelligence in Education*. 34(1): 62-72. DOI: 10.1007/s40593-023-00347-0

Pinski, Benlian, 2024 – *Pinski, M., Benlian, A.* (2024). AI literacy for users – a comprehensive review and future research directions of learning methods, components, and effects. *Computers in Human Behavior: Artificial Humans*. 2(1): 100062. DOI: 10.1016/j.chbah.2024.100062

Porayska-Pomsta et al., 2023 – *Porayska-Pomsta, K., Holmes, W., Nemorin, S.* (2023). The ethics of AI in education. Edward Elgar Publishing eBooks: 571-604. DOI: 10.4337/9781800375413.00038

Rafi, Junaid, 2025 – *Rafi, M.S., Junaid, A.* (2025). AI literacy and regulation in higher education. ProPakistani. [Electronic resource]. URL: https://propakistani.pk/2025/05/06/ai-literacy-and-regulation-in-higher-education/

Ranieri, Chianese, 2024 – *Ranieri, M., Chianese, S.* (2024). Co-designing media education strategies: a workshop on AI. In: *AIxEDU 2024 Workshop Proceedings*. [Electronic resource]. URL: https://ceur-ws.org/Vol-3879/AIxEDU2024_paper_24.pdf

Saeed et al., 2023 – *Saeed, R., Saqib, M., Pandey, A.* (2023). Artificial intelligence in higher education: A review of current applications and future prospects. *Journal of Student Research*. 12(3): 1-10. DOI: 10.47611/jsr.v12i3.2236

Saira et al., 2025 – *Saira, A., Qureshi, N., Hassan, R.* (2025). Digital media and artificial intelligence in education: a smart pedagogy approach. *International Journal of Innovation and Learning*. 12(1): 37-49. DOI: 10.63278/1377

Shahzad et al., 2024 – *Shahzad, M.F., Xu, S., Zahid, H.* (2024). Exploring the impact of generative AI-based technologies on learning performance through self-efficacy, fairness & ethics, creativity, and trust in higher education. *Education and Information Technologies*. 30(3): 3691-3716. DOI: 10.1007/s10639-024-12949-9

Shankar et al., 2025 – *Shankar, S.K., Pothancheri, G., Sasi, D., Mishra, S.* (2025). Bringing teachers in the loop: exploring perspectives on integrating generative AI in technology-enhanced learning. *International Journal of Artificial Intelligence in Education*. 35: 155-180. DOI: 10.1007/s40593-024-00428-8

Song, 2025 – *Song, E.* (2025). Prompt engineering as a 21st-century literacy: a k-12 curriculum design and assessment framework. *Artificial Intelligence Education Studies*. 1(2): 32-47. DOI: 10.6914/aiese.010203

Steinmann, Piazza, 2024 – *Steinmann, N., Piazza, A.* (2024). AI-based text creation in content marketing: designing and evaluating an effective prompt. *HMD Praxis der Wirtschaftsinformatik*. 61: 402-417. DOI: 10.1365/s40702-024-01058-3

Tan, Chen, 2025 – *Tan, X., Chen, G.* (2025). Artificial intelligence in teaching and teacher professional development: a systematic review. *AI Open*. 5: 100205. DOI: 10.1016/j.aiopen.2024.100205

Thanasi, Hoxha, 2024 – *Thanasi-Boçe, M., Hoxha, J.* (2024). From ideas to ventures: building entrepreneurship knowledge with LLM, prompt engineering, and conversational agents. *Education and Information Technologies*. 29: 24309-24365. DOI: 10.1007/s10639-024-12775-z

Tiernan et al., 2023 – *Tiernan, P., Costello, E., Donlon, E., Parysz, M., Scriney, M.* (2023). Information and media literacy in the age of AI: options for the future. *Education Sciences*. 13(9): 906. DOI: 10.3390/educsci13090906

Tinák, Gálik, 2026 – *Tinák, T., Gálik, S.* (2026). On the epistemological and ethical conditions of information in journalism. *Communication Today*. 2026. 17(1): 26-36.

Trikoili et al., 2025 – *Trikoili, A., Georgiou, D., Pappa, C.I., Pittich, D.* (2025). Critical thinking assessment in higher education: a mixed-methods comparative analysis of AI and human evaluator. *International Journal of Human–Computer Interaction*. 41(24): 15570-15583. DOI: 10.1080/10447318.2025.2499164

University Canada West, 2025 – University Canada West. Advantages and disadvantages of AI in education. 2025. [Electronic resource]. URL: https://www.ucanwest.ca/blog/education-careers-tips/advantages-and-disadvantages-of-ai-in-education

Vieriu, Petrea, 2025 – *Vieriu, A.M., Petrea, G.* (2025). The impact of artificial intelligence (AI) on students' academic development. *Education Sciences*. 15(3): 343. DOI: 10.3390/educsci15030343

Walter, 2024 – *Walter, Y.* (2024). Embracing the future of artificial intelligence in the classroom: the relevance of AI literacy, prompt engineering, and critical thinking in modern education. *International Journal of Educational Technology in Higher Education*. 21: Article 15. DOI: 10.1186/s41239-024-00448-3

Wang et al., 2024 – *Wang, C., Aguilar, S.J., Bankard, J.S., Bui, E., Nye, B.* (2024). Writing with AI: what college students learned from utilizing chatgpt for a writing assignment. *Education Sciences*. 14(9): 976. DOI: 10.3390/educsci14090976

Weller, 2020 – *Weller, M.* (2020). 25 years of ed tech. *Athabasca University Press*. [Electronic resource]. URL: https://www.aupress.ca/books/120290-25-years-of-ed-tech/

Williams, 2026 – *Williams, A.* (2026). Rapidly changing attitudes of university students on the use of generative artificial intelligence. *Journal of Further and Higher Education*. 1-15. DOI: 10.1080/0309877x.2026.2634035

Wilson, 2025 – *Wilson, T.D.* (2025). The development of policies on generative artificial intelligence in UK universities. *IFLA Journal*. 51(3): 722-734. DOI: 10.1177/03400352251333796

Wolfersberger, Hagler, 2025 – *Wolfersberger, V., Hagler, J.* (2025). Ai literacy in higher media education: exploring the balance between generative content creation and artistic expression. *EDULEARN Proceedings*. 1: 9142-9151. DOI: 10.21125/edulearn.2025.2364

Woo et al., 2024 – *Woo, D.J., Wang, D., Yung, T., Guo, K.* (2024). Effects of a prompt engineering intervention on undergraduate students' AI self-efficacy, AI knowledge and prompt engineering ability: a mixed methods study. *arXiv (Cornell University)*. DOI: 10.48550/arxiv.2408.07302

Xue, Talin, 2024 – *Xue, H., Talin, S.* (2024). Educational transformation in the age of AI: a framework and implementation path for AI competency for university instructors. *Malaysian Journal of Social Sciences and Humanities*. 9(1): 3112. DOI: 10.47405/mjssh.v9i1.3112

Yusuf et al., 2022 – *Yusuf, T.I., Adebayo, O.A., Bello, L.A., Kayode, J.O.* (2022). Adoption of artificial intelligence for effective library service delivery in academic libraries in nigeria. *SJSU ScholarWorks*. [Electronic resource]. URL: https://scholarworks.sjsu.edu/libphilprac/6804/

Zawacki-Richter et al., 2019 – *Zawacki-Richter, O., Marín, V.I., Bond, M., Gouvernaur, F.* (2019). Systematic review of research on artificial intelligence applications in higher education – where are the educators? *International Journal of Educational Technology in Higher Education*. 16(1). DOI: 10.1186/s41239-019-0171-0

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Key Themes in Russian Media Education at the Current Stage of Development

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Abstract

The article examines the main trends in contemporary Russian media education in the 21st century. Over the past quarter century, Russian media education has undergone several transformations, including an expansion of its subject area, a broadening range of methodological developments, and an interdisciplinary nature. New opportunities in the media sphere are opening up new horizons for contemporary researchers. At the same time, the rapid development of media technologies and the expanding capabilities of artificial intelligence and neural networks are associated with risks and threats arising from the younger generation's interactions with the media world. The author analyses a number of studies on media education issues, including pedagogical, psychological, political, and sociological research from recent years. The article presents characteristics of some key areas of development in media education, identifies the most promising areas for promoting media education in Russian media practice, and defines key approaches to the inclusion of all participants in media education. The analysis demonstrates that modern Russian media education is increasingly oriented toward promoting critical thinking, media culture, and media security skills, alongside with the development of people's creative and civic competencies. The integration of media education into formal and informal educational contexts, the diversification of its methods and forms, and the active involvement of all participants in the educational process highlight its systemic and comprehensive nature.

Keywords: media text, media culture, media security, media education, media education concepts, media creativity, development of critical thinking.

1. Introduction

Media education today occupies a crucial place in the sociocultural development of modern society. Over the past years, with the rapid development of artificial intelligence, blogging, and various media technologies, it has become clear that modern society needs to be able not only to successfully search for and select media information, but also to creatively interpret it, using it in various aspects of life.

It is a well-known fact that the modern generation is well-versed in the technical capabilities of the media sphere, easily mastering the latest innovations in the media industry, quickly engaging in the process of creating media content, and easily incorporating their life stories into general media educational content. However, it should be noted that the quality of this media content is far from always consonant with moral principles, value concepts, and worldviews. Focusing on fashionable trends, many of which are devoid of meaning, often leads to blind copying of visual images that carry neither intellectual weight nor social purpose. Here, we completely agree with the opinion of V.V. Savchuk: "A book requires solitude and return, while the screen requires short-

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term uninterrupted attention to something rarely returned to. The topos is becoming a territory covered by the on-screen image, but not encompassed by it. Digital representation is born. And a person no longer sees the difference between the internal image and the external image of a thing, between the construction of a look and the construction of an image, between a representation and what is presented" (Savchuk, 2020: 86).

Hence, we consider it especially important at the current stage of Russian media education to develop new training programs aimed at educating specialists of various levels who do not only apply media education methods and technologies but also support media education for the younger generation.

The themes in contemporary Russian media education are congruent with the realities accompanying education as a whole. Objectives such as fostering students' creative potential and critical thinking, independent evaluation of media content based on the traditional values of modern society, and cultivating their thoughtful attitude toward created media content pose important challenges for media education today, related to the full utilization of the teaching, nurturing, and developmental potential of media education.

2. Materials and methods

The material underlying this study includes Russian and international scholarly works on contemporary Russian media education, including dissertations, monographs, research articles, reports, etc. The research methods include theoretical analysis and synthesis; generalization and classification, content analysis, analogy, induction and deduction, abstraction and concretization, generalization. The methodological basis of the study is the research of L. Masterman (Masterman, 1985), C. Bazalgette (Bazalgette, 2009), D. Buckingham (Buckingham, 2004), A. Silverblatt (Silverblatt, 2016), and others.

3. Discussion

The history and theory of media education in the modern world, including Russia, have been thoroughly analysed by A.V. Fedorov (Fedorov, 2021). The current state of Russian media education has recently been reflected in numerous publications. At the present stage, the processes taking place in modern Russian media education are inextricably linked to the challenges of digitalization of the educational environment: "Modern education is no longer conceivable without media, which are decisively displacing the forms generated by the Gutenberg era. Media education today is an epiphenomenon of digital technologies, and it should also be analysed from this perspective" (Savchuk, 2020: 83).

It should be noted that systemic processes related to creating media landscape of educational organizations in Russia are quite active. All educational institutions cover current events, publishing all the relevant information on their official websites and in social media groups, intended for all participants in the educational environment (students, teachers, and the parent community). This open format is due to the inclusion of an electronic (digital) educational environment in the educational system all over the country: the Ministry of Education of the Russian Federation has launched the Federal Project "Digital Educational Environment", as part of the national project "Education", which "aims to create and implement a digital educational environment in educational organizations, as well as to ensure the digital transformation of the education system. The project includes equipping organizations with modern equipment and developing digital services and content for educational activities" (The Ministry..., 2019).

Similar processes are actively developing in the higher education system. In particular, in the Decree of the Government of the Russian Federation dated July 5, 2025, No. 1805-r "On the strategic direction in the field of digital transformation of the science and higher education sector until 2030" (Order..., 2025), the following are identified as "priorities of the strategic direction:

– Implementing the digital transformation of scientific organizations and higher education organizations based on Russian software and hardware systems, including Russian end-to-end digital technologies (artificial intelligence technologies), with the aim of increasing the efficiency of scientific research and development, as well as personnel training in the interests of ensuring the technological leadership of the Russian Federation;

– Ensuring the security of information and communication processes in science and higher education;

– Forming a unified policy in the field of information and communication technologies and developing unified approaches to constructing individual components of information system architecture in science and higher education, including the formation of individual components of information system architecture based on common tools for modelling and describing information system architecture;

– Building common information models, introducing common information exchange standards, unifying the regulation of interactions between various systems and entities, and ensuring flexible and scalable process management in science and higher education;

– Creating digital services for scientific organizations and higher education institutions using artificial intelligence technologies;

– Implementing state policy in the field of digital transformation while adhering to customer-centric principles" (Order, 2025).

The essential role of media education goals related to the digitalization of higher education is emphasized by many Russian researchers. We fully agree with A.A. Gevorgyan's opinion that "currently, every higher education institution strives to create an environment favourable to the development of young people, utilize its infrastructure to implement modern approaches to education, and, of course, this infrastructure is used by the university for corporate purposes, such as implementing its image policy and attracting applicants. The university also addresses a number of issues related to civic education, developing students' creativity, and social competencies. Given the intense influence of global information flows, there is a need for teaching media culture and media literacy" (Gevorgyan, 2022).

E.R. Dikikh and N.V. Bagautdinova explore the dynamic nature of ongoing changes in the media and information environment of a modern university. The authors note that the "issues related to the development of the digital environment of a modern university have remained relevant over the past decade. While initially these were objectives related to the technological aspects of the problem, today the issues related to understanding accumulated experience, coordinating the elements of the environment, and identifying its hidden potential are becoming increasingly pressing" (Dikikh, Bagautdinova, 2023: 125). Moreover, the authors identify a number of areas that make up "the digital structure of modern universities, including the following:

– The official website of the university, which is the main form of online activity, containing comprehensive information about the university, educational programs, staff, etc., and is also a powerful tool in the marketing communications system;

– An educational portal providing informational and methodological support for the educational process, communication between all the participants, and interaction during the mastery of academic courses and extracurricular activities;

– An electronic library providing access to full-text versions of educational, methodological, and scientific literature;

– A student's electronic portfolio, which is a tool for authentic assessment that allows for recording the progress and results of each student" (Dikikh, Bagautdinova, 2023: 127).

T.V. Popova and A.A. Shtin emphasize the inextricable link between equipping a modern electronic educational environment at a university and pedagogical design. The authors state that "the application of pedagogical design in the electronic educational environment stands for continuous development and improvement of knowledge and competencies, the modernization of educational technologies, thanks to which the educational process becomes personalized, high-quality, effective, and engaging in students' assimilation of the information provided, using advances in information technology based on digital data" (Popova, Shtin, 2023: 97).

Media security and countering unreliable and destructive media information remain key media education aspects in present-day schools and universities. These themes are closely linked to the need to develop critical thinking in the younger generation. In recent years, the theme of countering fake information in the context of media education has been addressed in a number of dissertation studies. For example, the importance of media literacy in a political science context is examined in A.A. Kazakov's dissertation (Kazakov, 2020). Presenting a detailed analysis of the topic under study, the author emphasizes that "specific actions to recognize and mitigate the influence techniques used by mass media, in our opinion, are an extremely important element of media literacy in a political context" (Kazakov, 2020: 377).

The use of media education in developing individuals has also been researched in recent studies. Among these, publications focused on fostering the spiritual and moral potential of

individuals, patriotic consciousness, and civic engagement of the younger generation through media education. In this regard studies by A.A. Kondrashkina (Kondrashkina, 2012), N.P. Ryzhikh (Ryzhikh, 2011), V. Mikhaleva and I.V. Chelysheva (Mikhaleva, Chelysheva, 2025; Chelysheva, 2025), and others are particularly noteworthy. For example, media education is also explored in the research of N.P. Ryzhikh (Ryzhikh, 2011), in her work with school audiences, focusing on fostering cognitive activity, developing creativity, shaping patriotic consciousness, and motivating students to learn.

For instance, A.A. Kondrashkina examines media education in terms of its pedagogical potential. The author notes a close connection between media competence and civic consciousness of the younger generation, emphasizing that "the pedagogical potential of media education as a factor in the development of civil society acts as a dynamic, functional system of value-based, substantive, and methodological tools that enable the educational impact on individuals. At the same time, by fulfilling ideological, socially adaptive, and developmental functions, the pedagogical potential of media education manifests itself as a means of rethinking the goals and content of education at the current stage of its development, taking into account the constantly evolving requirements for the intellectual, moral, and civic development of the individual" (Kondrashkina, 2012).

The range of forms and methods of media education in schools and universities has significantly expanded recently. Alongside with traditional forms – film and media clubs, film electives, and studios – media centers and media holdings are emerging, and media projects and media creative activities for children and young people are being launched. Current promoting domestic media education is discussed at international and national conferences, roundtables, forums, and elsewhere. I.A. Kuptsova and T.N. Vladimirova rightly emphasize that "the media environment offers additional opportunities in matters of education and upbringing. The organic perception of media texts by the younger generation serves as a mechanism for transmitting the value-semantic complex of Russian culture. The most relevant forms and methods of media education for promoting value orientations and the intellectual and creative development of the individual: online events, online broadcasts with feedback, festivals and competitions in the virtual space, interesting and useful content on the official social networks of educational organizations, social networks as a creative platform for young people'' (Kuptsova, Vladimirova, 2024: 63).

The theme of media education in family upbringing has also received considerable attention. This topic has been explored by L.A. Gritsai (Gritsai, 2025), I.V. Chelysheva, G.V. Mikhaleva, Sapozhnikova, A.A. Lozovitskaya (Chelysheva et al., 2025), and others. For example, L.A. Gritsai notes that "parents' media literacy is becoming an integral part of family education, allowing them to filter and interpret content, develop critical thinking in children, and instil strong moral values, which is especially relevant in the information society. Therefore, parents, acting as media conduits, significantly influence the development of media literacy and educational values in children, simultaneously modelling media behaviour, organizing joint media consumption, and establishing rules for media use, which strengthens the family's protection from the negative impact of media'' (Gritsai, 2025).

4. Results

In recent years, Russian media education has been rapidly developing. New media technologies, the use of neural networks, and artificial intelligence are opening up new opportunities for harnessing the potential of media education in the Russian education system across a wide range of academic courses. These opportunities highlight the need for a comprehensive comparative analysis of the conceptual foundations of contemporary media education in Russia, identifying the most productive practices in formal and informal education, current trends and strategies, and analysing the development of contemporary media education models (which form the basis of numerous media education programs and media projects for schoolchildren and students). The urgency of this task stems from the urgent need to identify and implement modern, effective media education methods aimed at enhancing citizens' media and information literacy.

The scientific significance of the issues under study lies in the analysis of key theories of media education, modern methods for fostering media and digital competence among citizens, and the content of domestic models of media education for the population, modern media education programs, and their implementation practices.

Given the ever-growing interest of the younger generation in mastering the media landscape, Russian media education in the 21st century opens up new prospects for educational organizations, including schools, universities, colleges, and supplementary education for children and youth. Integrated and specialized approaches to developing media competence in the younger generation are increasingly being applied in education, integrated into extracurricular activities and educational programs, and are becoming the subject of scientific research and innovative media education practices.

The range of relevant aspects of Russian media education is currently expanding significantly. Numerous studies in pedagogy, psychology, political science, sociology, cultural studies, and philosophy in recent decades attest to a growing interest in media education.

The media education landscape has been shaping itself in the context of a rapidly growing amount of information, generating content of a wide variety of ideological, semantic, and artistic levels. The system of integrating media education into teaching different subjects at the school and university levels is actively developing, and new curricular profiles are emerging focused on mastering the media landscape in pedagogical, sociological, philological, philosophical, and psychological contexts.

Among the most pressing themes in contemporary Russian media education are protecting children from destructive media content and developing critical thinking in the younger generation through interaction with media libraries of various types and genres.

The primary objective of contemporary media education is to utilize the rich potential of media education in the fields of civic, patriotic, spiritual, moral, aesthetic, and labour education. This potential is increasingly being explored in modern research: there are educational programs for schoolchildren and students, new organizational forms for integrating media education into school and university, and so on. The range of forms and methods of media education in academic and extracurricular activities, in the area of supplementary education for children and youth, is also expanding.

The theme of training media education specialists to work with the younger generation remains persistently pressing. The expanding range of media education programs demonstrates continued interest in integrating media education into the professional training of educators, psychologists, social workers, subject teachers, educational counsellors, youth workers, and others.

All participants in the educational process play a vital role in fully realizing the developmental potential of media education. Therefore, there is growing attention to promoting parents' pedagogical culture in the field of media: there are programs and online trainings for the parent community; educational work is being conducted with young families, and so on.

Media education for the younger generation is currently closely associated with teachers' media competence and the parent community. The aim of training media-literate teachers, psychologists, youth workers, and other specialists working with children and adolescents has remained relevant for many years and is being addressed at a number of Russian universities. These include media education programs successfully implemented at Moscow State Pedagogical University (Moscow), Herzen State Pedagogical University of Russia (St. Petersburg), Minin Nizhny Novgorod State Pedagogical University (Nizhny Novgorod), A.P. Chekhov Taganrog Institute (branch) of Rostov State University of Economics (RINH), and Don State Technical University (Rostov-on-Don), among others.

Thus, media education today offers broad prospects for shaping a new educational landscape, driven both by the expanding influence of the media sphere and its technical capabilities, as well as by introducing new methodological approaches to media education in schools and universities.

5. Conclusion

The development of media education in contemporary Russia reflects both the evolution of the media landscape and the growing societal demand for critically thinking, media-literate citizens. Over the past decades, media education has transformed into an interdisciplinary field, integrating pedagogical, psychological, cultural, and technological approaches. Its expansion has been driven not only by the rapid advancement of digital technologies, artificial intelligence, and networked communication, but also by the urgent sociocultural need to address the risks associated with these transformations, particularly for younger generations.

The analysis demonstrates that modern Russian media education is increasingly oriented toward promoting citizens' critical thinking, media culture, and media security skills, alongside

with their creative and civic competencies. The integration of media education into formal and informal educational contexts, the diversification of its methods and forms, and the active involvement of all participants in the educational process (teachers, students, and parents) highlight its systemic and comprehensive nature. At the same time, the growing role of digital educational environments and state-level initiatives underscores the strategic importance of media education in ensuring both educational quality and information security.

At the present stage, one of the key priorities remains the preparation of qualified specialists capable of effectively implementing media education practices and guiding young people in navigating complex media realities. At the same time equally important is the continued development of scientifically grounded models and programs that respond to contemporary media challenges, including misinformation, value disorientation, and the ethical implications of emerging technologies.

Ultimately, the future of Russian media education lies in its ability to balance technological innovation with humanistic values, fostering not only people's technical proficiency but primarily their responsible, reflective, and culturally aware engagement with media.

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References

Bazalgette, 2009 – *Bazalgette, C.* (2009). Key questions for media literacy and media policies. *Mediaimpulse*. 47(2): 1-9.

Buckingham, 2004 – *Buckingham, D.* (2004). The media literacy of children and young people. London: University of London.

Chelysheva et al., 2025 – *Chelysheva, I.V., Mikhaleva, G.V., Sapozhnikova, Yu.A., Lozovitskaya, A.A.* (2025). Obraz sem'i i semeynogo vospitaniya v proizvedeniyakh otechestvennogo khudozhestvennogo kinematografa i perspektivy mediaobrazovaniya (1920–2020) [The image of the family and family education in the works of Russian art cinema and the prospects for media education (1920–2020)]. Rostov-on-Don. [in Russian]

Chelysheva, 2025 – *Chelysheva, I.V.* (2025). Patrioticheskaya tema v otechestvennom igrovom kino XXI veka [Patriotic theme in Russian feature films of the 21st century]. *Bulletin of the International Centre of Art and Education*. 5: 8-16. [in Russian]

Dikikh, Bagautdinova, 2023 – *Dikikh, E.R., Bagautdinova, N.V.* (2023). K voprosu razvitiya tsifrovoy sredy sovremennogo vuza [On the development of the digital environment of a modern university]. *Uchenyye zapiski universiteta imeni P.F. Lesgafta*. 8 (222): 125-129. DOI: 10.34835/issn.2308-1961.2023.08.p125-129 [in Russian]

Fedorov, 2021 – *Fedorov, A.V.* (2021). Mediaobrazovanie: istoriya i teoriya [Media education: history and theory]. Moscow-Berlin. DOI: 10.23681/610938 [in Russian]

Gálik et al., 2024 – *Gálik, S. et al.* (2024). How competencies of media users contribute to deliberative communication. In: Peruško, Z., Lauk, E., Halliki-Loit, H. (eds.). European media systems for deliberative communication: risks and opportunities. New York: Routledge: 98-116. DOI: https://doi.org/10.4324/9781003476597

Gevorgyan, 2022 – *Gevorgyan, A.A.* (2022). Molodezhnyye vnutrivuzovskiye SMI kak tipologicheskiy, mediaobrazovatel'nyy i mediakommunikativnyy fenomen v kontekste razvitiya effektivnoy mediasredy vuza [Youth intra-university media as a typological, media educational and media communicative phenomenon in the context of the development of an effective media environment of the university]. Ph.D. Dis. Voronezh. [in Russian]

Gritsai, 2025 – *Gritsai, L.A.* (2025). Rol' mediaobrazovaniya v formirovanii semeynykh vospitatel'nykh tsennostey [The role of media education in the formation of family educational values]. *Znak: problemnoye pole mediaobrazovaniya*. 1(55): 17-28. DOI: 10.47475/2070-0695-2025-55-1-17-28 [in Russian]

Kazakov, 2020 – *Kazakov, A.A.* (2020). Politicheskaya rol' mediynoy gramotnosti v usloviyakh tekhnologicheskoy transformatsii massovoy kommunikatsii [The political role of media

literacy in the context of technological transformation of mass communication]. Ph.D. Dis. Moscow. [in Russian]

Kondrashkina, 2012 – *Kondrashkina, A.A.* (2012). Pedagogicheskiy potentsial mediaobrazovaniya kak faktora stanovleniya grazhdanskogo obshchestva [Pedagogical potential of media education as a factor in the development of civil society]. Ph.D. Dis. Nizhny Novgorod. [in Russian]

Kuptsova, Vladimirova, 2024 – *Kuptsova, I.A., Vladimirova, T.N.* (2024). Mediaobrazovanie kak sredstvo formirovaniya cennostnyh orientirov i intellektual'no-tvorcheskogo potentsiala lichnosti [Media education as a means of forming value guidelines and intellectual and creative potential of an individual]. *Nauka i shkola*. 3: 55-64. DOI: 10.31862/1819-463X-2024-3-55-64 [in Russian]

Masterman, 1985 – *Masterman, L.* (1985). Teaching the media. London: Comedia Publishing Group.

Mikhaleva, Chelysheva, 2025 – *Mikhaleva, G.V., Chelysheva, I.V.* (2025). Razvitiye grazhdanskoy aktivnosti studencheskoy molodezhi sredstvami otechestvennogo kinematografa: uchebnoye posobiye [Development of civic activity of student youth by means of national cinema: a tutorial]. Rostov-on-Don. [in Russian]

Order..., 2025 – Rasporyazheniye Pravitel'stva Rossiyskoy Federatsii ot 5 iyulya 2025 g. № 1805-r O strategicheskom napravlenii v oblasti tsifrovoy transformatsii otrasli nauki i vysshego obrazovaniya do 2030 g. [Order of the Government of the Russian Federation of July 5, 2025 No. 1805-r "On the strategic direction in the field of digital transformation of the science and higher education sector until 2030"]. Moscow. [in Russian]

Popova, Shtin, 2023 – *Popova, T.V., Shtin, A.A.* (2023). Informatsionno-obrazovatel'naya sreda vuza vo vzaimodeystvii s pedagogicheskim dizaynom [Information and educational environment of the university in interaction with pedagogical design]. *Prepodavatel' XXI vek*. 1(1): 93-103. DOI: 10.31862/2073-9613-2023-1-93-103 [in Russian]

Ryzhikh, 2011 – *Ryzhikh, N.P.* (2011). Ispol'zovaniye mediaobrazovaniya v vospitanii detey [Using media education in child-raising]. Taganrog. [in Russian]

Savchuk, 2020 – *Savchuk, V.V.* (2020). Mediaobrazovaniye – epifenomen tsifrovizatsii [Media education – an epiphenomenon of digitalization]. *Voprosy filosofii*. 5: 83-86. DOI: 10.21146/0042-8744-2020-5-83-86 [in Russian]

Silverblatt, 2016 – *Silverblatt, A.* (2016). Reflections on information literacy. *International Journal of Media and Information Literacy*. 1(1): 54-71. DOI: 10.13187/ijmil.2016.1.54

The Ministry..., 2019 – The Ministry of Education of the Russian Federation. Federal'nyy proyekt "Tsifrovaya obrazovatel'naya sreda" [The National Project "Digital educational environment"]. Moscow. 2019. [in Russian]

Tinák, Gálik, 2026 – *Tinák, T., Gálik, S.* (2026). On the epistemological and ethical conditions of information in journalism. *Communication Today*. 17(1): 26-36.

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Development of Media Literacy Education in the Context of New Challenges in the Professional Development of Student Youth

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Abstract

The rapid digitalization and mediatization of all spheres of public life impose new demands on the professional development of young people. The aim of this study is to analyze the role of media education in the professional development of students. Qualitative research methods were used in researching this article, including two focus groups (n = 9; n = 11) with students majoring in economics and management. An analysis of the participants' opinions revealed a superficial understanding of the fundamentals of media literacy and the use of a minimal set of data verification tools. The study identified dysfunctions in the development of media literacy in young people that limit their professional development: a lack of competencies in presenting their professional achievements in the media and promoting personalized content (professional image) on social media; a lack of skills in developing predictive scenarios for the impact of self-presentation on professional success (including in the long-term future) and in considering the social consequences of disseminating personal information on open platforms and social media for a specialist's professional reputation; distortions in professional knowledge and the formation of false professional values due to students' overestimation of their skills in searching for and critically evaluating information on professional topics. Students' subjective perception of personal invulnerability to digital manipulation reinforces false stereotypes based on digital algorithms for creating artificial virtual reality. Focus group discussions revealed a strong correlation between students' trust in the author of a source of information and their assessment of the credibility of its content. Students' low critical assessment of the author's competence, as well as the lack of verification of the source's accuracy, indicate a lack of media literacy among students, in contrast to their high self-assessment of their ability to recognize erroneous, false, and unreliable information on professional topics. The article identifies key areas for the development of media education in the modern context: developing skills for critically assessing competent behavior in the media space as a basis for forming one's “professional face” in social media; studying stereotypes and mechanisms of group influence on young people's perception of information on professional topics; examining the connection between the “digital footprint” of young people on social networks and the formation of their professional reputation; developing students' skills in creating media content on professional topics and promoting it in the media space in accordance with ethical requirements.

Keywords: media skills, youth professionalization, professional reputation, professional image, digital footprint, social media manipulation.

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1. Introduction

An analysis of scientific and media discourse demonstrates that, in today's world, the importance of developing media competencies as the foundation for the professional development of any specialist is paramount. This trend is reflected in the transformation of educational policy in developed countries and has enabled the use of a range of digital technologies in the professional development of young students. In particular, the demands of the digital economy and the need to ensure technological leadership make it crucial for educational systems in most countries to develop specialists' skills in digital communication and the accelerated processing of information without losing critical understanding of its reliability, completeness, and accuracy. The education system today also places special emphasis on developing students' skills in creating media texts and promoting them on social media. The integration of media education technologies into the training of future specialists will effectively adapt graduates to the changing demands of the professional environment and prepare them for lifelong learning (Zelenskaya et al., 2023; Frolova et al., 2024). Developing media literacy skills in students creates the conditions for preparing not only competitive professionals but also independent, strong individuals who possess critical thinking skills and are motivated to accumulate and share knowledge (Romanova, 2018).

The digitalization of all spheres of public life creates new resource opportunities for career development for young professionals, but also introduces risks and constraints to their professional development. New opportunities in the context of digitalization are associated with the prospects for building and developing the professional reputation of young media professionals, their integration into the professional community, and dynamic processes of information and knowledge exchange. However, existing opportunities for professional growth and career development can only be open to young professionals with a high level of media literacy and developed skills in searching, processing, and creating content. The role of these skills increases exponentially in the context of the dynamic circulation of information flows, its penetration into everyday practices, the development of digital communications, and the expanding boundaries of the media sphere's influence (Sutikna et al., 2024). The risks and limitations of young people's professional development in the context of digitalization are associated with digital inequality and insufficient competencies in media consumption and media creativity. University graduates with low levels of media literacy will likely find it extremely difficult to develop their professional competencies and resist information manipulation. Media literacy is the foundation for establishing professional connections in the digital space, building a professional reputation, and developing a personal professional brand.

2. Materials and methods

The purpose of this article is to analyze students' attitudes toward media education and determine its role in the professional development of young professionals.

Objectives:

1. To examine the relationship between media literacy and professional development prospects as assessed by students.
2. To explore the subjective perceptions of the risks of insufficient media literacy in the context of individual professional development.
3. To determine the prospects and role of media education in the professional development of young people.

Research methods include comparative analysis, generalization, observation, analogy, and systematization. General theoretical methods allowed us to structure knowledge and summarize materials related to the development of young people's media literacy, outline prospects for the development of media education in the current context, and specify the most significant components of media education that contribute to the professional development of young professionals. Qualitative research methods were used to analyze students' subjective assessments of the perceived risks of insufficient media literacy and the prospects for integrating media education into the educational process. Specifically, two focus groups were conducted (n = 9; n = 11). Students majoring in economics and management were invited to participate in the focus group. Participants included both full-time and part-time students, allowing for a diverse group composition based on age. At the beginning of the focus group, the moderator introduced key terms to the participants and explained the concepts of “media literacy” and “media education”.

3. Discussion

The scientific literature contains a significant number of studies substantiating the benefits of media education technologies for the professional development of young people. K. Aksenova, examining the specifics of training foreign language teachers, notes that professionally oriented media education has a beneficial effect on the development of the personality of future teachers, ensuring the effectiveness of their socio-professional functioning, taking into account new trends in the development of the media space (Aksenova, 2024). S. Koul and S. Jasrotia in their study drew attention to the need to expand the boundaries of academic education, incorporating modern media education tools. This modernization of curricula, according to scientists, contributes to the development of students' communication skills, focuses them on joint creativity (Koul, Jasrotia, 2023), allows for the diversification of the educational process, and provides unique opportunities for the development of professional competencies (Kanceva et al., 2024). The works of foreign authors V.V. Kumar and L.K. Jena emphasize the social component of modern media education. According to the scholars, its social mission includes, among other things, developing digital hygiene in young people, fostering self-discipline and self-control in their daily media consumption, and instilling norms digital ethics as the foundation for achieving social well-being (Kumar, Jena, 2020).

Technical innovations and the introduction of artificial intelligence are fundamentally changing the nature and principles of media consumption, raising new ethical and educational questions (Gálik et al., 2024; Nam, Bai, 2023; Schwarzenegger, 2020; Tinák, Gálik, 2026). The accessibility of information in the modern world and the expansion of communication boundaries in virtual space open up new opportunities for professional and personal development. However, according to M.D. Okulovsky, these expanded opportunities also carry new risks. In particular, there is the problem of assimilating distorted information and a one-sided point of view, which can lead to exaggerated values or falsified knowledge (Okulovsky, 2024).

Growing awareness of the negative impact of uncontrolled online communications of young people in the digital space on their professional self-presentation (professionalization in general) has led to widespread discussion of this issue in both academic and public discourse. This trend has drawn the attention of scholars, educators, and journalists to media education. Media education is viewed as a potential solution to the problem of social media's negative impact on young people's socialization. According to N. Cho, J. Cannon, R. Lopez, and W. Li, the current context requires updating the concept of media education, shifting its focus to the causal determinants of online message selection. A person's values and interests determine the course of action of algorithms that shape their informational reality in virtual space, which can reinforce false beliefs and values (Cho et al., 2022). Similar conclusions have been reached in the works of Russian scholars who discuss the automatic construction of digital reality in new media. In such a subjectively constructed reality, users feel most comfortable communicating with like-minded individuals and receiving recommended content that matches their interests and attitudes (Khankhunova, Choyropov, 2013). Thus, social media information selection algorithms can reinforce false beliefs and stereotypes, hinder the expansion of an individual's horizons, and limit professional growth.

It can be assumed that young people are at the highest risk, as they use social media much more frequently and are constantly engaged in information exchange. A study by S. Bajwa, M. Ali Khan, and S. Waheed revealed a low level of media literacy among young people, despite their high self-esteem in this area. The problem stems from the fact that young people trust information based on their subjective perceptions. For example, they may consider information to be reliable simply because it was shared by their favorite blogger or journalist. Based on research findings, scientists conclude that media education should include an analysis of information filtering principles and reflection on the meanings young people derive from media (Bajwa et al., 2022). The new digital reality requires developing skills for reflection, conscious questioning of the veracity of information, and assessing its reliability based on valid criteria rather than subjective perceptions of content appeal (Beikutova et al., 2024).The insufficient level of media literacy among young people has been documented in other studies as well. Gaps in media literacy reduce the competitiveness of young people in the labor market, which leads to the ineffective preparation of graduates for the demands of a changing landscape. The ineffective development of media education is due to strict curricula, limited capabilities of digital workers, and the resulting lack of teacher training.

Additional risks are compounded by the fact that even the presence of media literacy knowledge among young people does not guarantee their mandatory application (Vraga, Talley, 2021). Implementing media literacy skills in everyday life is not so much an individual act as a concrete one, shaped by collective norms and group identity. According to J. Swart, taking this factor into account requires expanding the boundaries of media education, shifting the focus from technological skills to the social aspect of interaction in the digital space, and developing students' communication and interactive skills (Swart, 2021).

A.V. Fedorov defines media competence as the motives, knowledge, and abilities that facilitate the selection, use, critical analysis, evaluation, creation, and transmission of media texts (Fedorov, Levitskaya, 2015). In an era of the rapid influence of media on social and professional life, the development of skills in the creation and transmission of media texts takes on new significance. Young people's need for self-presentation on social media creates "digital traces" that become embedded in an individual's personal profile throughout their life. Negative consequences for professional reputation may be associated with a revision of the individual's views, attitudes, and values, as well as possible ambiguous and/or negative impressions of their early ideas and experiments during their professional development.

P.B. Brandtzaeg and M.-Á. Chaparro-Domínguez, after conducting a series of in-depth interviews, found that some informants felt trapped in their own process of identity formation on social media. Participants described the challenges of transitioning to a new professional identity and difficulties with impression management in the digital space. Forming a professional image in the media was accompanied by practices of self-censorship of one's own content and the search for tools for positive self-presentation (Brandtzaeg, Chaparro-Domínguez, 2020). An analysis of the negative consequences of low levels of media literacy on the career development of young professionals is also presented in the work of X. Zhu, N. Hu, and Z. Xiong. This paper focuses on the active use of social media and the presentation of everyday professional practices among nursing students. Often, such presentations contained indirect signs of violations of professional ethics and controversial opinions, which can negatively impact the career development of young professionals. In this context, it seems necessary not only to instill professional ethical standards in students but also to develop self-presentation skills in the media and understand the risks and social consequences of posting public information on social media (Zhu et al., 2020).

Thus, the analysis of academic discourse demonstrates the serious attention paid by scholars to the issues of media literacy among students and the impact of these restrictions on the professional development of young professionals. However, issues related to students' subjective assessments, their understanding of media literacy, and its impact on professional career development have not been fully explored. Also of academic interest is an analysis of the demand for media education tools among students.

4. Results

The study revealed students' positive attitudes toward media education. Focus group participants unequivocally stated in their assessments that a high level of media literacy is essential for successful professional development in today's environment. Specifically, the following characteristic judgments were made:

Anna, 20 years: "Even for personal purposes, you need to be media literate, research information about health, doctors, verify and compare information, or, for example, shop... not to mention professional development... You need to stay abreast of changes; even professional vocabulary evolves, and this needs to be monitored, for example, in the public pages of good professionals... I subscribe to them and regularly check for interesting content...".

Olga, 18 years: "I periodically improve my skills. And in this matter, of course, you need to know how to work with information. You need to find the segment that's right for you, compare, read reviews... I think it's all about media literacy...".

Dana, 18: "If you don't know how to work with information and find reliable sources, then it'll be impossible to study... Let alone work. Yes, there's ChatGPT now, where you can get answers to your questions. But it also lies, sometimes... especially when it comes to selecting sources. And if you don't verify information, it can lead to bad consequences...".

The range of participants' statements reveals that students have a superficial understanding of media literacy, focusing primarily on information search skills. Most students use a minimal set of data verification tools, which reduces the effectiveness of their critical analysis. During a

discussion of information verification, students expressed their opinion on the importance of trusting the source of information. The author's reputation is considered a key factor in the reliability of data. Young people are characterized by polarized assessments of the risk of absorbing false and distorted information on professional topics. On the one hand, focus group participants acknowledge the existence of this problem, which is determined by a low level of media literacy. During the discussion, students cited existing practices and cases of acquaintances or friends who trust unverified information and even post it on their social media accounts. On the other hand, almost all focus group participants believe that this problem does not affect them personally due to their existing knowledge and skills.

The focus group also discussed the impact of algorithms on social media information collection. As in the previous case, the study results illustrate the "third-person effect". Despite acknowledging the destructive influence of digital algorithms on the attitudes and values of others, students believe themselves invulnerable to such manipulation. It can be assumed that today's youth overestimate their own information verification skills. This perceived cognitive resistance may trigger a decrease in critical thinking in the perception of digital content, reinforcing a false system of professional knowledge and values. Also, mixed opinions were expressed regarding the "digital footprint" and its impact on a specialist's professional reputation. Focus group participants were divided in their assessments. On the one hand, skepticism was expressed: "*It's unlikely that a serious employer would dig through my hundred-year-old publications...*" and "*Who would care... ".* Other students expressed cautious concerns about the need to build their professional reputation on social media.

Nikita, 18 years: "I hadn't really thought about it, but now I realize that yes, I should probably be more careful about what I post on my page... specifically from the perspective of potential employers or, say, a client... Perhaps I should start posting content that will demonstrate my level right now... But I haven't thought about that yet... ".

Students clearly expressed the need to integrate elements of media education into the educational process. Young people are particularly interested in skills for creating and publishing professional content and promoting it in the media. According to students, the role of media education in shaping the professional brand of young professionals is highly significant. These findings are supported by the findings of Russian scholars, who emphasize the need for a harmonious combination of pedagogical practices aimed at developing interpretive (evaluative) and practical-operational (creating and disseminating media texts) skills in working with media (Fedorov et al., 2016).

Students believe that media education technologies will enhance their interest in learning and make the learning process more diverse. The following opinions were expressed: "*Working with content is practical, it's more interesting than dry theory... ", "I think learning how to create a good podcast will be useful for future work", "I would be interested in understanding how to create good content, analyze interesting cases... ", "Anything creative is always interesting*". Students believe that media education helps overcome the routine nature of learning, strengthen its practice-oriented component, and develop essential professional competencies. Similar findings are present in modern scientific research. I. Ivanova concludes that developing media literacy in young people is a powerful pedagogical approach that ensures the development of students' cognitive and communicative skills. At the same time, to increase interest in learning, attention should be paid to the careful design of media literacy assignments and the authenticity of materials (Ivanova, 2025). Research results indicate that modern youth, characterized by integration into the media environment, place special demands on the teacher's ability to present material in an interesting way, including using media technologies (Frolova et al., 2024).

5. Conclusion

New challenges in professionalization require young professionals to critically analyze information, create and publish content, resist manipulative influences, develop a professional reputation in the media, and maintain communication within professional communities. The study found that students highly value the role of media literacy in successful professional development and career advancement.

The results of the study showed that in the context of increasing information flows and maximum involvement in social networks, the low level of media literacy of students leads to the emergence of negative scenarios for their professional development. First, an insufficient level of

critical thinking during information verification can contribute to the assimilation of false knowledge, which young professionals will then use in their professional activities. Qualitative research methods demonstrate that, when assessing the credibility of information, students primarily rely on their personal trust in its author. Second, overestimating their own media literacy skills and the "third-person effect" in their perception of digital algorithms can trigger the development of a distorted system of meanings and ethical principles of the profession. Young people's insufficient critical thinking, perceived cognitive resilience, and subjective perceptions of their own invulnerability to digital manipulation are perpetuating false stereotypes based on digital algorithms for creating artificial virtual reality. Thirdly, students' insufficient media literacy creates risks of damaging their professional reputations. In particular, the study revealed a low level of student reflection on media publishing and dissemination practices, a lack of understanding of the specifics and consequences of their "digital footprint" on their professional reputation, and a lack of skills in predicting the risks of publishing controversial content on social media.

To summarize the study's findings, highlight the key goals of media education for the professional development of today's youth:

– Developing skills for critical information perception, developing self-reflection in adequately assessing one's own media literacy;

– Considering the mechanisms of group influence on the assessment and perception of information, developing self-reflection skills in matters of the social impact;

– Creating a competency base for young people's professional activity in the digital environment, developing their readiness for intelligent self-expression in the media, and presenting their professional position;

– Reflecting on the risks of students' lack of targeted management of their professional image on social media, forecasting and analyzing the social consequences of posting information content in the media and its impact ("digital footprint") on professional reputation;

– Developing and refining students' skills in creating and publishing information, taking into account professional ethics requirements and career prospects.

In the future, it is crucial to study the factors that shape distorted self-assessments of young people's media literacy and the mechanisms for developing the socio-professional agency of young professionals.

References

Aksenova, 2024 – *Aksenova, K.A.* (2024). Media literacy as a mandatory component of the future English language teacher's functional literacy. *Cherepovets State University Bulletin*. 3(120): 178-183. DOI: 10.23859/1994-0637-2024-3-120-15

Bajwa et al., 2022 – *Bajwa, S., Ali Khan, M., Waheed, S.* (2022). Role of social media in perspective of media information literacy during pandemic Covid-19. *International Journal of Media and Information Literacy*. 7(2): 305-314. DOI: 10.13187/ijmil.2022.2.305

Beikutova et al., 2024 – *Beikutova, A., Kulzhanbekova, G., Kudyarova, Sh., Khamidova, A.* (2024). The synergy of media and language literacy to foster kazakh students' critical thinking and communication. *International Journal of Media and Information Literacy*. 9(1): 17-29. DOI: 10.13187/ijmil.2024.1.17

Brandtzaeg, Chaparro-Domínguez, 2020 – *Brandtzaeg, P.B., Chaparro-Domínguez, M.-Á.* (2020). From youthful experimentation to professional identity: understanding identity transitions in social media. *Young*. 28(2): 157-174. DOI: 10.1177/1103308819834386

Cho et al., 2022 – *Cho, H., Cannon, J., Lopez, R., Li, W.* (2022). Social media literacy: A conceptual framework. *New Media & Society*. 26(2): 941-960. DOI: 10.1177/14614448211068530

Fedorov et al., 2016 – *Fedorov, A., Levitskaya, A., Camarero, E.* (2016). Curricula for media literacy education according to international experts. *European Journal of Contemporary Education*. 17(3): 324-334.

Fedorov, Levitskaya, 2015 – *Fedorov, A., Levitskaya, A.* (2015). The framework of media education and media criticism in the contemporary world: the opinion of international experts. *Comunicar*. 23(45): 107-115.

Frolova et al., 2024 – *Frolova, E.V., Rogach, O.V., Faizullin, R.V.* Transformation of student roles and behavior patterns in the context of digitalization. *International Journal of Media and Information Literacy*. 9(2): 329-338. DOI: 10.13187/ijmil.2024.2.329

Gálik et al., 2024 – *Gálik, S. et al.* (2024). How competencies of media users contribute to deliberative communication. In: Peruško, Z., Lauk, E., Halliki-Loit, H. (eds.). European media systems for deliberative communication: risks and opportunities. New York: Routledge: 98-116. DOI: https://doi.org/10.4324/9781003476597

Ivanova, 2025 – *Ivanova I.* (2025). Critical thinking as a bridge between academic literacy and media literacy in a higher education context. *Medialingvistika*. 12(s): 718-721.

Kanceva et al., 2024 – *Kanceva, A.A, Ovechkina, A.Y, Nakisbaev, D.V* (2024). Explorative analysis of the impact of radio media on the developmrnt of critical media literacy. *RUDN Journal of Public Administration*. 11(3):327-332. DOI: 10.22363/2312-8313-2024-11-3-327-332

Khankhunova, Choyropov, 2013 – *Khankhunova, M.Yu., Choyropov, Ts.Ts.* (2013). Social'nye media kak instrument formirovaniya cennostnyh orientacij [Social media as a tool for forming value orientations]. *Vestnik Vostochno-Sibirskogo gosudarstvennogo universiteta tekhnologij i upravleniya*. 3(42): 117-123 [in Russian]

Koul, Jasrotia, 2023 – *Koul, S., Jasrotia, S.S.* (2023). Social Media: An Elixir to Boost Student Engagement in Higher Education Learning. *Business and Professional Communication Quarterly*. 88(3): 399-424. DOI: https://doi.org/10.1177/23294906231202437

Kumar, Jena, 2020 – *Kumar, V.V., Jena, L.K.* (2020). 'I am perfectly imperfect because I am a media professional': Asserting the association between media consumption attitude, emotional ownership and personal well-being. *Asia Pacific Media Educator*. 30(2): 160-179. DOI: 10.1177/1326365X20970424

Nam, Bai, 2023 – *Nam, B.H., Bai, Q.* (2023). ChatGPT and its ethical implications for STEM research and higher education: a media discourse analysis. *International Journal of STEM Education*. 10: 66. DOI: 10.1186/s40594-023-00452-5

Okulovskij, 2024 – *Okulovskij, M.D.* (2024). Molodezh' i media: vliyanie informacionnyh tekhnologij na politicheskoe mirovozzrenie [Youth and the Media: The Impact of Information Technology on Political Worldviews]. *Sociodinamika*. 4:10-21. DOI: 10.25136/2409-7144.2024.4.70480 [in Russian]

Romanova, 2018 – *Romanova, E.V.* (2018). Mediaobrazovanie kak instrument prodvizheniya kriticheskogo myshleniya u studentov [Media education as a tool for promoting critical thinking in students]. *Vestnik Taganrogskogo instituta*. 1: 71-75. [in Russian]

Schwarzenegger, 2020 – *Schwarzenegger, C.* (2020). Personal epistemologies of the media: Selective criticality, pragmatic trust, and competence–confidence in navigating media repertoires in the digital age. *New Media & Society*. 22(2): 361-377. DOI: 10.1177/1461444819856919

Sutikna et al., 2024 – *Sutikna, N., Pangestuti, S., Nuryanti, Parasdya S.D.* (2024). Adolescent media literacy in social media utilization. *International Journal of Media and Information Literacy*. 9(1): 195-202. DOI: 10.13187/ijmil.2024.1.195

Swart, 2021 – *Swart, J.* (2021). Tactics of news literacy: How young people access, evaluate, and engage with news on social media. *New Media & Society*. 25(3): 505-521. DOI: 10.1177/14614448211011447

Tinák, Gálik, 2026 – *Tinák, T., Gálik, S.* (2026). On the epistemological and ethical conditions of information in journalism. *Communication Today*. 2026. 17(1): 26-36.

Vraga, Tully, 2021 – *Vraga, E, Tully, M.* (2021). News literacy social media behaviors and skepticism toward information on social media. *Information Communication and Society*. 24(2): 150-166.

Zelenskaya et al., 2023 – *Zelenskaya, O.YU., Makarenko, YU.V., Vencel', V.A.* (2023). Mediaobrazovanie kak resurs professional'noj orientacii sovremennoj molodezhi [Media education as a resource for professional orientation of modern youth]. *Problemy sovremennogo pedagogicheskogo obrazovaniya*. 78(2): 107-110 [in Russian]

Zhu et al., 2020 – *Zhu, X, Hu, H, Xiong, Z. et al.* (2020). Utilization and professionalism toward social media among undergraduate nursing students. *Nursing Ethics*. 28(2): 297-310. DOI: 10.1177/0969733020952105

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Unity of Nations in Soviet War Feature Films

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Abstract

In Russia, 2026 has been declared the Year of Unity of Nations. Unity of nations is understood as a fundamental characteristic of a modern state, encompassing intercultural dialogue and harmony among people of different nationalities united by shared goals and values. Preparing young people to harmoniously combine national and civic unity is becoming one of the most important tasks of the education system. This article examines Soviet feature films about the Great Patriotic War, which showcase examples of the unity of nations for achieving a common victory. Among the typical characteristics of unity of nations are the combination of ideological and artistic components, the dynamic emphasis with an invariable reliance on high moral ideals, and the depiction of the Soviet Union as a "supranational" embodiment of a great state, a family of nations united by the goal of defending their common Fatherland. In the context of developing media literacy in future teachers, one form of professional training is proposed in the process of studying the unity of nations in Soviet feature cinema: an educational project with elements of discussion, including a retrospective and pedagogical analysis of the characteristics of interethnic unity in Soviet feature films about the Great Patriotic War.

Keywords: media education technology, Soviet feature films, unity of nations, Great Patriotic War, future teachers.

1. Introduction

World War II is moving from the realm of living memory into that of cultural commemoration. Russians continue to remember the Great Patriotic War of 1941–1945, a heroic experience of not only defending the nation but also saving the world from Nazism (Edele, 2020). For Russia and the peoples of other former Soviet republics, this memory plays a huge role as a symbol of their unity in achieving the noble goal of protecting humanity. In Russia, 2026 has been declared the Year of National Unity. The goal is to strengthen national unity, peace, and harmony among representatives of the country's diverse ethnic groups. Numerous events will be held, including folk culture festivals, exhibitions, concerts, theater projects, scientific and public forums, projects aimed at studying the languages of the nations of Russia, supporting multilingual education, creating modern educational materials on the history and culture of the country's peoples, and national theater tours. New holidays have also been established: Day of Indigenous Minorities of Russia (April 30) and Day of Languages of the Nations of Russia (September 8). All of this should contribute to the development of a culture of interethnic communication, fostering an interest in the history and culture of their country among young people, and strengthening an all-Russian civic identity. This is a significant factor influencing the education system.

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Media education is a relevant tool in education, including professional education. Media products (including feature films) contain rich and diverse historical, cultural, and ethical material. Developing media literacy is now recognized as one of the significant goals of professional education, including pedagogical education. Media literacy has a complex and comprehensive nature, it is regarded as being a conglomeration of a great many skills including the ability to read, evaluate, analyze, imagine possibilities, deconstruct messages, recognize patterns, challenge meanings, judge credibility, decipher sender intent, counter-argue, dig for truth, avoid influence, and produce messages, to name but a few (Potter, 2022). In relation to teacher education, media literacy presupposes that future teachers master the tools of pedagogical media analysis, primarily identifying and utilizing its educational potential. This means developing a media culture – «teachers need to develop a media culture, or better, a new teaching culture hosting media in a natural way» (Rivoltella, 2018). Media literacy skills are «constants» used in deconstructing and constructing communication through which to contextualize, acquire and apply content knowledge (Jolls, 2015). Media literacy education is interdisciplinary. The ultimate goal of teacher preparation should be to cultivate educational leaders that equip their students with the ability to critically engage beyond the surface of technological acts toward more creative and responsible roles as media-literate citizens (Domine, 2011).

Media contents can be in very different formats and can range from simple text to more complex forms of virtual reality. However, without a doubt, one of the formats that has experienced the most development and that will continue to develop in the coming years is the audiovisual format (Camarero et al., 2019). The advantage of cinema as an audiovisual genre lies in the strong sensory and emotional connection it creates between the film and the viewer. The viewer identifies with the values and situations depicted in the film. The sense of empathy that arises in the viewer allows them to translate external impressions into their internal worldview.

Providing future teachers with the tools to analyze feature films about the Great Patriotic War and apply them in their educational work with schoolchildren is becoming a key goal of professional education. In Russia, teachers are always viewed as custodians and transmitters of cultural and historical heritage, as active agents in building moral continuity between generations, unity in shared history, and shared efforts and experiences.

The purpose of my research is to identify the main characteristics of the image of the unity of nations in Soviet feature films about the Great Patriotic War, and to determine the possibilities of using these films in the process of developing media literacy in future teachers.

2. Materials and methods

A theoretical analysis of scholarly works on cinema allowed us to identify common approaches to expressing the unity of nations in Soviet feature films about the Great Patriotic War. To identify the key characteristics of the image of national unity in Soviet feature films, we used content analysis and retrospective analysis within the framework of media pedagogy principles. The website *Kino-teatr.ru* (Kino-teatr.ru, 2026) was used to study the history of film production. To preliminarily identify students' perceptions of the research problem, a frontal survey was conducted among 54 students studying to become teachers at a pedagogical college.

3. Results

One of the key legislative documents defining national policy in modern Russia is the *Strategy for State National Policy of the Russian Federation through 2036* (Strategiya..., 2026). Among its key objectives is strengthening the historically established state unity and integrity of the Russian Federation, preserving and protecting the ethnocultural identity of its peoples, ensuring the constitutional rights and freedoms of citizens, and harmonizing interethnic relations. Civil unity is defined as the foundation of the Russian nation, the recognition by citizens of the Russian Federation of the sovereignty of the state, its state and territorial integrity, the unity of the fundamental rights, freedoms and duties of citizens, the ethnocultural and linguistic diversity of the Russian Federation, the significance of the historical and cultural heritage of its peoples, their equal rights to social and cultural development, access to cultural values, the social responsibility of citizens and the solidarity of generations in achieving the goals and solving the problems of developing society and protecting the Fatherland.

One of the significant elements of contemporary national policy is the work of the *Assembly of the Nations of Russia*, which implements numerous national and regional projects. For example,

the *Know Ours!* project includes festivals, photo contests, forums, and various ethnocultural events. More than 190 nations living in Russia create a unique multinational heritage, which young people, first and foremost, are immersed in studying and preserving (Assambleya..., 2026).

In 2026, the online project *In united formation they forged victory* (V yedinom..., 2026) was launched. This historical and educational portal tells the story of the heroic deeds of the indigenous peoples of the Soviet Union - the Nanai, Izhorians, Evenks, Mordvins, Mansi, and many others – who made a worthy contribution to victory in the Great Patriotic War. The all-Russian educational project *Knowledge. Cinema* (Znaniye..., 2026) helps educators organize film screenings and film lectures, as well as various interactive formats that promote understanding of ethno-confessional diversity as a universal value.

During my research, I analyzed several Soviet feature films that reflected the theme of the unity of nations during the Great Patriotic War.

1. *Bakhtiyar* (1942, directed by Aga-Rza Kuliyev). A short film from the Baku Film Studio, based on a true story. A song and a photograph of his girlfriend help soldier-carrier Bakhtiyar Kerimov maintain high morale. With one rifle and two grenades, he engages 11 enemy soldiers in single combat. His fellow Soviet soldiers are accustomed to Bakhtiyar's precision in delivering food supplies. They realize that Bakhtiyar is in trouble and rush to his aid. Wounded several times, Bakhtiyar destroys the enemy unit and prevents them from touching the bread he was carrying. In his final moments, Bakhtiyar sees a letter from his girlfriend and hears her voice. The film suggests that the death of this glorious son of Azerbaijan was not in vain – it became another step towards a future great victory.

2. *Son of Tajikistan* (1942, directed by Vasily Pronin). The beginning of the film is filled with national color: Tajik collective farmers send off their fellow countryman, Hafiz, to war. This is accompanied by folk music, military rites, and a farewell dinner. Hafiz's father supports his son: “fatigue remains behind a warrior”. Hafiz receives a staff from his father as a symbol of parental support and protection. The Russian soldier Ivan is also sent off to war. This unity of fate is demonstrated by the young people of different nations, united by the fulfillment of their military duty. «One source can be covered with a shovel of earth, but when many merge into a river, even an elephant cannot cross it». Ivan and Hafiz become comrades in arms. They defend Tuapse and clash with enemy troops. Hafiz must deliver a message, and Ivan remains to cover him. His father's staff helps Hafiz in the fight against the enemy. Ivan dies in his friend's arms, and Hafiz vows to avenge him. «For my Black Sea!» Hafiz's exclamation demonstrates that the entire Soviet Union is his homeland.

3. *You're Not an Orphan* (1962, directed by Shukhrat Abbasov). In 1941–1942, more than 1.5 million people, including more than 400,000 children, were evacuated from the western regions of the USSR to Uzbekistan. Saving the lives of these children and caring for them is a great feat of the Uzbek people. Blacksmith Shaakhmed Shamakhmudov and his wife Bakhri Akramova adopted and raised fourteen orphaned children of different nationalities during the Great Patriotic War. The film is based on this true story. The film's main characters, Fatima and Mahkam, possess the wisdom and patience so necessary for raising children of different ages. The family lives in difficult financial circumstances, but even ordinary white wheat bread brings joy to the children. The children learn to be one family – a process that is not easy, and conflicts arise. Some children doubt the sincerity of their adoptive parents' intentions. But they are now a united family and resolve their relationship issues on their own. The children independently return their runaway brother and adopt the surname Makhkamov. Makhkam and Fatima's eldest biological son, returning from the war, brings with him a German orphan boy. He is also accepted into the family. Kindness and compassion are boundless – this is the film's central message.

4. *Through the Cemetery* (1964, directed by Viktor Turov). The partisan movement, which numbered approximately a million people, had a significant impact on the course and outcome of the war. The film shows how Belarusian partisans made a significant contribution to victory in the Battle of Stalingrad during the critical period of autumn 1942. But this film is far from a clichéd account of heroic deeds. The black-and-white film creates a bleak picture – a cloudy sky, a wet autumn forest, darkness, the suffering of ordinary people – and the path of the young partisan Mikhas through the cemetery is a symbol of existence during the war. The music complements this impression. The film is distinguished by its psychological insight. On the one hand, war drives people to the brink of mental exhaustion – «no one feels sorry for anyone, not even for oneself», when the living envy the dead. On the other hand, 16-year-old Mikhas, who lost his mother, hasn't

had time to «harden his heart». Despite his youthful maximalism, he also possesses a generous spirit. He admits that he even feels sorry for his suffering enemies. «We don't teach our children to despise other peoples», says mechanic Bugreev. Walking through the cemetery and preserving one's humanity is a true feat of a «little man» in war. Mikhas's companion and, to some extent, antithesis is the experienced Sazon Ivanovich, who, in his words, relies on «flattery and cunning» to help him deal with the invaders. «There are no people in the world more terrible than lackeys», he says of those who joined the occupiers' police force. The film's heroes confront the deathly silence of the cemetery, yet they still have purpose and hope. They display the best traits of the Belarusian people: resilience and high moral standards, love of freedom, devotion to duty, and the capacity for self-sacrifice. Belarusians, on the brink of life and death, persevered and triumphed alongside their country.Mechanic Bugreev's legacy to his wife: «Know and remember that we worked for the good of the Motherland». In 1994, UNESCO included the film in its list of the 100 most significant war films.

5. *Memory of the Heart* (1958, directed by Tatyana Lioznova). In 1944, British pilot Ralph Chadwick found himself on Soviet territory after his plane was shot down. Russian teacher Ekaterina Ivanovna Fedotova, who had lost her husband and son in the war, took in the seriously wounded pilot and cared for him, hiding him in the school basement. She was assisted by a brave schoolboy, Fedya Vasyukov. The pilot's knowledge of Russian helps him communicate. From the very beginning of the film, it's clear that Chadwick doesn't think in the cliches of propaganda. He strives to understand the motives of his Soviet allies. He reasons objectively: «Only people who know what they're fighting for can fight the way the Russians do». He says it can be difficult to understand Russians, but one must try. The pilot is filled with genuine trust: «What motivates your kindness in this inhuman life, what warms your heart, I call God». The partisans send the pilot to Moscow, but the seriously wounded teacher cannot fly. The pilot doesn't want to part with her. Many years later, on his birthday, reminiscing about the past, Chadwick says: «You can love Russians or not, but you can't take away from them what makes a person human. There I knew a man who managed to contain in his heart an entire world, full of reason and goodness. Whether it was the Russian element or what is called the Soviet element, it was there. I saw a boy there who had lost everything except his faith in life. He inherited ruined homes and scorched lands. He could have become a beast, but he was taught to be human. And he deserves respect». Ralph and his friends travel to Moscow and then to the village where the Russian teacher saved his life. He visits the school and learns that Ekaterina Ivanovna didn't survive, and Fedya grew up and became a teacher. Chadwick tells the schoolchildren: «A person cannot and should not forget the good done to them. You don't know war – that's good. But if you forget the people who gave everything for you, that will be bad. There is memory of the head, and there is memory of the heart. This memory is stronger».

It is possible to identify some general typical characteristics of the depiction of the theme of the unity of nations during the war in Soviet feature films:

1. Soviet feature films about the Great Patriotic War had both an ideological and artistic component. In the early years of the war, the emphasis was on comprehensive mobilization (psychological, ideological, labor, and other aspects) and heroism; in the postwar years, on the construction of memory. Over time, Soviet directors began to depict the war in a more multifaceted manner, within the context of personal human stories and experiences.

2. The Soviet Union is depicted as a family of nations united by the noble goal of defending their common Fatherland. The Russian people fulfill a key unifying function, and the USSR becomes the «supranational» embodiment of a great state. The friendship between Russian soldiers and soldiers of other nationalities is depicted in warm, emotional tones. Soviet directors and actors, many of whom had served at the front, understood well the feelings experienced by those on the brink of life and death, deeply bound to their comrades by military brotherhood. In this situation, national boundaries between people do not exist.

3. Kindness, duty, the ability to make friends and sacrifice oneself are the fundamental qualities of soldiers and civilians of various nationalities. These qualities are strengthened in critical combat situations. Driven by the concept of conscience and justice, people are able to overcome fear and fight together to the end. The unity of nations is shown as a natural phenomenon, unquestioned, and existing as the moral foundation of life in the USSR.

4. The civilian population of all republics in the USSR made every effort to help the army, save orphans, and work in factories. The compassion and moral fortitude of people of various nationalities were the key to the survival of the entire country.

5. Children of various nationalities helped adults achieve a common victory. Their patience and fearlessness were the result of their love for their parents and country, their desire to unite with them in shared values and actions. Children matured quickly during the war; they did not discriminate among their peers based on nationality; they all experienced common hardships and worked toward a common goal.

6. Soviet feature films combined idealization and realism. They were not divorced from real events and human stories, but at the same time, they emphasized the best human qualities and feelings. The unity of nations was understood as an ideal to strive for, yet at the same time, it was an entirely achievable characteristic, inevitably present in the relationships of soldiers during war. Consequently, the unity of nations in Soviet war cinema can be considered an «embodied ideal».

7. Despite the somewhat schematic portrayal of allies from other countries, even during the Cold War, Soviet directors sought to «revive» Western society's memory of shared goals and values, of the military camaraderie that, until recently, had allowed for friendship and shared plans for peacetime. «Russians want others to try to understand them, and they themselves are open to friendship and cooperation» – this is the core idea, which remains relevant today.

8. Soviet films about the Great Patriotic War did not depict conflicts based on ethnicity, although they did show some situations in which Soviet people of different nationalities needed to learn the customs and traditions of another people. Mutual knowledge, as a rule, leads to respect and rapprochement. To understand someone, you need to know their culture, values, and rules of life – this idea is true in all eras. Showing any ethnic contradictions during the war would have undermined the idea of unity. But such contradictions were indeed too minor and rare an occurrence against the backdrop of the overall great drama and hardly deserved attention. Soviet war films were morally bright, clearly depicting the confrontation between good and evil. The shift in thematic emphasis from the promotion of military heroism to an emotional and spiritual reflection on human destiny was an inevitable consequence of understanding the role of war in the life of the country and individual people. It was precisely this commonality of destinies that became the main unifying factor for people of different nationalities. Common sacrifices, suffering, and victories brought people together most strongly.

I conducted a survey of 54 senior students majoring in Elementary School Teaching. It turned out that they hadn't seen any of the films I described above. Overall, students' knowledge of Soviet feature films is declining year after year. This is due to the remoteness of events and the lack of adequate media education in their families. At the same time, over 80 % of respondents expressed a desire to explore the issue of national unity in Soviet feature films about the Great Patriotic War. Among the possible forms of research, most students mentioned a film club, a course project, and a mini discussion during a practical lesson. Therefore, I propose an educational informational research project, *Living Memory of Unity*, for use in teaching pedagogy. The project will be implemented over two weeks. The project implementation process is as follows:

1. Students are divided into small groups of 4–5 people. 2. They create a set of Soviet feature films about the Great Patriotic War that depict the theme of national unity. 3. After a joint discussion, each small group selects 2–3 films, conducts a pedagogical analysis of them, and presents a report in the classroom. It is essential that the selected films be studied by more than one small group to facilitate discussion. A pedagogical analysis of a film necessarily includes an assessment of its influence on the worldview of young people of a certain age, identifying areas of moral values (primarily civic and patriotic ones), and possible forms and methods of using film in the educational process. Questions for the final discussion:

– Why did the theme of national unity become a key theme in Soviet feature films about the Great Patriotic War?

– What were the most significant factors that determined the unity of nations during the war?

– How was national unity manifested, and how was it depicted in Soviet films about the war?

– Do you agree that one of the most important and powerful qualities of all nations, contributing to their shared victory, was the triad of «humanity – duty – capacity for friendship and self-sacrifice»? Illustrate, using specific examples from the films, how this triad found its expression.

– Are Soviet films depicting the unity of nations during the Great Patriotic War relevant today? How can they be applied in the modern education system?

At the end of the discussion, students could be asked to develop a brief concept for an educational event for schoolchildren using the films they studied. This project could become one element of a comprehensive process for developing a civic-patriotic culture in future teachers and allows them to outline prospects for implementing the theme of national unity within the framework of media education.

4. Discussion

Contemporary researchers emphasize the complexity and ambiguity of the solution to the national question in the Soviet Union. They note the USSR leadership's desire to find a balance between the ethnic and the supra-ethnic, the Soviet. The Soviet leadership promoted «universal, non-ethnic themes were espoused for the purpose of all-Union integration and cohesion» (Brunstedt, 2011). The socialist idea became the principle and instrument for unifying society. National policy in the USSR «defined nations simultaneously in territorial and political terms (as national republics) and in extra-territorial, cultural terms (as nationalities). Nations were to be seen not heard; culture, politics and administration were to be «national in form but socialist in content» (Shinar, 2013). But in the Soviet Union, there were no legislative restrictions on the right of individual citizens to national self-determination or the persecution of national culture. Books were published in the languages of the nations of the USSR, and various genres of national art were supported. Athletes of various nationalities formed a powerful foundation for Soviet sporting victories. One example is the opening ceremony of the 1980 Olympics in Moscow, where the «Friendship of Nations» suite was performed, featuring dances from all the republics of the USSR (culminating in a Russian folk dance) and concluding with a shared dance demonstrating unity. I remember my childhood in the USSR – people of different nationalities were truly kind to one another.In this article, I do not intend to provide an in-depth analysis of nationalities policy in the USSR or the problems of interethnic relations. I merely note that the sharp rise of nationalism (driven by both strong external incentives and internal socioeconomic factors) in the second half of the 1980s largely contributed to the collapse of the Soviet Union. This historical lesson undoubtedly compels us to pay even more serious attention to the problem of building interethnic relations in modern Russia. Young people must clearly understand that nationalism is a destructive and absurd phenomenon, and that relations between peoples should be built on a foundation of trust, mutual understanding, intercultural dialogue, respect, and support. The education system creates conditions for understanding a constructive national idea.

For the Soviet state, cinema was an important means of social communication, a tool for managing perceptions, conveying visual images and meanings, and motivating normative behavior patterns (Klinova, Trofimov, 2021). Soviet war cinema evolved from a purely heroic narrative toward «the tragic component of war – the trauma «articulated» through cinema» (Igaeva, Nikolai, 2022). While at the outset of the war, cinema's agitational and propaganda function proved most in demand (Anan'yev, 2020), later the emphasis began to shift toward the personal experiences of film characters and the dramatic tension between life and death. From the very beginning, however, Soviet cinema clearly adhered to the idea of joining forces with fellow citizens for a common victory. At the same time, the course toward a return to national traditions and values, outlined by Stalin in the pre-war years, was vividly reflected in feature cinema during the Great Patriotic War. The main value for which the heroes gave their lives was no longer socialist ideas, but the Motherland, the Fatherland (Orlova, 2015).

The Motherland is, first and foremost, the people who live nearby. These are your relatives, your neighbors, your childhood playmates. These are the people with whom you spent your childhood and youth. These are the citizens of your country. If they suffer, it is your sorrow. And there is one victory for all, in the war that decides whether your country exists or not. This struggle revealed the best national qualities – courage, loyalty, kindness, justice, mercy. These qualities are understood as a social and moral norm for every nation. These very qualities form the foundation of the country as a single family. Soviet cinema understood this and sought to convey to audiences that the unity of different peoples is natural and, indeed, inevitable; otherwise, everyone will lose and perish. The Motherland is protected just like a mother – this idea is eternal for both the USSR and its heirs.

5. Conclusion

Some scientists believe that the cult of the Great Patriotic War undoubtedly has a shelf life that might soon reach its expiration date, as the central carriers of the war myth are dying and every passing year further eroding the memory of the war (Mann, 2020). No, this is not a cult. This is a living, real memory of dramatic times, connecting different nations and generations. This is a memory of shared efforts, sacrifices, and experiences. This is a memory of saving the world from destruction and slavery. Russian educators are ready to preserve and transmit this memory, using the educational potential of Soviet feature films. Russia's military history is rich, spanning many centuries, and is a source of legitimate national pride. The unity of the army and the people is the key to a stable future for the state.

The enormous losses and deprivations of the nations of the USSR in the Great Patriotic War were not in vain. The world and their own country were saved from Nazism. Respect for the heroism of the generation of the 1940s, solidarity, and memory of their shared pain form the «Immortal Regiment», in which all the peoples of modern Russia and many former Soviet republics march together.

Any feature film is a document of its era, showing the life of the people in the ideological and social state in which it was carried out at that time. Each film offers an irreplaceable window into culture and history, valuable not only for students and researchers, but also for descendants of the communities whose lives are documented (Apley, 2017). Soviet films offer us examples of true friendship and the unity of different nations for the sake of victory. Unity and solidarity are among the key ethical principles of social life. I believe that the shared memory of World War II is a powerful force in uniting people for the sake of building peace.

The process of developing media literacy in future teachers is becoming more systematic and ongoing thanks to the inclusion of media product analysis in the educational process within the framework of core pedagogical disciplines in various formats. The more people practice media literacy skills, the more automatic their skills can become (Austin, Domgaard, 2024). By analyzing the plot, motives, and outcomes of characters' actions in feature films in the context of social and pedagogical situations, students can develop empathy and emotional intelligence as essential professional competencies.

References

Anan'yev, 2020 – *Anan'yev, D.A.* (2020). Velikaya Otechestvennaya voyna v osveshchenii sovetskogo i rossiyskogo kinematografa: osnovnye tendentsii i problemy [The Great Patriotic War in Soviet and Russian cinema: key trends and problems]. *Mezhdunarodnyy zhurnal issledovaniy kul'tury*. 4(41): 26-39. DOI: 10.52173/2079-1100_2020_4_26 [in Russian]

Apley, 2017 – *Apley, A.* (2017). On the Matter of Film. *Anthropology Now*. 9(2): 87-101. DOI: 10.1080/19428200.2017.1337354

Assambleya..., 2026 – Assambleya narodov Rossii [Assembly of the Nations of Russia]. 2026. [Electronic resource]. URL: https://ogoanr.ru [in Russian]

Austin, Domgaard, 2024 – *Austin, E.W., Domgaard, S.* (2024). The media literacy theory of change and the message interpretation process model. *Communication Theory*. 34(4): 167-177. DOI: 10.1093/ct/qtae018

Brunstedt, 2011 – *Brunstedt, J.* (2011). Building a Pan-Soviet Past: The Soviet War Cult and the Turn Away from Ethnic Particularism. *The Soviet and Post-Soviet Review*. 38: 149-171.

Camarero et al., 2019 – *Camarero, E., Fedorov, A., Levitskaya, A.* (2019). Audiovisual and media literacy for social change. In: The Routledge handbook of positive communication contributions of an emerging community of research on communication for happiness and social change. New York: Routledge. Chapter 43. DOI: 10.4324/9781315207759-37

Domine, 2011 – *Domine, V.* (2011). Building 21st-Century Teachers: An Intentional Pedagogy of Media Literacy Education. *Action in Teacher Education*. 33(2): 194-205. DOI: 10.1080/01626620.2011.569457

Edele, 2020 – *Edele, M.* (2020). The Many Memories of the Soviet Union's World War II. *The Journal of Slavic Military Studies*. 33(4): 524-526. DOI: 10.1080/13518046.2020.184508

Igaeva, Nikolai, 2022 – *Igaeva, K.V., Nikolai, F.V.* (2022). Velikaya Otechestvennaya voyna v sovetskom I postsovetskom kinematografe: problem remediatsii [Great Patriotic War in Soviet and Post-Soviet Cinematography: Problems of Remediation]. *Nauchnyi dialog*. 11(7): 197-211. DOI: 10.24224/2227-1295 2022-11-7-197-211 [in Russian]

Jolls, 2015 – *Jolls, T.* (2015). The New curricula: how media literacy education transforms teaching and learning. *Journal of Media Literacy Education*. 7(1): 65-71.

Kino-teatr.ru, 2026 – Kino-teatr.ru. 2026. [Electronic resource]. URL: https://www.kino-teatr.ru/ [in Russian]

Klinova, Trofimov, 2021 – *Klinova, M.A., Trofimov, A.V.* (2021). Obrazy Velikoy Otechestvennoy voyny v sovetskom kinematografe vtoroy poloviny 1940-kh gg. i ikh otrazheniye v ego dokumentakh [Images of the Great Patriotic War in Soviet cinema of the second half of the 1940s and their reflection in documents]. *Vestnik Tomskogo gosudarstvennogo universiteta*. 467: 200-208. DOI: 10.17223/15617793/467/24 [in Russian]

Mann, 2020 – *Mann, Y.* (2020). (Re)cycling the Collective Memory of the Great Patriotic War. *The Journal of Slavic Military Studies*. 33(4): 508-513. DOI: 10.1080/13518046.2020.1845080

Orlova, 2015 – *Orlova, A.S.* (2015). Khudozhestvennyy kinematograf kak sredstvo moral'no-psihologicheskoy mobilizatsii naseleniya (na materialakh filmov o Velikoy Otechesnvennoy voyne 1941–1945 godov [Artistic cinema as a means of moral and psychological mobilization of the population (based on film materials about the Great Patriotic war of 1941–1945)]. *Vestnik Novosibirskogo Gosudarstvennogo Universiteta. Seriya Istoriya, Filologiya*. 14(1): 142-149. [in Russian]

Potter, 2022 – *Potter, W.J.* (2022). Analysis of definitions of media literacy. *Journal of Media Literacy Education*. 14(2): 27-43. DOI: 10.23860/JMLE-2022-14-2-3

Rivoltella, 2018 – *Rivoltella, P.C.* (2018). The third age of the media. *Research on Education and Media*. 10(1). DOI: 10.1515/rem-2018-0001

Shinar, 2013 – *Shinar, C.* (2013). The Role of the national problem in the disintegration of the Soviet Union. *European Review*. 21(1): 56-69. DOI: 10.1017/S1062798712000257

Strategiya..., 2026 – Strategiya gosudarstvennoy natsional'noy politiki Rossiyskoy Federatsiina period do 2036 goda [Strategy for State National Policy of the Russian Federation through 2036]. 2026. [Electronic resource]. URL: https://docs.cntd.ru/document/1314572226 [in Russian]

V yedinom..., 2026 – V yedinom stroyu kovali pobedu [In united formation they forged victory]. 2026. [Electronic resource] URL: https://narody23.mil.ru [in Russian]

Znaniye..., 2026 – Znaniye. Kino [Knowledge. Cinema]. 2026. [Electronic resource]. URL: https://znanierussia.ru/lectlib/edinstvo-narodov [in Russian]

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Deepfake Technologies in the Digital Media Environment: Implications for Education and Media Literacy

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Abstract

The rapid development of generative artificial intelligence has intensified academic interest in synthetic media and deepfake technologies. In the context of higher education, deepfakes represent both a pedagogical resource and a serious challenge for media literacy education, academic integrity, and students' critical engagement with digital content. The purpose of this article is to examine the potential affordances and constraints of deepfakes in contemporary university education and to identify their implications for media literacy and digital competence. The study is based on an integrative literature review of 31 peer-reviewed publications from 2021–2025. The selected studies were analyzed through the lens of affordance theory and thematic analysis. The results indicate that deepfakes can support immersive learning, historical simulation, avatar-based teaching, accessibility of educational materials, and practical training in the detection of manipulated media content. At the same time, deepfakes may intensify misinformation, reproduce social and cultural bias, undermine trust in authentic sources, and create new risks for privacy, student well-being, and academic communication. The article argues that deepfake literacy should be integrated into broader media and information literacy programs in universities. Such integration can help students develop critical, ethical, and analytical competencies necessary for participation in digital media environments and academic responsibility.

Keywords: deepfakes, generative artificial intelligence (GenAI), AIED, higher education, affordance theory, media literacy education.

1. Introduction

The current development of generative artificial intelligence (GenAI) is rapid, multimodal, and increasingly embedded in educational and media environments. Regardless of the economic success or failure of particular AI products, the influence of GenAI on media, communication, and education is likely to be a long-term phenomenon that requires sustained academic attention. In educational settings, GenAI has introduced new opportunities for teaching, learning, content production, personalization, and accessibility (Belkina et al., 2025; Kasneci et al., 2023). At the same time, it has created challenges related to cheating, misleading information, outdated content, academic dishonesty, and meta-cognitive laziness (Khosravi et al., 2025; Luo, 2024; Tlili et al., 2023). These ethical and pedagogical issues emphasize the need for institutional guidelines, university policies, and educational strategies that regulate the use of GenAI in academic environments (Chiu, 2024; Mozelius, 2024; Rudenkin, Iufereva, 2020; Zlotnikova et al., 2025).

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One of the most visible and socially significant forms of GenAI-generated content is the deepfake. In recent years, advancements in GenAI based on deep learning techniques have made substantial progress in the production of humanlike multimedia content, including text, images, audio, and video. The term deepfake was created as an abbreviation combining deep learning and fake media. Deepfakes, in their various modalities, can be understood as digital fabrications in which realistic likenesses of persons, voices, or events are synthetically generated or altered to depict something that never occurred (Danry et al., 2022). Today, almost anyone can create AI-generated deepfakes using accessible online tools without advanced technical knowledge. For example, the number of AI-generated photos increased by 550 % between 2019 and 2023, while the creation of realistic deepfakes is no longer limited to experts (Romero Moreno, 2024).

This technological accessibility has made deepfakes an important issue for media literacy education. Deepfakes challenge users' ability to distinguish authentic from manipulated media content, verify sources, evaluate evidence, and recognize persuasive forms of misinformation. Recent studies emphasize that media and information literacy is increasingly necessary for developing critical engagement with digital content, especially in contexts shaped by misinformation, disinformation, algorithmic personalization, and AI-generated media (Afzal, Rafiq, 2025; Bhoi, Kumar, 2025; Ghosh et al., 2025; Kavut, 2025; Rogach et al., 2025; Toulgeridis et al., 2025; Vrindha, Rekha, 2025).

In relation to deepfakes specifically, scholars underline the need to move beyond technical detection and to develop broader educational competencies, including source verification, critical interpretation of visual evidence, awareness of bias, ethical reflection, and responsible participation in digital media environments (Ahvanooey et al., 2025; Hill, Conceição, 2025; Lao et al., 2025; Roe et al., 2024; Twomey et al., 2023). Therefore, deepfake literacy can be considered a specific component of broader media and information literacy, aimed at preparing students to identify, interpret, and critically respond to synthetic media in academic, professional, and everyday communication.

In higher education, the issue of deepfake literacy is especially significant because students use digital media not only for everyday communication but also for learning, academic research, public debate, and professional self-presentation. Universities therefore need to address deepfakes not only through restrictive policies or detection technologies, but also through systematic media literacy education (Bhoi, Kumar, 2025; Chiu, 2024; Hill, Conceição, 2025; Roe et al., 2024; Rogach et al., 2025; Zlotnikova et al., 2025). Such education should help students understand how synthetic media are produced, why they are persuasive, how they circulate across digital platforms, and what social, ethical, and academic consequences they may generate (Afzal, Rafiq, 2025; Lao et al., 2025; Naffi et al., 2025; Roe et al., 2024; Toulgeridis et al., 2025; Twomey et al., 2023).

Research has reported new challenges related to deepfakes in law, politics, media, entertainment, and education (Blankenship, 2021; Lundberg, Mozelius, 2025; Romero Moreno, 2024). In higher education, deepfakes can be discussed not only as a technological risk but also as a pedagogical object through which students may learn to understand digital manipulation, misinformation, bias, privacy threats, and the erosion of public trust. Previous studies have also discussed the potential educational affordances of deepfakes, including historical simulations, avatar-based teaching, science education, accessibility of learning materials, and detection-based training (Murillo-Ligorred et al., 2023; Roe et al., 2024; Slabin, 2024; Vallis et al., 2024). However, the rapid normalization of synthetic media requires a stronger focus on how deepfakes should be understood within media literacy education, digital competence, academic integrity, and students' critical engagement with multimodal information.

The focus of this study is higher education, a field in which deepfakes may function both as educational tools and as sources of misinformation, manipulation, and ethical concern. This study aims to analyze and discuss the potential positive and negative impacts of deepfakes in higher education through the lens of affordance theory. The overall research question for this literature study is: What affordances and constraints can be identified regarding the use of deepfakes in higher education?

Methodologically, the research adopts an integrative literature review design and analyzes 31 peer-reviewed publications through the lens of affordance theory and thematic analysis. The study contributes to the literature by conceptualizing deepfakes in higher education as a dual phenomenon: both as pedagogical resources that may support immersive learning, accessibility, and media literacy education, and as sources of misinformation, manipulation, bias, privacy risks,

and challenges to academic trust. By connecting deepfake technologies with media literacy education, digital competence, and academic integrity, the article contributes to ongoing debates on the role of GenAI in higher education. From an educational perspective, the study offers implications for universities, teachers, and students by highlighting the need to integrate deepfake literacy into broader media and information literacy programs.

2. Materials and methods

This study used the affordance theory, as outlined by J.J. Gibson (Gibson, 1979), as a theoretical framework for the deductive-inductive thematic analysis. According to J.J. Gibson (Gibson, 1979), an affordance describes what the environment can offer to humans or animals in a selected context. In this study, the selected context is higher education, with a focus on how deepfakes might provide affordances and constraints in this educational context. In the chosen field of higher education, affordances refer to action potentials, describing what benefits the use of deepfakes can offer for individuals and universities with specific purposes. Affordances have their counterpart in constraints, which in this study refer to how the use of deepfakes might impede and disturb individuals and universities striving for particular goals. With the overall aim of answering the research question, the inductive part of the data analysis identified sub-themes for the main themes of affordances and constraints.

This research was based on an integrative literature review design to synthesize diverse perspectives on deepfake technology in educational context. An integrative literature review allows for the combination of theoretical and empirical data to build a comprehensive understanding of the studied phenomenon (Torraco, 2005). The research includes a multi-stage process: identification, critical screening, and conceptual synthesis through the lens of affordance theory with two main themes of affordances and constraints.

The literature search was conducted based on the following databases: Scopus, Google Scholar, and PubMed. The analysis was carried out on the 29–30th of July, 2025. The research was conducted in several stages: identification, screening, and inclusion.

The following databases were selected: Scopus, Google Scholar, and PubMed.

Different search queries were selected for each database depending on the platform itself, since the characteristics for searching articles are different. Scopus: 2024–2025, article title, abstract, keywords: "Deepfake education", English language, sort by "Cited by (highest)". Google Scholar: 2024–2025, article title "Deepfake higher education", sort by "Relevant". PubMed: 2024–2025, article title "Deepfake higher education", "Deepfake education", "Deepfake students", English language, sort by "best match".

The selection process was designed to move from broad initial records (n = 15.116) to a focused conceptual core through two distinct phases:

Initial screening: The top 30 publications were automatically selected from each database selected: Scopus, Google Scholar, and PubMed. After forming a dataset from each database (n = 90), duplicate entries were removed (n = 9). Thus, at the screening stage, the authors examined 81 academic units.

Qualitative refinement: In the line with integrative review standards, papers were excluded not just because of a lack of relevance, but to maintain a specific focus on educational application. Specifically, the following categories were identified and excluded (n = 64):

Scientific units focused on the general definitions, characteristics, and typologies of deepfakes were not included. These studies provide theoretical overviews without addressing the role of deepfakes in educational applications.

Units exploring the political and social effects of deepfakes were excluded. These studies deal with broader societal consequences (e.g., the negative impact of deepfakes on electoral interference, public psychological or mental health, etc.) and are not directly related to educational practices. Furthermore, studies with a narrow domain-specific focus were excluded unless they explicitly addressed educational use, student learning, training, or media/digital literacy. Studies exploring ethical concerns about the creation and dissemination of deepfakes were not included. While they raise important normative issues, the focus of these articles lies outside the empirical or applied educational context prioritized in this review.

A total of 17 publications were selected.

To ensure a holistic perspective, backward and forward citation tracking was employed during the deep-reading phase. This allowed the inclusion of 14 additional articles published

between 2021 and 2025. Consequently, the final synthesis included 31 core publications on deepfakes and education. Additional methodological, theoretical, and contextual sources were used to frame the analysis but were not counted as part of the core review corpus.

The retrieved publications were analyzed according to the six-step process for thematic analysis presented by V. Braun and V. Clarke (Braun, Clarke, 2006). The ingoing six phases in this process are 1) Familiarizing yourself with your data, involving the taking of notes on initial ideas and themes, 2) Generating initial extracts and sub-themes in the data that appears relevant, 3) Searching for themes that can be developed by collating codes into preliminary themes that have the potential to answer the research question, 4) Reviewing the preliminary themes, and checking if the themes work in relation to the data extracts and the theoretical framework, 5) Defining and giving descriptive names to the final themes, and refine the specifics of each theme, and finally 6) Writing up the presentation of the found themes and fine-tuning the narration. (Braun, Clarke, 2006; Humble, Mozelius, 2022).

A deductive-inductive analysis process was conducted using J.J. Gibson's (Gibson, 1979) Affordance Theory as the theoretical lens.

3. Discussion

Findings have been analyzed and categorized in a deductive-inductive thematic analysis as outlined by V. Braun and V. Clarke (Braun, Clarke, 2006). Thematic analysis is used here as an analytic method rather than as a separate methodology, since it can be applied within different theoretical frameworks (Clarke, Braun, 2014). In this study, the first deductive categorization was based on affordance theory. The sub-categories that emerged from the reviewed publications were divided into two main categories: affordances and constraints.

The findings of this review should be interpreted within the broader field of contemporary media literacy education, media studies, journalism studies, and platform studies. Recent scholarship argues that media literacy can no longer be limited to the ability to recognize false information or to use digital tools effectively. It increasingly includes critical understanding of platform infrastructures, algorithmic visibility, media production, source verification, civic responsibility, and ethical participation in digital culture (Ahmed, 2023; Chiu, 2024; Gillespie, 2022; Hill, Conceição, 2025; Hobbs et al., 2022; Livingstone et al., 2025; Polizzi et al., 2025; Rauchfleisch et al., 2025). From this perspective, deepfake literacy should be considered not as a separate technical skill, but as a specific component of media and information literacy that prepares students to evaluate synthetic media, understand the conditions of its circulation, and reflect on its social consequences.

This is especially important because deepfakes transform the traditional relationship between visual evidence, authenticity, and trust. Studies in media and journalism show that deepfakes are often discussed as a threat to news credibility, democratic communication, and public knowledge because they make it increasingly difficult to distinguish authentic media from manipulated media (Ahmed, 2023; Rauchfleisch et al., 2025; Weikmann, Lecheler, 2024). At the same time, platform studies emphasize that the impact of such content depends not only on the content itself, but also on the digital environments in which it circulates. Recommendation systems, platform affordances, content moderation, emotional engagement, and virality influence how users encounter, interpret, and share misinformation (Gillespie, 2022; Gillespie, 2023; Livingstone et al., 2025; Polizzi et al., 2025). Therefore, university-based deepfake literacy should include not only detection exercises, but also critical analysis of platforms, audiences, circulation, and media power.

The reviewed literature demonstrates that deepfake education should combine technical, critical, and ethical dimensions. Technical detection alone cannot solve the problem, because students may still fail to understand why deepfakes are persuasive, why they are socially harmful, and how they can be used to manipulate emotions, identities, and public trust. This corresponds with recent research in media literacy education, which emphasizes active interpretation, reflective learning, responsible media creation, civic engagement, and critical awareness of generative AI systems (Chiu, 2024; Hill, Conceição, 2025; Hobbs et al., 2022; Qu, 2026; Roe et al., 2024). In this sense, deepfakes can become both a risk and a pedagogical resource: they may be used to teach students how synthetic media are produced, but only if such activities are framed by clear ethical rules concerning consent, privacy, representation, and possible harm.

The affordances identified in this review show that deepfakes may support media literacy education, immersive learning, historical simulation, avatar-based instruction, accessibility, and personalization. These opportunities are important for higher education because they can make learning more visual, interactive, and inclusive. However, these affordances should not be interpreted as automatically positive. The same characteristics that make deepfakes pedagogically attractive – realism, personalization, simulation, emotional engagement, and accessibility – also make them potentially dangerous. They can support learning, but they can also reinforce bias, normalize disinformation, damage reputations, and weaken trust in academic and public knowledge.

The media literacy dimension is therefore central to the interpretation of the results. Deepfakes can be used in higher education not only as teaching materials but also as objects of critical analysis. Students may compare authentic and synthetic media, verify sources, examine platform circulation, discuss visual credibility, and reflect on the ethical consequences of creating or sharing manipulated content. Such tasks can help students understand how deepfakes are produced, why they are persuasive, and what social harms they may create for individuals, academic communities, and democratic societies (Ahvanooey et al., 2025; Naffi et al., 2025; Rauchfleisch et al., 2025; Roe et al., 2024; Weikmann, Lecheler, 2024). This means that deepfake literacy should be embedded into broader media literacy education rather than treated as a narrow technical topic.

At the same time, the constraints identified in this review show that deepfakes may intensify misinformation, bias, privacy violations, cyberbullying, fraud, and the erosion of public trust. These risks are directly relevant to higher education because universities depend on trust in evidence, academic expertise, scientific communication, and institutional authority. If students encounter realistic synthetic media without sufficient critical preparation, they may either believe false content or become skeptical toward reliable sources. Both outcomes are problematic for academic culture. For this reason, universities need to address deepfakes not only through detection tools or restrictive policies but also through systematic media literacy education, teacher training, academic integrity policies, and digital competence programs.

The discussion also shows that deepfakes should be understood as part of a broader media-cultural transformation. Synthetic media are not only technological artifacts; they are shaped by platform logics, data bias, visual culture, commercial incentives, journalistic norms, and social power. Recent studies on generative AI in journalism indicate that news organizations are developing policies, professional routines, and ethical frameworks for dealing with AI-generated content, yet these responses remain uneven and contested (Becker et al., 2025; Morosoli et al., 2025; Weikmann, Lecheler, 2024). This is relevant for higher education because students need to understand not only how synthetic media are technically produced, but also how professional media institutions, journalists, platforms, and audiences negotiate their meaning and credibility.

Therefore, the educational response must also be multidimensional. It should include technical understanding of synthetic media, critical interpretation of media messages, ethical reflection on consent and representation, and institutional strategies for protecting students and academic communities from harm. In this broader framework, deepfake literacy becomes an important part of contemporary media education and a necessary condition for responsible participation in digital culture. It also connects media literacy with AI literacy, since students increasingly need to evaluate how generative AI systems produce, transform, circulate, and legitimize information in academic and public contexts (Qu, 2026; Rauchfleisch et al., 2025).

Thus, the central issue is not whether deepfakes should be accepted or rejected in higher education. The more important question is under what conditions they can be used critically, ethically, and pedagogically. The present review suggests that universities should approach deepfakes through a balanced framework that recognizes both their educational affordances and their social constraints. Such a framework can help students and academic staff understand synthetic media not only as a technological novelty, but as a phenomenon that requires critical, ethical, cultural, and institutional response.

4. Results

The selected papers concern the multifaceted influence and application of deepfakes in education, and they bring both opportunities and challenges.

Accelerated development and accessibility of AI enable easy creation of deepfakes without special technical knowledge (Lundberg, Mozelius, 2025). This opens the door to the dissemination of inaccurate visual content, which can lead to the manipulation of public opinion, erosion of public

trust, panic, and compromise of democratic processes (Heidari et al., 2024; Iufereva, 2023). Deepfakes are increasingly used for malicious purposes such as political disinformation, fraud, cyberbullying, and sensitive topics such as gender/sexual violence, religion, etc. (Cavari et al., 2024; Godulla et al., 2021; Naffi et al., 2025; Roe et al., 2024).

AI-created video content is becoming almost indistinguishable from real video content (Ahvanooey et al., 2025). As generated content becomes increasingly difficult to distinguish from authentic, more users face the impossibility of instantly determining the reliability of such information. People, especially younger generations, may be vulnerable to perceiving false information, putting their health and the well-being of others at risk. For example, as O. Navarro Martínez (Navarro Martínez et al., 2024) notes, "...videos using DeepFakes would lead many people [may] to believe that solutions or diagnoses for any kind of illness can be given by anyone, thus creating an uninformed society". (Navarro Martínez et al., 2024: 2751). This raises concerns about the increasing scale and impact of deepfakes on society's safety (Fulsher et al., 2025; Iufereva, 2024).

While deepfakes and AI tools in general offer opportunities for education, it is important to note that they are based on the linguistic data (obtained from the internet), which "contains the biases and representations of the dominant ideologies espoused on the internet" (Roe, 2024: 6). Reproducing "biases of the data they are trained on and that these tools have significant limitations" (James, Andrews, 2024, p. 251). As G. Cooper (Cooper, 2023) underlines, what GenAI tools define as truth is simply a reflection of what is most popular in the training data. Furthermore, most of these models are trained primarily in English and 'on an English-biased semantic space' (Wendler et al., 2024), which creates some linguistic restrictions as well. If AI systems are mistakenly seen as producers of objective information, risks occur in limiting users (including students)' understanding of the diversity of knowledge. Moreover, AI systems favor particular kinds of epistemologies over others, which could in theory lead to a monoculture of dominant worldviews and perspectives." (Roe, 2024: 7) Therefore, universities need to ensure that AI tools are used ethically and transparently, guiding students to acquire critical skills in utilizing these tools.

Given the risks posed by deepfakes, the importance of educational programs to build youth resilience to deepfakes is especially critical. With direct access to AI-generated content, students may uncritically accept its results, relying on fictional content and sources (Fulsher et al., 2025), especially in sensitive areas such as scientific data (Erduran, 2024). The use of AI may limit the development of critical thinking skills (James, Andrews, 2024), replacing students' own abilities – such as writing and creative thinking-with AI-generated outputs (Crawford et al., 2023).

In the context of the widespread distribution of malicious content and the high risk of its consumption, the issue of improving media literacy has become one of the key issues (Ahvanooey et al., 2025). "Such educational programs could also be valuable for university students and academic staff. By undertaking deepfake education, students and faculty can be taught what deepfakes are and how to suspect them." (Roe et al., 2024: 11). For this reason, there is a tendency to integrate deepfake-related topics into communication courses. Such programs develop students' critical thinking skills in evaluating information sources in terms of their accuracy and readability. For example, in computer science and media engineering courses, students are involved in assessing the accuracy and presence of misinformation in AI-generated content (e.g., identifying inaccuracies, biases) (Kumar et al., 2023). C. Vallis (Vallis et al., 2024) underlined that increasing students' awareness of the nature of AI is a necessary step in the educational process. It may be achieved through the active involvement of students in the process of generating avatars since it supports deeper learning in how data can be manipulated: "Sharing 'lecture' scripts with students or involving students in the design and development of a shared or their own avatar may have prompted more ethical reflection on AI, increased their capability to interrogate its business implications, and extended their learning" (Vallis et al., 2024: 546).

In addition to deepfake detection practices, deepfakes and generative AI are increasingly being explored in other applications in education. Teachers can, for instance, create deepfake videos of historical figures, such as chemists, narrating prepared texts, making the learning experience more engaging and informative. "This method allows educators to bring historical figures to life in an engaging and informative manner, enhancing the learning experience for students" (Slabin, 2024: 418). Another study by Murillo-Ligorred (Murillo-Ligorred et al., 2023) provides an example of using AI and digital modeling technologies to create a realistic but virtual image of Salvador Dali in an exhibition at the St. Petersburg Museum in Florida in 2019. The digital avatar appeared to educate visitors about their artwork in museums, or to allow

students to "talk to" historical characters. "In this positive sense is where deepfake images connect the past with the present, bringing back disappeared figures" (Murillo-Ligorred et al., 2023: 6).

The use of deepfakes has also been noted in fields such as medicine, where students can develop medical skills without compromising patient safety in real-life situations (Erduran, 2024). Deepfakes can also be used for training healthcare staff, particularly nursing care, in case studies, providing a more immersive experience. In a study examining the perspective of medical students in their assessment of the use of deepfakes in treating patients, it was noted that "students identify the use of DeepFake as a possible way to help people with Alzheimer's disease by interacting with young faces that they could remember from other times in their lives" (Navarro Martínez et al., 2024: 2752).

Research shows a positive relationship between deepfakes, generative artificial intelligence (GenAI), and creating educational content for students. The combination of these tools makes the educational context more accessible and helps overcome language barriers that may arise between teachers and students. With access to AI-powered software, educators can produce high-quality videos based on lectures, presentations, or scientific papers, featuring artificial avatars that speak clear and comprehensible English. For instance, the potential of AI to deliver content and support students for whom English is a second language was noted, as students highlighted the clarity and effectiveness of AI-generated videos (Vallis et al., 2024). Another example of a meaningful use of deepfakes is the accessibility of AI tools. Generative AI, specifically large language models (LLMs) like ChatGPT, can "enhance language proficiency, address disparities among diverse student populations, and contribute to a more equitable academic landscape" (James, Andrews, 2024: 251). Using deepfakes may be useful, including the ability of learners to converse "with historical figures and receive instantaneous translations or give a voice to those who are unable to speak." (Roe et al., 2024: 3)

5. Conclusion

The study has shown a multifaceted side of deepfakes. Synthesizing findings across 31 peer-reviewed articles, the analysis identified a dichotomy of affordances and constraints. This methodological lens allowed us to reconsider deepfakes as both a powerful pedagogical instrument and an ethical challenge for higher education that may erode learning environments at universities.

From an affordance perspective, deepfakes can enrich educational practice by fostering media literacy, critical and analytical thinking, and creativity. Deepfakes may provide an immersive learning experience that unites key components of education as inclusion, engagement, and understanding. Applications such as historical simulations, based on AI-driven tools, and avatar-based tutoring demonstrated how deepfakes can make education more interactive, accessible, and personalized.

Conversely, the research highlighted a set of constraints. The difficulty of verifying the reliability of media content threatens public trust since the young generation may be vulnerable to perceiving false content. It can lead to the contribution to misconceptions about facts, reinforce bias, and even increase hostility toward certain social or cultural groups. Without adequate ethical frameworks and media literacy, the academic environment risks reinforcing normalizing disinformation and undermining students' trust in authentic knowledge sources.

This research calls for the development of an adequate university policy response. Universities should integrate deepfake literacy as a key element within broader media literacy programs because both professors and students have to be able to possess analytical, critical, and ethical capacities to recognize and evaluate opportunities and risks of synthetic media. Furthermore, institutional strategies must align with evolving frameworks such as the EU AI Act and national privacy legislations to ensure the protection of academic integrity and individual rights.

Future research

Further research could develop simultaneously in two main directions – theoretical and applied. First, at the theoretical level, it would be useful to deepen conceptual understanding of deepfakes and to develop an original typology that reflects their functions, forms, and significance in the educational context. Second, at the practical level, future research could design and implement case studies for university students to develop critical thinking skills and media literacy competencies relevant to the contemporary digital environment.

References

Afzal, Rafiq, 2025 – *Afzal, A., Rafiq, S.* (2025). Combating misinformation through media and information literacy: A case study among university students. *International Journal of Media and Information Literacy*. 10(2): 123-131. DOI: 10.13187/ijmil.2025.2.123

Ahmed, 2023 – *Ahmed, S.* (2023). Navigating the maze: Deepfakes, cognitive ability, and social media news skepticism. *New Media & Society*. 25(5): 1108-1129. DOI: 10.1177/14614448211019198

Ahvanooey et al., 2025 – *Ahvanooey, M.T., Mazurczyk, W., Lee, D.* (2025). Socio-economic threats of deepfakes and the role of cyber-wellness education in defense. *Communications of the ACM*. 68(1). DOI: 10.1145/3715317

Becker et al., 2025 – *Becker, K.B., Simon, F.M., Crum, C.* (2025). Policies in parallel? A comparative study of journalistic AI policies in 52 global news organisations. *Digital Journalism*. DOI: 10.1080/21670811.2024.2431519

Belkina et al., 2025 – *Belkina, M., Daniel, S., Nikolic, S., Haque, R., Lyden, S., Neal, P., ..., Hassan, G.M.* (2025). Implementing generative AI (GenAI) in higher education: A systematic review of case studies. *Computers and Education: Artificial Intelligence*. 100407.

Bhoi, Kumar, 2025 – *Bhoi, S., Kumar, R.* (2025). Assessing and addressing gaps in media education: Faculty perspectives on integrating media literacy into university curricula. *International Journal of Media and Information Literacy*. 10(2): 143-151. DOI: 10.13187/ijmil.2025.2.143

Blankenship, 2021 – *Blankenship, R.J.* (2021). Educational responsibility in the deepfake era: A primer for TPACK reform. *Deep fakes, fake news, and misinformation in online teaching and learning technologies*. IGI Global: 1-23. DOI: 10.4018/978-1-7998-6474-5.ch001

Braun, Clarke, 2006 – *Braun, V., Clarke, V.* (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*. 3(2): 77-101.

Cavari et al., 2024 – *Cavari, A., Mate, A., Sebők, M.* (2024). Staying on the democratic script? A deep learning analysis of the speechmaking of U.S. Presidents. *Policy Studies Journal*. 52(4): 709-729. DOI: 10.1111/psj.12534

Chiu, 2024 – *Chiu, T.K.F.* (2024). The impact of generative AI (GenAI) on practices, policies and research direction in education: A case of ChatGPT and Midjourney. *Interactive Learning Environments*. 32(10): 6187-6203. DOI: 10.1080/10494820.2023.2253861

Clarke, Braun, 2014 – *Clarke, V., Braun, V.* (2014). Thematic analysis. Encyclopedia of critical psychology. Springer: 1947-1952.

Cooper, 2023 – *Cooper, G.* (2023). Examining science education in ChatGPT: An exploratory study of generative artificial intelligence. *Journal of Science Education and Technology*. 32(3): 444-452. DOI: 10.1007/s10956-023-10039-y

Crawford et al., 2023 – *Crawford, J., Cowling, M., Allen, K.-A.* (2023). Leadership is needed for ethical ChatGPT: Character, assessment, and learning using artificial intelligence (AI). *Journal of University Teaching and Learning Practice*. 20(3). DOI: 10.53761/1.20.3.02

Danry et al., 2022 – *Danry, V., Leong, J., Pataranutaporn, P., Tandon, P., Liu, Y., Shilkrot, R., ..., Sra, M.* (2022). AI-generated characters: Putting deepfakes to good use. *CHI Conference on Human Factors in Computing Systems Extended Abstracts:* 1-5.

Erduran, 2024 – *Erduran, S.* (2024). Deepfakes and students' deep learning: A harmonious pair in science? *Science*. 385(6712): eadr8354.

Fulsher et al., 2025 – *Fulsher, A., Pagkratidou, M., Kendeou, P.* (2025). GenAI and misinformation in education: A systematic scoping review of opportunities and challenges. *AI & Society*. 1-13.

Ghosh et al., 2025 – *Ghosh, S., Chauhan, G.S., Kotwal, R.* (2025). Integrating media and information literacy in Indian schools: Teachers' insights on challenges, opportunities, and key competencies for implementation. *International Journal of Media and Information Literacy*. 10(2): 152-161. DOI: 10.13187/ijmil.2025.2.152

Gibson, 1979 – *Gibson, J.J.* (1979). The ecological approach to visual perception. Houghton Mifflin.

Gillespie, 2022 – *Gillespie, T.* (2022). Do not recommend? Reduction as a form of content moderation. *Social Media + Society*. 8(3). DOI: 10.1177/20563051221117552

Gillespie, 2023 – *Gillespie, T.* (2023). The fact of content moderation; Or, let's not solve the platforms' problems for them. *Media and Communication*. 11(2). DOI: 10.17645/mac.v11i2.6610

Godulla et al., 2021 – *Godulla, A., Hoffmann, C.P., Seibert, D.M.A.* (2021). Dealing with deepfakes-An interdisciplinary examination of the state of research and implications for communication studies. *Studies in Communication and Media*. 10(1): 73-96.

Heidari et al., 2024 – *Heidari, A., Jafari Navimipour, N., Dag, H., Unal, M.* (2024). Deepfake detection using deep learning methods: A systematic and comprehensive review. *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery*. 14(2): e1520.

Hill, Conceição, 2025 – *Hill, L.H., Conceição, S.C.O.* (2025). Media literacy and faculty responsibility: Addressing AI-generated disinformation in higher education. *New Directions for Adult and Continuing Education*. DOI: 10.1002/ace.70018

Hobbs et al., 2022 – *Hobbs, R., Moen, M., Tang, R., Steager, P.* (2022). Measuring the implementation of media literacy instructional practices in schools: Community stakeholder perspectives. *Learning, Media and Technology*. DOI: 10.1080/17439884.2022.2151621

Humble, Mozelius, 2022 – *Humble, N., Mozelius, P.* (2022). Content analysis or thematic analysis: Doctoral students' perceptions of similarities and differences. *Electronic Journal of Business Research Methods*. 20(3): 89-98.

Iufereva, 2023 – *Iufereva, A.* (2023). Fake news as a distortion of media reality: Tell-truth strategy in the post-truth era. *Proceedings of the 22nd European Conference on Cyber Warfare and Security*. 22(1): 610-615. DOI: 10.34190/eccws.22.1.1080

Iufereva, 2024 – *Iufereva, A.* (2024). How is fake news spread? An analysis of the dissemination process: Actors, channels, and motives. *Proceedings of the International Conference on AI Research*. 4(1): 456-462. DOI: 10.34190/icair.4.1.3054

James, Andrews, 2024 – *James, T., Andrews, G.* (2024). Levelling the playing field through GenAI: Harnessing artificial intelligence to bridge educational gaps for equity and disadvantaged students. *Widening Participation and Lifelong Learning*. 26(3): 250-260.

Kasneci et al., 2023 – *Kasneci, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., ..., Kasneci, G.* (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*. 103: 102274.

Kavut, 2025 – *Kavut, S.* (2025). Artificial intelligence and information literacy in Turkey: A content and bibliometric analysis from 2005 to 2025. *International Journal of Media and Information Literacy*. 10(2): 185-196. DOI: 10.13187/ijmil.2025.2.185

Khosravi et al., 2025 – *Khosravi, H., Shibani, A., Jovanovic, J., Pardos, Z.A., Yan, L.* (2025). Generative AI and learning analytics: Pushing boundaries, preserving principles. *Journal of Learning Analytics*. 12(1): 1-11.

Kumar et al., 2023 – *Kumar, Y., Gordon, Z., Morreale, P., Li, J.J., Hannon, B.* (2023). Love the way you lie: Unmasking the deceptions of LLMs. In *Proceedings of the 2023 IEEE 23rd International Conference on Software Quality, Reliability, and Security Companion (QRS-C 2023):* 875-876.

Lao et al., 2025 – *Lao, Y., Hirvonen, N., Larsson, S.* (2025). Everyday encounters with deepfakes: Young people's media and information literacy practices with AI-generated media. *Journal of Librarianship and Information Science*. DOI: 10.1177/01655515251330605

Livingstone et al., 2025 – *Livingstone, S., Jessen, R.S., Stoilova, M.* (2025). Can platform literacy protect vulnerable young people against the risky affordances of social media platforms? *Information, Communication & Society*. DOI: 10.1080/1369118X.2025.2518254

Lundberg, Mozelius, 2025 – *Lundberg, E., Mozelius, P.* (2025). The potential effects of deepfakes on news media and entertainment. *AI & Society*. 40(4): 2159-2170.

Luo, 2024 – *Luo, J.* (2024). A critical review of GenAI policies in higher education assessment: A call to reconsider the "originality" of students' work. *Assessment & Evaluation in Higher Education*. 49(5): 651-664.

Morosoli et al., 2025 – *Morosoli, S., Resendez, V., Naudts, L., Helberger, N., de Vreese, C.* (2025). I resist: A study of individual attitudes towards generative AI in journalism and acts of resistance, risk perceptions, trust and credibility. *Digital Journalism*. 1-20. DOI: 10.1080/21670811.2024.2435579

Mozelius, 2024 – *Mozelius, P.* (2024). Generative AI and its impact on activities and assessment in higher education: Some recommendations from master's students. *4th International Conference on AI Research (ICAIR 2024).* 4.

Murillo-Ligorred et al., 2023 – *Murillo-Ligorred, V., Ramos-Vallecillo, N., Covaleda, I., Fayos, L.* (2023). Knowledge, integration and scope of deepfakes in arts education: The development of critical thinking in postgraduate students in primary education and master's degree in secondary education. *Education Sciences*. 13(11): Article 11. DOI: 10.3390/educsci13111073

Naffi et al., 2025 – *Naffi, N., Charest, M., Danis, S., Pique, L., Davidson, A.L., Brault, N., Barma, S.* (2025). Empowering youth to combat malicious deepfakes and disinformation: An experiential and reflective learning experience informed by personal construct theory. *Journal of Constructivist Psychology*. 38(1): 119-140. DOI: 10.1080/10720537.2023.2294314

Navarro Martínez et al., 2024 – *Navarro Martínez, O., Fernández-García, D., Cuartero Monteagudo, N., Forero-Rincón, O.* (2024). Possible health benefits and risks of deepfake videos: A qualitative study in nursing students. *Nursing Reports*. 14(4): 2746-2757.

Polizzi et al., 2025 – *Polizzi, G., D'Arcy, J., Harris, R., Yates, S., Yeoman, F.* (2025). Media literacy provision from the perspective of policymakers and civil society organisations in five areas of the UK: A case study approach. *Learning, Media and Technology*. DOI: 10.1080/17439884.2025.2572624

Qu, 2026 – *Qu, Y.* (2026). Generative artificial intelligence in higher education. *British Journal of Educational Technology*. DOI: 10.1111/bjet.70029

Rauchfleisch et al., 2025 – *Rauchfleisch, A., Vogler, D., de Seta, G.* (2025). Deepfakes or synthetic media? The effect of euphemisms for labeling technology on risk and benefit perceptions. *Social Media + Society*. 11(3): 12. DOI: 10.1177/20563051251350975

Roe et al., 2024 – *Roe, J., Perkins, M., Furze, L.* (2024). Deepfakes and higher education: A research agenda and scoping review of synthetic media. *Journal of University Teaching and Learning Practice*. 21(10). DOI: 10.53761/2y2np178

Roe, 2024 – *Roe, J.* (2024). AI and the anthropological imagination: Rethinking education in the digital age. *OpenAnthroResearch*. [Electronic resource]. URL: https://openanthroresearch.org/index.php/oarr/preprint/view/399

Rogach et al., 2025 – *Rogach, O., Frolova, E., Faizullin, R.* (2025). Artificial intelligence in students' learning activities. *International Journal of Media and Information Literacy*. 10(2): 197-206. DOI: 10.13187/ijmil.2025.2.197

Romero Moreno, 2024 – *Romero Moreno, F.* (2024). Generative AI and deepfakes: A human rights approach to tackling harmful content. *International Review of Law, Computers & Technology*. 38(3): 297-326.

Rudenkin, Iufereva, 2020 – *Rudenkin, D., Iufereva, A.* (2020). Communication culture of Generation Z: Opportunities and risks for the education system. In *Proceedings of the European Conference on E-Learning (ECEL)*, Kidmore End, United Kingdom. DOI: 10.34190/EEL.20.071

Slabin, 2024 – *Slabin, U.* (2024). Deepfake in science education. Why not? *Journal of Baltic Science Education*. 23(3): 416-420.

Tlili et al., 2023 – *Tlili, A., Shehata, B., Adarkwah, M.A., Bozkurt, A., Hickey, D.T., Huang, R., Agyemang, B.* (2023). What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. *Smart Learning Environments*. 10(15). DOI: 10.1186/s40561-023-00237-x

Torraco, 2005 – *Torraco, R.J.* (2005). Writing integrative literature reviews: Guidelines and examples. *Human Resource Development Review*. 4(3): 356-367. DOI: 10.1177/1534484305278283

Toulgeridis et al., 2025 – *Toulgeridis, A., Efthymiou, F., Kyprianos, K., Kouis, D.* (2025). Mainstream media in Greece: Small-scale bias experiment on information scientists. *International Journal of Media and Information Literacy*. 10(2): 227-249. DOI: 10.13187/ijmil.2025.2.227

Twomey et al., 2023 – *Twomey, J., Ching, D., Aylett, M.P., Quayle, M., Linehan, C., Murphy, G.* (2023). Do deepfake videos undermine our epistemic trust? A thematic analysis of tweets that discuss deepfakes in the Russian invasion of Ukraine. *PLOS ONE*. 18(10): e0291668. DOI: 10.1371/journal.pone.0291668

Vallis et al., 2024 – *Vallis, C., Wilson, S., Gozman, D., Buchanan, J.* (2024). Student perceptions of AI-generated avatars in teaching business ethics: We might not be impressed. *Postdigital Science and Education*. 6(2): 537-555.

Vrindha, Rekha, 2025 – *Vrindha, K., Rekha, R.V.* (2025). Assessing fact-checking sites and sentiment analysis of misinformation. *International Journal of Media and Information Literacy*. 10(2): 250-258. DOI: 10.13187/ijmil.2025.2.250

Weikmann, Lecheler, 2024 – *Weikmann, T., Lecheler, S.* (2024). Cutting through the hype: Understanding the implications of deepfakes for the fact-checking actor-network. *Digital Journalism*. 12(10): 1505-1522. DOI: 10.1080/21670811.2023.2194665

Wendler et al., 2024 – *Wendler, C., Veselovsky, V., Monea, G., West, R.* (2024). Do Llamas work in English? On the latent language of multilingual transformers. *arXiv*. [Electronic resource]. URL: https://arxiv.org/abs/2402.10588

Zlotnikova et al., 2025 – *Zlotnikova, I., Hlomani, H., Mokgetse, T., Bagai, K.* (2025). Establishing ethical standards for GenAI in university education: A roadmap for academic integrity and fairness. *Journal of Information, Communication and Ethics in Society*. 23(2): 188-216. DOI: 10.1108/JICES-07-2024-0104

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Reflection of the Regional Cultural Memory of the Documentary Films as a Means of Developing Creativity in Media Education

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Abstract

This study found that the protection of the features and mechanisms of reflecting the students regional cultural memory in documentary films is a means of developing creativity in media education and video creation. In this investigation, our attention is drawn to the theme of copyright films about regional cultural heritage and the typology of documentary films about its cultural memory. An analysis of the stages of reflecting media cultural space in graduate qualification works of students showed its determinarion by active immersion in cultural heritage, using its reflection in video documentary creation, determining cultural markers are to select a significant topic. The use of video creation in media education contributes to the formation of students' knowledge about culture. It is reflecting cultural memory about in significant themes of the documentary films about the context memory of the region are included in the stages of reflecting media texts in the final qualification works of students with the help of active immersion in educational media environment, in video creation through incarnations of content. The connection of video creation with the interpretation of cultural memory allows students to form ideas about the culture, traditions and history of the region. At the same time, it is important to understand that the respectful attitude of cultural memory about local figures of culture and art allows us to highlight the most significant topics, the cultural heritage of the region in the forms of documentary films.

Keywords: cultural memory of the region, media cultural space, markers of cultural memory, media texts, author's documentary films, mechanisms, video creation, media education, educational media environment, images of cultural heritage.

1. Introduction

The theme of analysing the problem of cultural memory can be used in media education to form students' knowledge of culture, historical events and traditions through the media. This allows them to introduce them to the culture of memory, create conditions for their civil identification, take into account regional features and trends, establish links with the cultural heritage presented in the educational media environment, study how images of cultural heritage affect public perception, and develop the skills of creating copyright documentaries. At the same time, cultural memory falls into the media cultural space, including the media, the Internet.

The study of the features culture perception above led Yuriy Usov actualizes the question to wrote at the end of the twentieth century that the attitude of young people, their "moral convictions

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depend on the everyday uncontrolled influence of educators of mass electronic culture, which causes such painful deviations as video clipism, video mania, video film" (Usov, 1995 : 25).

In contrast to Western standards of media consumption, the Russian model of media education is based on two aspects: on the one hand, it is the education of a culture of perception. based on universal values and, on the other hand, highlighting the most culturally significant images and plots of documentary films on the basis of spiritual values laid down by the authors of the region's documentaries. The use of digital platforms in the form of online excursions to digital museums, virtual tours of historical places, the use of game formats (historical quests, online quizzes) allow you to develop skills in analyzing media projects through an active interpretation of cultural memory. When creating media texts in the form of author's documentaries, videos, blogs, social media projects covering the cultural heritage, cultural events of the region.

The research methodology is based on the integration of the sociocultural theory of media and the media ecological approach including the localization of a media product to the use of markers of cultural memory.

In this regard, I.V. Chelysheva are considers, that "sociocultural theory of media focuses the media not just as channels of data transmission, but as active creators of the cultural environment, forming social consciousness, socialization of the individual and reality itself. Media form "media culture" and construct social reality through filtering information, defining important for society" (Chelysheva, 2016: 15).

According to V.A. Vozchikov, "Ensuring new individual life horizons and prospects allows us to talk about the human-forming function of media education, and more broadly – improving education in general, deepening and expanding its philosophy" (Vozchikov, 2007).

In this context, the another approach of V.V. Savchuk determines the priorities in the spheres of culture. He considers, that "the avalanche-like increasing rate of spread of "media derivatives" is a sign of the times, the essence of which is that the social, cultural and environmental consequences produced by new media, as well as their crossing of the boundaries outlined by old media (and therefore meanings), exceeded the critical mass of innovations and led to a new stage of human development" (Savchuk, 2008: 35).

The media-ecological approach is based on a synthesis of philosophical and cultural views. So, academician V.I. Vernadsky considered the ecology of culture as a necessary basis for the transition of the biosphere to the noosphere – the sphere of reason. Culture, in his opinion, should harmonize the activities of mankind with the laws of nature, turning scientific thought into the main geological force that transforms the planet consciously and carefully. Culture is an ethical attitude to nature, capable of preventing environmental catastrophe through the reasonable management of biosphere processes (Vernadsky, 1991).

In this vein, he substantiated the ecology of culture D.S. Likhachev, who connected it with material and spiritual values. He believed that "culture is also a home for man, and a home created by man himself. This includes a wide variety of phenomena: materially embodied and embodied in the form of ideas and various kinds of spiritual values" (Likhachev, 1993: 37).

As a result of the spread of these ideas to the field of media education, it is important to spread these ideas to the concept of media ecology of N. Khilko, which is considered as a means of forming a culture of media perception and safe interaction with the screen environment (Khilko, 2005).

Sociocultural approach to cultural memory: and the harmful effects of social media contained in the following works. This approach is based on a study examines the development for Initial Literacy «as an integrative pedagogical approach designed to strengthen foundational reading literacy by combining phonological instruction, learner engagement, and sociocultural support» (Iswara et al.: 25). It is spreading to cultural memory.

However, the socio-cultural approach to cultural memory explores not only positive features, but also social consequences. Concerns over the harmful effects of social media have directed.

2. Materials and methods

The theoretical material of the study was articles by Russian and foreign publications on media education in the field of animation pedagogy and audience culture. The empirical material for the article was the formation of cultural memory for student directors in the Omsk region is the website of the Omsk regional public charitable foundation "Culture of Siberia." Research methods are content analysis of site content, systemic and comparative methods of pedagogical research.

3. Discussion

The main aspects of research in Cultural Memory in Media education are considered by a number of Russian and foreign scientists. The special attention of modern researchers is riveted to the analysis of the possibilities of critical thinking for Cultural Memory. For example, Khathayut, Phanlapa notes the crucial role in this process not only "basic strategies, primarily those associated with lower-order thinking skills (e.g., highlighting key words and rereading for context comprehension), while neglecting higher-order strategies (e.g., evaluating credibility or synthesizing ideas)" (Khathayut, 2025: 42). This position may be relevant for the development of students' thinking.

Considering the urbanization of the general strategy, "the integration from five dimensions – concept, design, operation, professionalism and technology – and construct a new public space model featuring "healing priority, art empowerment" for cultural memory (Li et al., 2026: 6). At the same time Cho et al. are develop "current conceptions of media literacy are frequently based on mass media, focusing on the analysis of common content and evaluation of the content using common values" (Cho et al., 2022: 941).

In this regard, a number of scientists have rightly established a connection between literacy and the competence of students. In particular, some scientists revealed various individual, household, and school-related factors contributing to reading competence (Yoon et al., 2026).

Aspect related to using new media and visual art forms to preserve cultural memory in video analyze is considered by Lindsay Nelson. Pointing to new boundaries in the creation and consumption of media products, the author notes "videos turn passive forms of media interactive" (Nelson, 2025). In another of his articles, the author suggests "to focus less on the study of "things" and more on the study of "the discursive basis on which they would have been created" (Nelson, 2012: 149). The connection between creativity and cultural reflection established by scientists is more than effective.

Active features video perception technologies using standards and artificial intelligence.

Erdi Okan Yılmaz associate the effectiveness of creativity with the status of participation students in the virtual class, claiming that "the average achievement scores of the students who watched course videos synchronously and asynchronously were significantly higher than those who watched only synchronously or asynchronously and did not watch at all" (Yılmaz, 2025: 1).

In this context Pitoňáková et al. pay attention to *artificial intelligence*, "its current applications and trends, focusing on cases where artific intelligence is complementing human creativity rather than replacing it" (Pitoňáková et al., 2025: 64).

The aspect of the problem under *teaching technology is in the context of cultural heritage* and cultural memory: historical figures, unique, fates of languages and communities; emotion transfer technique, challenging gender stereotypes. Within the framework of this article, it is planned to study the influence of the auteur cinema on cultural heritage. In this direction "approaches to teaching film in higher education, with a focus on centering historically marginalized identities, languages, and communities" (Franco et al., 2026).

A similar point of view is in other study: "The unique fates and professional achievements or failures of public figures, including popular figures in the music industry. In fact, we believe that the *representation of reality* in the media reality (represented by audiovisual images of the described genre) is modified to a certain extent" (Rusňáková, Kvetanová, 2025: 4).

In the same direction, Eliot Bessette demonstrates an unusual technique for conveying characters' emotions, which I call emotional point of view (POV) (Bessette, 2016), which, on our perchis, able to revive Istric memory.

Another scientists have convincingly proved that joint creativity can overcome different stereotypes (Wong et al.). Key role in modern pedagogical concepts is plays the study on the *integration of cultural heritage* in the education of children. Putting a fair emphasis on creativity, he argues "focuses on the cognitive development characteristics of children, and designs a teaching practice activity that integrates field visits to cultural heritage, interactive experiences of digital products, handmade cultural and creative products, and storytelling of cultural heritage" (Zhu, 2025: 498).

Formation of communication *virtual reality and documentary images* in cultural memory is considered by others scientists who prove that "the potential of virtual reality (VR) technology as a novel form of immersive journalistic storytelling for generating interest, enhancing reach, and boosting credibility ratings" (Wehden et al., 2026: 1).

Cultural heritage, among other things, inevitably includes "the protection of the culture of the past: the restoration in memory of forgotten names, facts, events, traditions of national cultures, cultural experience of previous generations" (Sablukova, 2004: 67).

Based on the above, it should be understood that cultural heritage is objectively associated with cultural memory in terms of its intangible component. In the first approximation, it is objectively associated with the preservation of cultural heritage in the process of integrating its meanings with society. In this regard, N.U. Yarychev, who believes that "cultural memory is a mechanism for preserving, broadcasting and updating meanings, values and social experience, ensuring the identity of the group through the connection of times" (Yarychev, 2022: 11).

In addition, one cannot but reckon with the fact that cultural memory is based on the interpretation of past events in a new modern context. Therefore, in media education aimed at preserving cultural memory, one should rely on the position of Yu.N. Usov that it is necessary to "develop the aesthetic consciousness of the student: the skills of artistic perception and interpretation of its results, aesthetic assessment of audiovisual information" (Usov, 1998: 15).

It should be noted that in modern conditions, as in the 1990s, the scientist's "prospect of using beneficial educational opportunities in the development of intelligence and emotions based on media culture: various types of thinking, artistic and creative activity, perception, interpretation skills, aesthetic assessment of diverse media texts" (Usov, 1995: 25).

From here it becomes clear the connection of media educational activities with the study of the cultural and educational environment of the region. However, it should be noted that this study, when entering the cultural memory of heritage in the process of video creation, cannot but be combined with the actualization of images.

It is impossible not to note the role of the educational potential of documentary cinema, which is written by S.S. Sokolova and N.A. Simbirtseva. Indeed, the images of documentary cinema are effective due to its photographicity and reliability, which requires "indispensable comprehension and inducement to dialogue" (Sokolova, Simbirtseva, 2023: 171).

4. Results

The main conditions of video creation, in our opinion, pass, firstly, through the actualization of images of cultural heritage in video creation, and secondly, through the fixation of the cultural memory of the region in the appropriate markers. As a result, an actual author's documentary is created, in which the media cultural space forms a special educational media environment. Here the mechanisms of reflecting cultural memory work: the embodiment of images, the reconstruction of the picture of the world, the identification of content, the actualization of significant events and personalities, the revival of interest in the forgotten facts of culture, the reconstruction of the lost heritage. Hence, the updated theme of films can be traced: glorified folk art groups, significant events in the region, outstanding people of the region, heroes of labor, anniversaries in the field of culture (Figure 1).

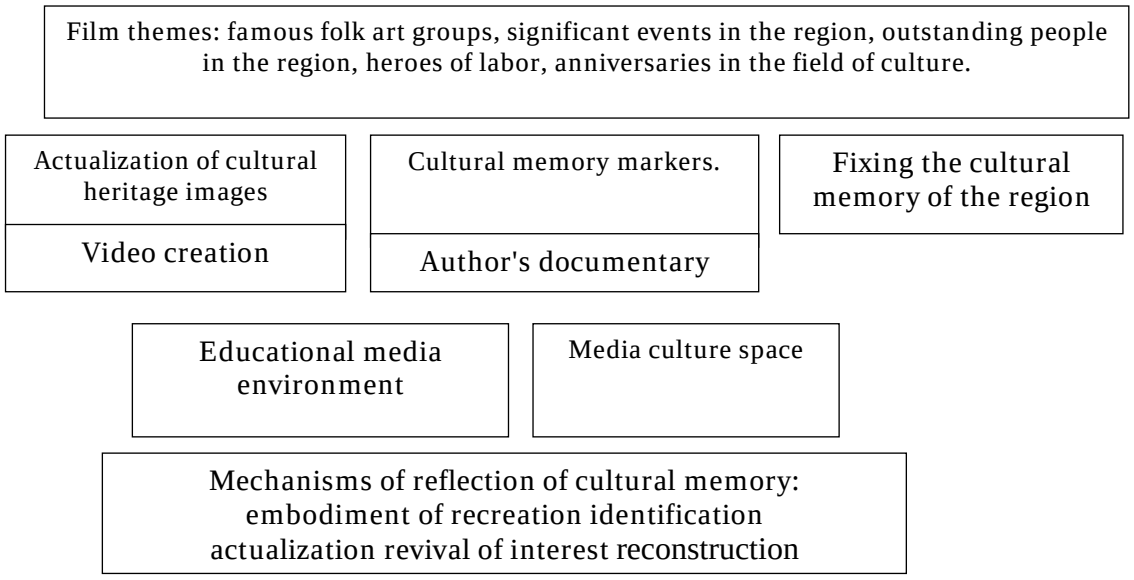

Fig. 1. Mechanisms for reflecting cultural memory in the development of video creation in media education

The most achievements a means of video reflection of cultural memory in film and television is documentary forms. The sources of these works are data from archives and Internet sites. The material for this kind of works is the site "Culture of Siberia," within the framework of which the project "Pride of the Omsk Land" is reflected. As they say on the site page, "the goal of the project is to create documentaries about people, prominent representatives of the Omsk region, enterprises, organizations that have made a significant contribution to the development of the Omsk region" (Genova, 2025).

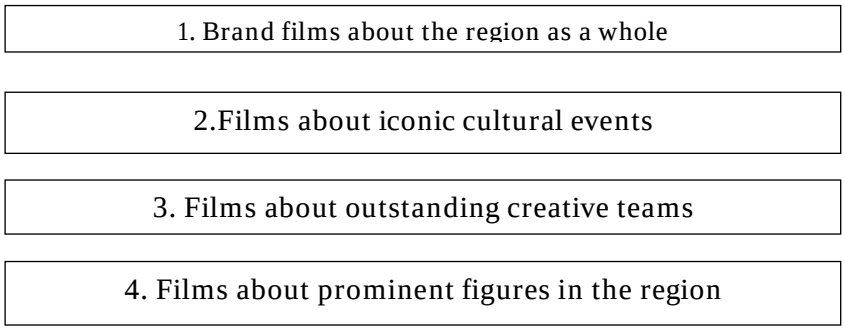

Fig. 2. Typology of author films about the cultural memory of the region in importance

The site (Video..., 2026) posted video content of regional cultural heritage. His plots reflect: branded images of the history and culture of Omsk associated with F.M. Dostoevsky, significant events of the city and the region, about the festival "Soul of Russia," about numerous creative teams. Films by V. Tsyganov meet this theme: "Pride of the Omsk Land"; about the Krutinsky folk choir, about the theater of children's song poetry, a film about the history of the Irtysh State Television and Radio Broadcasting Company). Among the outstanding people are: politicians, cultural and art figures, whose fates are connected with the city and the region (S. Manyakin, L. Polishchuk, V. Dvorzhetsky, L. Ermolaeva, V. Kudrinsky, I. Trusova), legendary personalities (N. Genova), who have a trace in the culture of the region and are part of the national cultural heritage. Creative value for students take on V. Tsyganov's film Pride of the Omsk Land; about the Krutinsky Folk Choir, about the theater of children's song poetry, a film about the history of the State Television and Radio Company "Irtysh").

Based on local history knowledge, students of the specialty "multimedia directing" and the profile "film, photo, video creation" strive to create documentary video images based on significant events in the region, the creative path of prominent cultural figures. At the same time, they reconstruct memorable events, images of people of art, based on the collection of images and facts of the history and culture of the region, overcoming oblivion.

To this end, within the framework of intergenerational communication, students use: books about prominent people of the region, testimonies of "living Siberia": memories, memorials, relics. Events are held in honor of outstanding fellow countrymen who revive history and become evidence of cultural memory, its actualization in society.

Taking into account the above, four stages of reflection of cultural memory in graduate qualification works of students can be determined.

At the first stage, there is an active immersion in cultural memory through acquaintance with the materials of the site, videos, master classes of filmmakers, outstanding documentary filmmakers. At the second stage, the use of mechanisms for reflecting cultural memory is introduced: its actualization in video images, the revival of interest in the content of videos and films, then – the initiation of the embodiment of the content, the study of the possibilities of recreating the appearance, atmosphere, situation of the past, then – identification through contact images, in some cases – this is the reconstruction of events. It should be noted that in approaching the third stage, the standards of perception of cultural memory, which set the content of documentaries shown to students, are beginning to play an increasing role in student video creation.

This concept is based on its interpretation by S.V. Pogodina, who claims that "the standards of perception of images in creativity are fixed in culture and consciousness – stable sensory and semantic models that serve as the language of art and a tool of cognition, allowing the creator to convey and the viewer to read meanings, through comparison with familiar stereotyping patterns" (Pogodina, 2009: 17).

Such examples are documentary author films that embody the cultural memory of the region.

We agree with the position of J.D. Dzhartybaev, B.F. Akhanov, S.M. Zhanbyrshiev that concluded that in the work of students, these standards of perception of images are internal criteria, structures and representations formed in the learning process that guide an active artistic vision, ensuring objectivity, integrity and semantic interpretation of the created works (Dzhartybaeva et al., 2023).

At the third stage, all previous steps determine the interaction of cultural memory perception standards and perception markers, the corresponding cultural memory markers, which then determines the choice of the topic and significance of the final qualification work: region, event, team, personality (Figure 3).

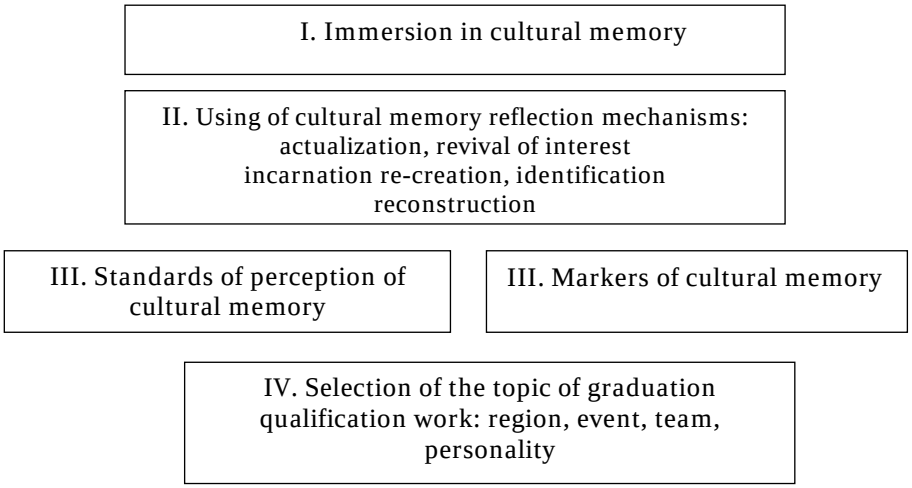

Fig. 3. Stages of reflection of cultural memory in graduate qualification works of students

5. Conclusion

The use of cultural memory topics in media education contributes to the formation of students' knowledge about culture, historical events and traditions through the media and the interpretation mechanism. It allows you to introduce them to the culture of memory, create conditions for their civil identification, taking into account regional characteristics and trends. At the same time, the most important mechanism is to establish a connection with the cultural heritage presented in the educational media environment, which is connected with the media cultural space on the Internet.

Significant themes of author's films about regional cultural heritage and the typology of documentaries about regional cultural memory are included in the stages of reflecting cultural memory in graduate qualification works of students. With the help of active immersion in cultural memory, the use of mechanisms of its reflection in the creation of video through the embodiment of content, the merging of markers of cultural memory with the standards of its perception, the significance of choosing the topic of graduation qualification work is justified.

At the same time, one cannot but reckon with the fact that cultural memory is based on the interpretation of past events in a new modern context. Thus, the features of reflecting regional cultural memory contribute to the personal development of students by means of media education. Featured topics themes of author's films about regional cultural heritage and the typology of documentaries about the regional cultural memory are included in the stages of reflecting cultural memory in the final qualification works of students. With the help of active immersion in cultural memory, using mechanisms of its reflection in video creation through incarnations of content, merging markers of cultural memory with standards of its perception, the significance of choosing the topic of graduation qualification work is substantiated.

References

Bessette, 2016 – *Bessette, E.* (2016). Emotional point of view in The Texas Chain saw massacre. *Journal of Cinema and Media Studies.* 62(1): 36-59. [Electronic resource]. URL: https://www.jstor.org/stable/27395719

Chelysheva, 2016 – *Chelysheva, I.V.* (2016). Sociokul'turnoe pole media: real'nost', kommunikaciya, chelovek [Sociocultural field of media: reality, communication, person]. Moscow. [in Russian]

Cho et al., 2022 – *Cho, H., Cannon, J., Lopez, R., Li, W.* (2022). Social media literacy: A conceptual framework. *New Media & Society*. 26(2): 941-960. DOI: https://doi.org/10.1177/14614448211068530

Dzhartybaeva et al., 2023 – *Dzhartybaeva, Zh.D., Akhanov, B.F., Zhanbyrshiev, S.M.* (2023). Znachenie hudozhestvennyh etalonov v tvorcheskom stanovlenii doshkol'nikov. [Development of artistic perception among students of art and pedagogical specialties in drawing classes]. *Intellectual potential of the XXI century: stages of knowledge.* 12: 23-46. [in Russian]

Franco, Farrell, 2026 – *Franco, B.V., Farrell, M.L.* (2026). Focus introduction: decolonizing film studies curricula: approaches through Latin American cinemas. *JCMS: Journal of Cinema and Media Studies.* 65(2):138-142. DOI: https://dx.doi.org/10.1353/cj.2025.a982206

Genova, 2025 – *Genova, N.M.* (2025). Preambula sajta [Preamble of the site]. Omsk. [Electronic resource]. URL: http: kulturasibiri [in Russian]

Iswara, et al. – *Iswara, P.D., Supriyadi, T., Ruziyev, O.A., Kodirova, F.U., Qodirov, I., Safiyev, M.A.* (2026). Effectiveness of the READI model in foundational reading literacy across diverse primary education contexts. *International Journal of Learning, Teaching and Educational Research*. 25(2): 25-43.

Khathayut, 2025 – *Khathayut, P.* (2025). Investigating critical reading strategies and challenges among Thai EFL university students: a mixed-methods study. *International Journal of Learning Teaching and Educational Research*. 24(12): 18-42. DOI: 10.26803/ijlter.24.12.2

Khilko, 2005 – *Khilko, N.F.* (2005). Ekologiya audiovizual'nogo tvorchestva. [Ecology of audiovisual creativity]. Omsk. [in Russian]

Li et al., 2026 – *Li, Z., Wang, X., Ding, H.* (2026). Research on the art therapy mechanism of urban public spaces. *Highlights in Art and Design.* 13(1): 6-8. DOI: https://doi.org/10.54097/p4qmhn54

Likhachev, 1993 – *Likhachev, D.S.* (1993). Ekologiya kul'tury [Ecology of culture]. [Electronic resource]. URL: https://www.lihachev.ru/lihachev/bibliography/pdf_2023/1391.pdf [in Russian]

Nelson, 2012 – *Nelson, L.* (2012). Review of visions of Japanese modernity: Articulations of Cinema, Nation, and Spectatorship: 1895-1925. *Discourse.* 34(1): 149-152. [Electronic resource]. URL: https://muse.jhu.edu/article/503910

Nelson, 2025 – *Nelson, L.* (2025). From analog to interactive haunting: Fake Documentary "Q" and the Remediation of Japanese Horror". *JCMS: Journal of Cinema and Media Studies.* 65(2): 51-70. DOI: https://dx.doi.org/10.1353/cj.2025.a98220151-70.10.1353/cj.2025.a982201

Pitoňáková, 2025 – *Pitoňáková, S., Pál, D., Kubala, M.* (2025). Technology and creativity: how ai is changing work in the media industry. *Communication Today*. 16(1): 64-77.

Pogodina, 2009 – *Pogodina, S.V.* (2009). Znachenie hudozhestvennyh etalonov v tvorcheskom stanovlenii doshkol'nikov [The importance of artistic standards in the creative formation of preschoolers]. *Bulletin of Moscow State Pedagogical University*. 1: 17-20. [in Russian]

Rusňáková, Kvetanová, 2025 – *Rusňáková, L. , Kvetanová, Z.* (2025). The film industry and its critical reflections in biographical dramas. *Communication today*. 16(1.1): 4-24. DOI: https://doi.org/10.34135/communicationtoday

Sablukova, 2004 – *Sablukova, L.I.* (2004). Ekologiya duhovnoj kul'tury v shkole kinozritelya (po materialam deyatel'nosti kinocentrov Omskoj oblasti [Ecology of spiritual culture at the school of the cinema viewer (based on the materials of the activities of the cinema centers of the Omsk region]. *Ecology of culture and creativity in screen media education*. Omsk: 66-67. [in Russian]

Savchuk, 2008 – *Savchuk, V.V.* (2008). Mediafilosofiya: formirovanie discipliny [Media philosophy: formation of discipline]. *Mediafilosofiya: osnovnye problemy i koncepcii.* St. Petersburg: 7-40. [in Russian].

Sokolova, Simbirtseva, 2023 – *Sokolova, S.S., Simbirtseva, N.* (2023). Obrazovatel'nyj potencial dokumental'nogo kino [The educational potential of documentary films]. *Sovremennoe sostoyanie mediaobrazovaniya*. Rostov-on-Don. [in Russian]

Tinák, Gálik, 2026 – *Tinák, T., Gálik, S.* (2026). On the epistemological and ethical conditions of information in journalism. *Communication Today*. 2026. 17(1): 26-36.

Usov, 1995 – *Usov, Yu.N.* (1995). Mediaobrazovanie v Rossii (na materiale ekrannyh iskusstv) [Media education in Russia (based on screen arts)]. Moscow. [in Russian]

Usov, 1998 – *Usov, Yu.N.* (1998). Programma uchebnogo kursa “Osnovy ekrannoj kul'tury” [Program of the training course "Fundamentals of screen culture"]: 29-45. [in Russian]

Vernadsky, 1991 – *Vernadsky, V.I.* (1991). Biosfera i noosfera [Biosphere and noosphere]. Moscow. [in Russian]

Videos..., 2026 – Videozapisi Tvorcheskogo centra [Videos of the Creative Center]. [Electronic resource]. URL: https://vkvideo.ru/@kulturasibiriproducer [in Russian]

Vozchikov, 2007 – *Vozchikov, V.A.* (2007). Filosofiya obrazovaniya i mediakul'tura informacionnogo obshchestva [Philosophy of education and media culture of the information society]. Ph.D. Dis. St. Petersburg. [in Russian]

Wehden et al., 2026 – *Wehden, L.O., Küpper, L.M., Reer, F., Quandt, T.* (2026). News from every angle: On the potential of implementing virtual reality technology in journalistic contexts. *Mass Communication and Society*. 1-23. DOI: https://doi.org/10.1080/15205436.2025.2609281

Wong et al., 2026 – *Wong, B., Copsey-Blake, M., Kemp, P.E.J., Hamer, J.M.M.* (2026). Marketing computing: how school branding reinforces or challenges gender stereotypes. *Cambridge Journal of Education*. 1-18. DOI: https://doi.org/10.1080/0305764X.2026.2624676

Yarychev, 2022 – *Yarychev, N.U.* (2022). Kul'turnaya pamyat' kak ponyatie i yavlenie: osnovaniya konceptualizacii [Cultural memory as a concept and phenomenon: the foundations of conceptualization]. *Culture and art*. 12: 11-18. [in Russian]

Yılmaz, 2025 – *Yılmaz, E.O.* (2025). The effect of distance education students' virtual classroom participation status on their course achievement. *Participatory educational research*. 12(4): 1-18. DOI: https://doi.org/10.17275/per.25.46.12.4

Yoon et al., 2026 – *Yoon, S., Kim, J., Hong, S.* (2026). Students’ reading enjoyment as a multilevel mediator of the relationship between parental reading enjoyment, teachers’ stimulation of reading, ICT factors, and reading literacy. *International Journal of Educational Research Open*. 10. 100554. DOI: https://doi.org/10.1016/j.ijedro.2025.100554

Zhu et al., 2025 – *Zhu, Z., Mo, Y., Fauzi, N., Liu, D.* (2025). An initial study on integrating cultural heritage into children’s education: The case of stone carvings from the southern dynasties in China. *International Journal of Education and Humanities*. 5(3): 498-508. DOI: https://doi.org/10.58557/(ijeh).v5i3.33

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Media Literacy and University Students' Perceptions of Online Media Credibility

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Abstract

The rise in the popularity of digital media among users has revolutionized both the ways of accessing information by university students and the problems related to misinformation and the credibility of online sources. As a result, this paper is aimed at examining students' views on media credibility in the light of media literacy. Specifically, the use of computational text analysis and sentiment analysis will be employed in the study to identify the main patterns in students' opinions about online media credibility revealed from written answers provided to an open-ended questionnaire. Data was collected from 320 university students who were attending public and private universities located in Lahore, Pakistan. Students' attitudes towards digital information and media literacy, verifying the information, were examined using an open-ended survey question. In terms of data analysis, word frequency analysis, sentiment analysis, and thematic analysis have been employed. The findings of the study suggest that university students tend to link online media with notions like trustworthiness, information verification, and misinformation. Regarding the sentiments associated with the topic of online media credibility, results of sentiment analysis show that there are slightly more positive than negative statements, but a significant part of respondents still consider problems related to fake news and misinformation. At the same time, some common topics revealed during thematic analysis include issues related to trustworthy sources, misinformation, dependence on social media, and fact-checking practices.

Keywords: media literacy, online media credibility, sentiment analysis, digital media, media education.

1. Introduction

With the fast growth of information technology, the processes of information acquisition, distribution, and communication have undergone a revolutionary transformation. In today's digital environment, information and communication are largely done through social media, news websites, blogs, and even videos available on certain websites (Saad, Seffah, 2025). Despite the significant increase in the amount of information available to users in such digital environments, problems arise concerning information authenticity and the spread of misleading information on social media. This problem is so severe that it raises concerns about the credibility of digital media and the individual's ability to critically evaluate the reliability of digital information resources (Fedorov, Levitskaya, 2015; Hobbs, Coiro, 2019; McDougall, 2019; Tinák, Gálik, 2026). One way of addressing the problems mentioned above is by promoting media literacy. The concept of media literacy implies individuals' ability to access, analyze, evaluate, and generate messages in a variety

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of media (Hobbs, 2010). Such abilities include a number of skills that can help people interpret the information presented to them, identify potential biases in media content, and critically assess the reliability of information sources. Media literacy skills are important in the educational process as well since they contribute to the development of an informed perspective among learners.

Higher education institutions play a vital role in helping their students develop critical digital literacy skills. Today universities are required to teach students to evaluate media messages in order to understand their underlying meanings, consider the social-political context of these messages and act responsibly while working with various digital technologies. Thus, media literacy education at universities aims to teach students the skills necessary to identify the reliability and authenticity of the messages communicated in the media. According to scholars, media literacy education does not only imply teaching students some basic technical competencies in relation to information and its processing; it also involves a critical evaluation of media production and distribution processes (Buckingham, 2007). As such, media literacy education implies developing students' ability to comprehend how media messages are constructed and how audiences process these messages and their meanings (Buckingham, 2007). In the age of digital communication, such skills have acquired particular importance. At the same time, media literacy helps students become better critical thinkers and digital citizens who will be able to analyze the information available to them and detect any misleading content (Orhan, 2023). Therefore, media literacy education has become increasingly relevant at universities to help prepare students for life in the digital age. Online media credibility has attracted increasing attention lately. Online media credibility is defined as the degree to which consumers trust the media and believe it to be truthful and reliable (Feldman et al., 2014). In digital contexts, where everyone can create content and share it with others, evaluating online sources' credibility poses difficulties for individuals.

Some scientific researchers have found out that the quick spreading of misinformation impacts on the shaping of people's opinion, social attitudes, and even decreases trust towards legitimate information sources (Voitovych et al., 2025). In particular, university students, who are widely exposed to the Internet and its information resources, face problems connected with misinformation. Not having developed media literacy, they can hardly evaluate information sources' reliability or be able to recognize fake or biased information. The popularity of fake news and misinformation in modern society is explained by the algorithmic features of social media, which prioritize the promotion of viral content over credible one (Bonaki et al., 2025). Therefore, helping university students to develop critical evaluation of online media credibility has become one of the main issues in media education research.

The development of computational methods and natural language processing has helped scientists to investigate public opinion or attitudes using big textual data analysis. The term "sentiment analysis" or "opinion mining" refers to a special type of computer technique aimed at detecting, identifying, and categorizing emotional or opinional attitudes towards certain topics expressed in texts (Zamir et al., 2024). Analyzing the patterns of language use in texts, the researchers are capable to evaluate their author's sentiments and attitudes toward certain themes. Today, this methodology has been widely used in educational research when exploring students' attitudes towards different aspects of university life, educational technologies, or digital media, for instance. Being one of the newest techniques of textual data evaluation, sentiment analysis helps to explore how the students perceive certain pieces of text and evaluate them. Thus, this tool has become useful for evaluating the learners' interaction with the online media content. Besides, this methodology represents an innovative methodological perspective allowing us to investigate attitudes towards the credibility of online media. Analyzing the data obtained during the students' discussion or writing, we can find out more about their attitudes and perception of online media. With the continuous increase in digital communications' textual output, the role of sentiment analysis becomes more significant in studying students' interactions with media.

Research Gap: while there is now a considerable number of studies on media literacy and digital citizenship amongst students, only little effort has been dedicated to exploring how students view the credibility of online media using computational approaches such as sentiment analysis. Previous literature mostly centered around developing assessments that could measure students' media literacy abilities via survey instruments and experiments. However, only a handful of studies considered examining students' attitudes and perceptions concerning media literacy based on textual analysis. On top of that, although media literacy was stressed in several studies as an essential tool against fake news, there is still a gap in knowledge when it comes to exploring how

university students perceive the credibility of online media. By analyzing students' sentiments towards online media, it would be possible to gain additional knowledge about students' media literacy activities and assess their ability to evaluate online content.

Research Objectives:

– To explore university students' perceptions of the credibility of online media sources.

– To analyze the sentiments expressed by university students toward online media information using sentiment analysis techniques.

– To examine how university students evaluate the reliability and trustworthiness of online media content.

Research Questions: based on the objectives of the study, the following research questions guide this investigation:

– RQ1: What are university students' perceptions of online media credibility?

– RQ2: What sentiments do students express toward online media information?

– RQ3: How do students evaluate the reliability of online media sources?

Literature Review: in today's digital age, media literacy is a crucial skill for all individuals who continuously engage with various media and digital forms of information. Generally, media literacy is viewed as an individual's ability to access, analyze, evaluate, and create media messages. According to R. Hobbs (Hobbs, 2010), media literacy consists of a collection of competencies that help individuals critically examine media content, comprehend the processes involved in creating media messages, and contextualize media messages within their specific social and cultural frameworks. The relevance of media literacy skills is particularly pronounced in the current digital environment, where media content is easily accessible and disseminated online. Scholars have stressed that media literacy skills extend beyond technical knowledge of media usage but also include higher-order critical thinking skills needed to evaluate and make sense of media content.

D. Buckingham (Buckingham, 2003) describes media literacy as an individual's ability to comprehend the creation, interpretation, and representation of media content. In light of this definition, media literacy instruction empowers individuals to assess the credibility, bias, and purpose of media messages. Additionally, media literacy entails knowledge of how institutional and technological media structures impact information creation and distribution (Potter, 2013). Many media literacy frameworks emphasize the significance of critical examination, reflection, and active participation in digital media spaces. These frameworks place emphasis on the value of equipping individuals with the skills and knowledge needed to be active participants in digital media settings. As digital communication technologies advance, media literacy has become a key aspect of education systems worldwide.

Media Literacy in Higher Education: higher education establishments play an important role in providing media literacy competence development opportunities to students. The integration of media literacy and digital literacy in the curricula of higher education institutions is becoming a trend as universities try to prepare students to participate in the digitally mediated world (Georgopoulou et al., 2025). Media literacy education in higher education aims at teaching students the skills needed to analytically evaluate media content and detect cases of disinformation and misrepresentation. University research demonstrates that the majority of students use digital media resources like social networks, blogs, and news web pages to obtain the necessary information for educational and personal needs. Hence, higher education institutions should teach their students the competencies for evaluating the validity and reliability of information resources.

Hobbs and Coiro (Hobbs, Coiro 2019) state that media literacy education promotes critical analysis and reflection, giving students the opportunity to analyze digital media content adequately and make the right decisions. Media literacy education is also essential for developing digital citizenship, which is the practice of being responsible and ethically correct when participating in various digital environments. Digital citizenship includes issues like internet safety, misinformation, privacy, and ethical communication, among other things.

According to Von Gillern et al. (Von Gillern et al., 2022), media literacy instruction promotes the acquisition of competencies needed to be a responsible member of digital communities and conducts an analysis of media messages critically. Additionally, multiple studies emphasize the necessity of promoting media literacy programs at higher education institutions due to the problem of digital misinformation and manipulation. Educational interventions that contribute to media literacy help students develop skills needed to analyze and evaluate online information sources

adequately and detect misleading information. Therefore, media literacy education has become crucial in developing students' competencies in higher education environments.

Online Media Credibility: credibility of media sources can be defined as the extent to which the perceived information sources are deemed trustworthy, reliable, and accurate. When it comes to digital media, assessing the credibility of online information becomes especially problematic because of the abundance of sources. Any individual can create or share information online, making it challenging for people to determine whether the information they come across is accurate and credible (Aïmeur et al., 2023). The advent of social media platforms and changes in information dissemination practices has added another layer to the issue. While online information is shared instantly, it leads to the prevalence of disinformation or even outright fake news. Recent research suggests that one cannot underestimate the problem of misinformation or fake news in the modern media landscape; such information affects people's opinions and shapes their social attitudes (McDougall, 2019).

College or university students that use digital media to study or entertain themselves are among the most exposed groups. Many studies highlight problems faced by young adults and adolescents in assessing the credibility of online information; according to Orhan (Orhan, 2023), the ability of students to detect disinformation and fake news is associated with their levels of new media literacy and critical thinking skills. Students who possess more developed media literacy skills are better able to assess online information for its credibility. Furthermore, academics note that social media and other digital platforms' algorithms lead to the proliferation of disinformation because of their tendency to prioritize high engagement posts regardless of their accuracy. Thus, in order to navigate through the plethora of information sources online, students need to develop their media literacy skills.

Sentiment Analysis in Education Research: sentiment analysis or opinion mining refers to a computational technique that helps to analyze language and detect emotional/attitudinal expressions in text data (Hemmatian, Sohrabi, 2019). Sentiment analysis is commonly employed in the realm of NLP, which aims to enable computers to understand human language. Through sentiment analysis, text data is categorized into sentiments like negative, positive, or neutral depending on language patterns. In recent years, sentiment analysis has gained popularity among scholars interested in social media research, marketing studies, and political communication research. With the help of machine learning and new technologies for NLP, researchers have started to work with extensive textual datasets.

According to Liu (Liu, 2012), sentiment analysis allows researchers to explore how individuals express their views through language. In recent years, many educational researchers have used sentiment analysis techniques to examine students' perceptions of various phenomena related to educational experiences, technologies, and processes of communication. For instance, by analyzing students' texts, including comments, discussions, or social media interactions, scholars may learn more about students' attitudes toward particular issues.

According to Zamir et al. (Zamir et al., 2024), researchers can apply sentiment analysis based on machine learning algorithms in order to study digital communication. Thus, scholars can identify language patterns that reflect public opinions regarding media and the ways people consume digital content. In relation to media education research, sentiment analysis can contribute to the investigation of students' opinions about various online media and their critical evaluation of sources. Indeed, students' texts allow researchers to assess their attitudes toward media content and their critical thinking skills while evaluating information sources.

Previous Studies: many studies have highlighted the importance of media literacy in helping individuals discern media contents and fake information. Researchers have also analyzed the connection between media literacy and detecting fake news. For instance, Orhan (Orhan, 2023) revealed that university students who had high levels of new media literacy and critical thinking skills performed better when evaluating social media contents. Other researches have shown that media literacy programs can help students become more knowledgeable about misinformation and enhance their skills in assessing online information resources. Apart from media literacy research, several studies have utilized sentiment analysis in educational research (Sweta, 2024). For example, researchers have used sentiment analysis to examine student reviews and opinions expressed in online education discussions, forums, and social media. The findings show that sentiment analysis is an effective tool for gaining insights into students' perspectives and feelings towards digital learning environments and resources. While sentiment analysis and media literacy

have been extensively studied, very few scholars have applied these tools together in media education research. Current studies typically use surveys and experiments in evaluating media literacy skills. Therefore, integrating sentiment analysis into media education research offers a new and innovative methodological framework for exploring students' attitudes towards digital information sources and their credibility.

Conceptual Framework: based on the literature reviewed, the following conceptual framework is used for this study, which focuses on the relationship between media literacy, the evaluation of the credibility of online media content, and the sentiments of students towards digital media information. In particular, media literacy is considered a competence that allows students to think critically about media messages. Hence, the more literate students become in terms of media knowledge, the better their capacity to assess the credibility of online media resources is supposed to be. Assessment of online media content credibility implies analysis of the reliability of the media source, the accuracy of the information provided by the latter, as well as possible biases within media content (Viviani, Pasi, 2017).

As soon as the evaluation takes place, students form certain attitudes towards media information. These attitudes might be positive, negative, or neutral. Thus, sentiment analysis becomes an analytical tool for the research in question to explore students' attitudes towards online media resources and their assessment based on media literacy skills.

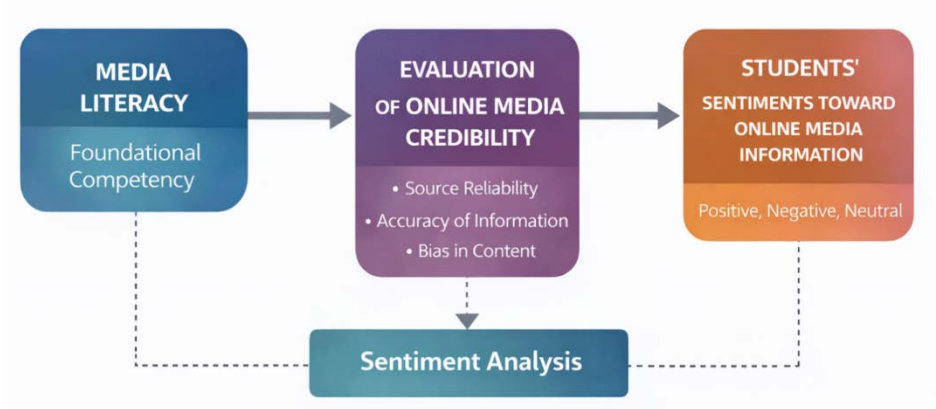

Fig. 1. Conceptual framework of the study

2. Materials and methods

The use of computational text analysis was employed in this study to examine university students' perceptions of online media credibility. Computational text analysis is an effective method for analyzing textual data and identifying patterns related to opinions and sentiments among the study participants (Mettler, 2025). Sentiment analysis and thematic analysis were applied in this study to uncover students' attitudes towards the credibility of online media. Sentiment analysis is one of the NLP techniques that help identify and categorize texts based on their emotions, such as negative, positive, or neutral sentiments (Sweta, 2024). The application of sentiment analysis on textual data collected through the survey will assist in understanding the emotional basis of the students' perceptions about the credibility of online media. Moreover, word frequency analysis and thematic analysis have been used to discover dominant patterns, commonly used terms, and significant themes emerging from textual data.

Participants: the subjects of the study comprised university students studying at higher education institutes in Lahore, Pakistan. The city was chosen as the study context due to its rich presence of public and private universities, ensuring that a broad group of students could be accessed for the study, based on their differing educational backgrounds and exposure to digital media. Altogether, 320 students took part in the study. The sample of participants was chosen based on a convenience sampling approach. This method is often applied when conducting exploratory studies among student groups (Obilor, 2013). The sample covered students attending both private and public universities in order to include participants in varying educational contexts and with differing exposure to digital media. Participants were sourced from several prominent universities in Lahore, namely the University of the Punjab, Lahore College for Women University, and a few private universities in the area. The selection criteria stipulated that only those students

should take part in research who were actively enrolled in undergraduate and postgraduate studies and regularly consumed information through digital media.

Data Collection: the data collection method entailed the use of an open questionnaire meant to provide students' views concerning the credibility of media online and methods employed in assessing online information (Maor, Fraser, 2005). Open questions were employed since they permit individuals to express their perspectives freely and thus yield qualitative responses that can be subjected to sentiment and theme analysis. These questionnaires were then sent out to students either using online platforms or personal contacts at certain universities. It is important to mention that participation in this survey was voluntary, and participants were made aware of the purpose of this research before answering the questionnaire. The open questions sought to understand students' perspective on issues related to online media, trust in online information, and verification procedures. Some of the questions asked were:

How credible do you believe information available on online media platforms (such as social media and news websites) is? Please explain your opinion.

What factors make you trust or distrust information found on online media?

How do you usually verify the accuracy of information obtained from social media or online sources?

Have you ever encountered misinformation or fake news online? If yes, how did you identify it?

In your opinion, what skills are necessary for students to critically evaluate information found on digital media?

The questions were constructed to elicit answers in the form of text that reflected students' opinions and evaluation processes regarding the credibility of online media sources, thereby allowing the application of text analytics.

Data Preprocessing: before performing computational analysis, the collected textual data was subjected to some pre-processing techniques to make the analysis as accurate and consistent as possible. Text pre-processing is a critical phase of natural language processing as it helps prepare the raw textual data for proper computation.

First, all punctuation marks, numbers, and irrelevant symbols were eliminated from the text responses. After that, all texts were turned to lowercase as a way to ensure consistency throughout the dataset. Such a step will prevent words written with different cases from being interpreted as different terms during the analysis. Next, text tokenization took place, in which text responses were broken down into individual terms, known as tokens. Words like “the,” “and” “is,” and “of” were considered to be stop words as they did not offer any value to the understanding of text content and were consequently filtered out of the dataset. Such terms are very common in any text corpus, and their removal allows focusing on words carrying actual semantic value for a more accurate analysis.

Word Frequency Analysis: after the data has been preprocessed, a word frequency analysis is performed to uncover the most frequent words in the students’ answers. Word frequency analysis gives an insight into the main vocabulary used by the participants and helps detect common themes related to the credibility of information on social media platforms. Through analyzing the most often used words, researchers will be able to see what topics are discussed by the participants and which concerns arise when talking about social media. The most likely words that will have high frequencies in this study include media, trust, information, verification, fake news, and credibility. The findings from the word frequency analysis are used to point out the most frequent keywords in the dataset. These keywords are further analyzed in regard to students’ media literacy and the process of assessing digital sources.

Sentiment Analysis: the sentiment analysis technique was applied in analyzing the emotional orientation of students' opinions on the issue of the credibility of online media. Sentiment analysis allows for classifying the texts corresponding to particular sentiments, such as positive, negative, and neutral sentiments. For this work, the analysis of sentiments was performed using popular NLP tools, including VADER (Valence Aware Dictionary for Sentiment Reasoning), the NRC Emotion Lexicon, and TextBlob (Nariman, 2024). Each tool can be used to identify the sentiment polarity of the textual data. The implementation of sentiment analysis was performed using popular Python tools, including VADER, NRC Emotion Lexicon, and TextBlob. These tools allow conducting sentiment analysis in texts. As a result, each opinion expressed by students was classified according to sentiment orientation. If the opinion was positive, it means that a student trusted online media or believed himself/herself to be capable of evaluating the content of information. In the case of negative sentiments, students had a skeptical attitude towards digital

media or were worried about the spread of fake news and misperceptions. Neutral sentiments meant that students gave a balanced opinion that did not have an obvious orientation to a particular side of the problem. The results of sentiment analysis were quantified by calculating the percentage of positive, negative, and neutral sentiments expressed by respondents.

Thematic Analysis: apart from sentiment classification, the research utilized a thematic analysis technique to find out any common themes emerging from the students' responses. According to Clarke and Braun (Clarke, Braun 2017), thematic analysis refers to a systematic exploration of text-based data with the aim of establishing patterns or categories that capture the main concepts or experiences reported by the participants. The students' responses were examined to discover some of the common themes regarding the students' opinions about online media credibility. Various themes were identified during the process, such as trust in online media outlets, fear of misinformation, and techniques used to verify information. The themes highlighted the way the students understand digital information and how well-informed they are. Through the thematic analysis, it was possible to contextualize the findings of the sentiment analysis, especially when trying to understand the specific factors contributing to the attitudes of university students towards online media.

3. Discussion

Thus, in accordance with the goals of the current study, computational text analysis and sentiment analysis were applied to the open-ended responses to understand the students' perception of the credibility of digital media. The findings of the study shed light on important aspects concerning students' perception of the obtained information from digital platforms and media literacy's role in their attitude towards information sources in digital environments.

Firstly, one of the main outcomes identified in this study is that students often associate online media with concepts related to trust, verification, credibility, and misinformation, according to word frequency analysis. High keyword frequency means that the topic of evaluating credibility has acquired particular significance for students while interacting with digital media. It seems reasonable to state that in the context of a contemporary digitalized environment where people receive large amounts of data from multiple sources, credibility has become a significant issue. As suggested by R. Hobbs (Hobbs 2010) and D. Buckingham (Buckingham 2003), the modern digital era requires developing certain skills to evaluate the credibility of the received information and distinguish facts and trustworthy data from fiction.

Another important outcome identified based on the conducted sentiment analysis is the existence of mixed attitudes towards digital media among university students, which includes both negative and positive sentiment expressed in the open-ended responses. It should be noted that the share of positive sentiments has slightly exceeded the proportion of negative feelings towards the issue. Overall, according to Hemmatian and Sohrabi (Hemmatian, Sohrabi, 2019), people's attitude towards the credibility of online information was mainly positive, and most students perceived digital media as a reliable source of useful and interesting information. Nevertheless, a certain share of negative attitudes towards the credibility of digital information was also identified in students' responses, and it is related to the issues of fake news, rumors, and unverified information. Thus, in accordance with previous studies, the increased use of digital media platforms implies certain risks in terms of receiving misleading information and misinformation (McDougall, 2019; Nichols, LeBlanc, 2021).

Several key themes were revealed in the responses of participants to questions on the assessment of information credibility and the perception of online media sources. These include trust in trustworthy sources, fear of encountering false information, reliance on social media platforms for receiving information, and verification procedures to determine information validity. These topics reveal the relationship between information evaluation practices and digital information literacy. For instance, students admitted relying on social media platforms for information but also recognized the risk factors inherent to these types of sources. Thus, students tend to be cautious about trusting the information available on social media platforms despite being regular users of these services (Aïmeur et al., 2023).

The finding that relates to students' use of various strategies to verify the information received from online media sources is also notable. According to respondents, some of these practices include cross-checking sources of information, checking the credibility of the author or publisher, as well as referring to news sites with reputations for delivering accurate information

(Viviani, Pasi, 2017). The strategies mentioned demonstrate the skills developed by individuals to evaluate the quality and reliability of online content and make decisions about what to believe and what information should be disregarded. A similar connection was observed in the studies dedicated to media literacy and misinformation detection. For example, Orhan (Orhan, 2023) notes that people who possess skills in new media literacy and critical thinking demonstrate better abilities in detecting fake news.

It should also be noted that the study reveals the effect that media literacy skills have on people's attitudes towards online media credibility. The conceptual framework introduced in the literature review states that the influence of media literacy includes students' ability to evaluate the information obtained from online media and assess the credibility of online sources based on such an evaluation. This influence manifests in the attitudes and perspectives that people hold about digital media in general. According to Potter (Potter, 2013), media literacy allows individuals to gain cognitive capabilities needed for the critical interpretation of media messages.

This study adds to the body of knowledge that is developing computational methods in media studies. The application of sentiment analysis demonstrates how natural language processing technologies can be used to conduct media consumption research and obtain valuable insights into people's opinions and attitudes regarding online media and digital communication. Sentiment analysis allows analyzing large quantities of texts written in natural language to determine their linguistic characteristics (Sweta, 2024). Since digital media creates huge amounts of textual data every day, such an approach is likely to become increasingly valuable in studying media communication practices.

However, several limitations of the present study can be observed. First, the research involved only a sample of university students from certain institutes of Pakistan located in Lahore. Such limitations can affect the generalizability of the results and conclusions made based on the data collected. Second, although sentiment analysis helps understand emotional tones that students associate with information from online sources, this method cannot reveal the complexity of students' cognitive experiences. The scope of this study might be expanded by incorporating participants from various regions and educational settings. A combined approach, including computational text analysis and traditional interviews or group discussions, might prove to be effective as well.

Implications for Media Education: there are several implications of this study for media education that are crucial to be considered. First of all, due to the increase in using digital media platforms as the primary source of obtaining information, it is necessary to enhance media education at universities and colleges. In spite of the fact that students perceive possible problems with credibility, they also see benefits in the development of digital media. Therefore, the need for universities to play a proactive role in developing media literacy among students and preparing them to critical evaluation of online information sources is clear (Aïmeur et al., 2023). The first important implication related to this issue can be associated with the need to incorporate media literacy education into various courses at universities. This process should go beyond communication studies and be a part of a wider range of educational courses. Such initiatives will allow developing an ability to assess the credibility of information among students from other disciplines. Courses or workshops devoted to digital literacy, critical thinking and methods of information evaluation can be helpful in achieving this goal (Saad, Seffah, 2025). It is also possible to mention encouragement of students to develop certain strategies that will make them able to evaluate the credibility of the used digital media resources. These strategies may include comparing several information sources, researching the credibility of the author of the content and publisher and, of course, checking information from reliable news agencies and fact-checking platforms. Thus, the development of such competencies will promote responsibility in digital content consumption and production.

Moreover, another possible implication of this research is connected to the need to educate students regarding the proper use of social media platforms and information found there. As it was stated earlier, this type of media plays an important role for university students. Therefore, it is important to educate students to approach the obtained data in a more critical manner and not to accept the information without checking its credibility. Media education initiatives may focus on the development of critical digital citizens who will critically evaluate their actions while interacting with social media platforms and using the available information. In addition, university-level media education should include innovative pedagogical approaches such as the analysis of digital

media content and the use of computational methods such as sentiment analysis and text analytics. This will give the students additional opportunities to analyze the information obtained and its impact on people.

4. Results

Participant Characteristics: the total number of university students from both private and government universities in Lahore constituted 320. They are comprised of diverse backgrounds and different levels of exposure to digital media. Details of respondents' demographic profile are given in Table 1 below.

Table 1. Participant demographic characteristics

Variable	Category	Frequency	Percentage
Gender	Male	172	53.8
	Female	148	46.2
Program Level	Undergraduate	238	74.4
	Postgraduate	82	25.6
Field of Study	Social Sciences	112	35.0
	Business & Management	96	30.0
	Natural Sciences	64	20.0
	Other Disciplines	48	15.0

According to the demographic data analysis, the respondents were mostly comprised of undergraduate students (74.4 %). The participants' gender ratio was almost equal since 53.8 % were males while 46.2 % were females. They belonged to various fields of study, ensuring the inclusion of varied viewpoints on the credibility of online media and digital information.

Word Frequency Analysis: dominant linguistic patterns in the responses of the students were identified by conducting word frequency analysis following the pre-processing of the text data. Common stop words were removed, and keywords were derived to identify the most frequent terms associated with credibility in online media, as illustrated in Table 2 below.

Table 2. Top words in student responses

Word	Frequency
media	148
information	132
trust	105
fake	92
verify	88
social	85
news	79
sources	74
credibility	66
misinformation	61

As can be seen from Figure 2, some of the most common words used are media, information, trust, and verify, implying that students often talk about the reliability and verification of information on the internet. The inclusion of words like fake, misinformation, and sources shows that students are aware of the difficulties of verifying the reliability of digital information. This suggests that students make associations between online media and the issue of misinformation.

Sentiment Analysis Results: sentiment analysis was performed to ascertain the emotional nature of students' views concerning the credibility of online media, as illustrated in Table 3. All responses were categorized into positive, negative, or neutral sentiment using linguistic features and sentiment dictionaries.

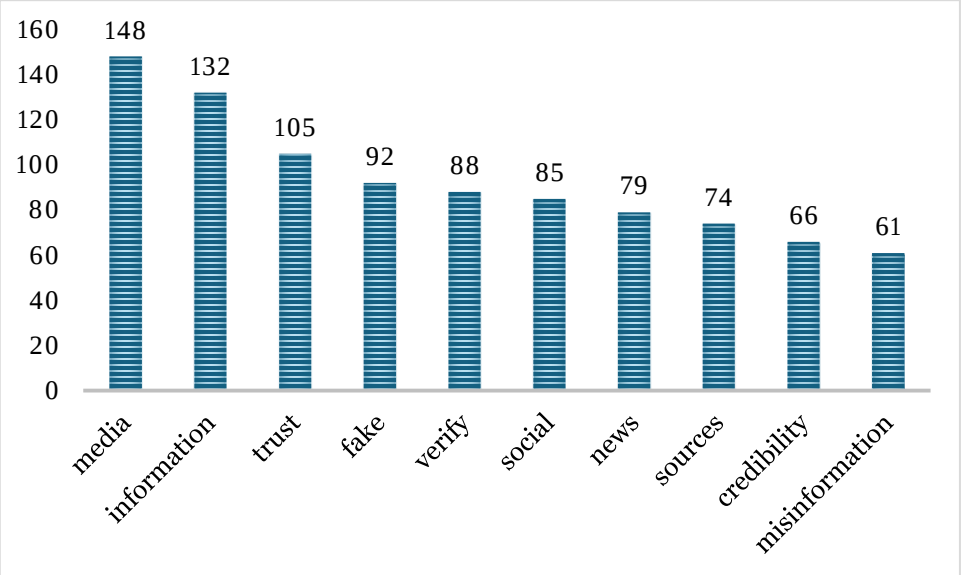

Fig. 2. Word frequency distribution (top keywords)

Table 3. Sentiment distribution in student responses

Sentiment Category	Frequency	Percentage
Positive	136	42.5
Negative	108	33.8
Neutral	76	23.7
Total	320	100

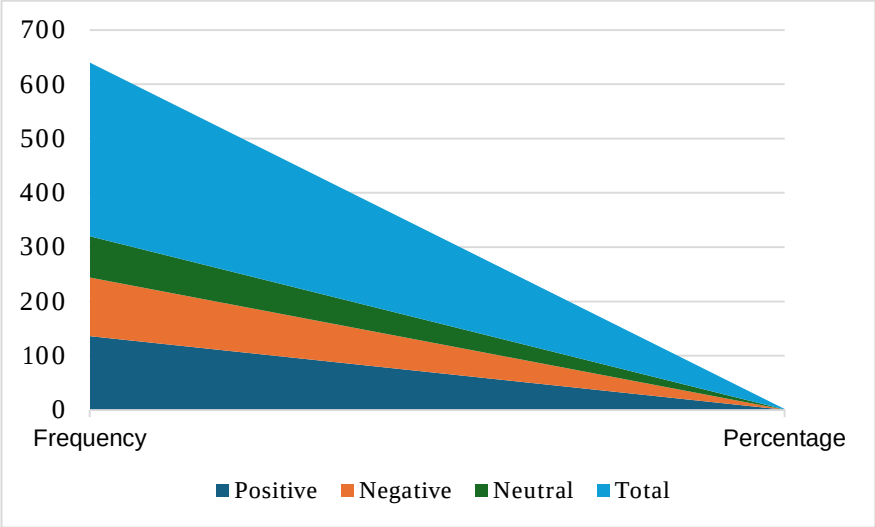

Fig. 3. Distribution of sentiments toward online media

From the results obtained from the sentiment analysis, it is clear that 42.5 % of students had positive sentiments towards online media. It implies that many students believe that digital media is an important and reliable source of information. On the other hand, 33.8 % of students had negative sentiments towards online media. In this case, it is evident that there is a perception among many students that online media contains misleading information and fake news. Moreover, 23.7 % of students had neutral sentiments towards online media, see Figure 3.

Emerging Themes: the themes explored in this research have been generated through a systematic thematic analysis of the students' textual responses. First, the students' responses have been analyzed to find significant textual units, which have then been coded according to the ideas

repeated in their response regarding the credibility of online media information. The resulting codes have been divided into broad categories based on the themes emerging from those ideas. Finally, those four broad themes are summarized below. The coding technique applied for theme generation is shown in Table 4.

Table 4. Major Themes Identified in Student Responses

Initial Codes	Sub-themes	Themes
Verified news websites, credible sources, trusted media outlets, reliable information, authentic news platforms, official news channels	Source credibility, reliability of information, trust in news institutions, credibility of media sources	Trust in credible sources
Fake news, misinformation, misleading content, inaccurate information, manipulated news, rumors spreading online	Awareness of misinformation, concern about fake news, recognition of misleading content, distrust of unreliable information	Concerns about misinformation
Facebook news consumption, Instagram updates, Twitter information sharing, social media news access, online platforms for news, digital media usage	Social media as news source, dependence on social platforms, digital news consumption habits, online information access	Reliance on social media
Cross-checking information, comparing multiple sources, verifying information online, checking author credibility, confirming with trusted websites, fact verification practices	Information verification behavior, fact-checking practices, evaluation of information sources, critical verification strategies	Fact-checking strategies

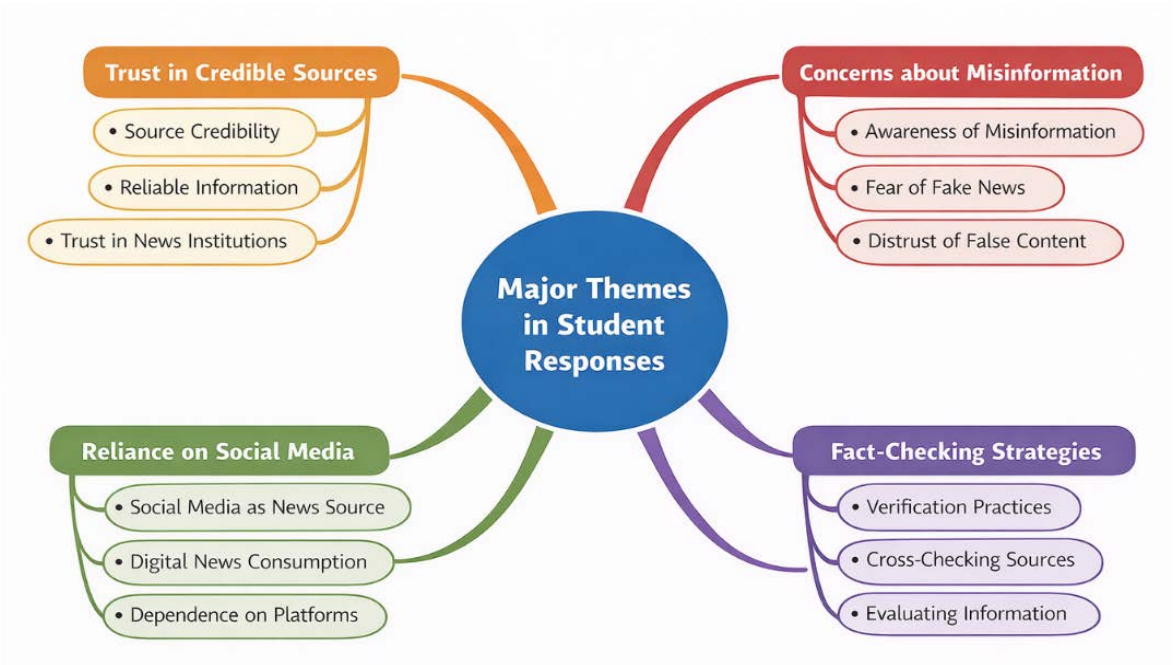

Fig. 4. Thematic mind map in student responses

There were several significant themes found during the thematic analysis of students' perceptions towards online media. One of the themes is "trust in credible sources," which reveals the fact that many students trust credible sources of information. Moreover, there is another major theme that refers to students' worries regarding misinformation, indicating that many students are well aware of the problems related to the availability of inaccurate information online. The use of social media for obtaining information is also one of the major themes found during the thematic analysis, which means that many students use social media platforms like Facebook, Twitter, and

Instagram for getting information. There was a description of the ways students check information, such as using several sources or websites, see Figure 4.

Interpretation of Students' Media Literacy: this research's findings offer great insights into the degree of media literacy possessed by university students as well as how they evaluate information found online. From the research findings, it is evident that the students display a medium level of media literacy by showing concern about misinformation and by attempting to verify the accuracy of the information. From the word frequency analysis, it is clear that the participants often relate online media with words such as trust, verification, and misinformation. The latter implies that the process of credibility verification plays a crucial role in their use of digital media. Sentiment analysis conducted during this research indicates that there is a balance between positive and negative attitudes towards the use of online media, implying that the respondents appreciate both advantages and limitations of online information sites. Moreover, from thematic analysis, it is apparent that the participants use a range of methods to check facts on online platforms, including comparing different websites and checking the authenticity of news platforms.

Word Cloud: in order to better analyze the linguistic patterns found in the students' answers, a word cloud was created using the data obtained from this research. Word clouds offer an image of the most common words used in a certain set of texts, thus enabling researchers to easily identify the main topics discussed. For instance, in this case, the word cloud provides insight into the important words used by the students concerning their opinions and worries related to the reliability of online media.

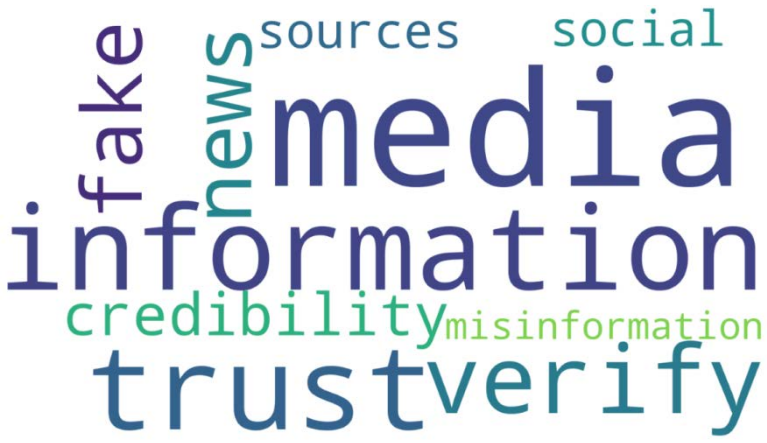

Fig. 5. Word cloud of student responses

The above Figure 5 shows the most commonly occurring words in the answers provided by students regarding the credibility of online media. The larger the font size used for writing the word, the greater its occurrence in the data set.

5. Conclusion

The results of the study on university students' views on the credibility of online media showed that students have an understanding of how useful digital media is as a credible source of information and the risks of misinformation and unreliable online content. These results show that it is essential to promote media literacy among students so that they learn how to evaluate information received via digital media and adopt verification practices. Nonetheless, there are some drawbacks of this study. Firstly, the data were collected from university students in Lahore, Pakistan. Therefore, it is possible that the results would differ in case the same study was performed in other countries or cities. Secondly, the application of sentiment analysis may not fully represent the nuances of how university students perceive information obtained via digital media. Future research should involve a more comprehensive examination of how university students assess the credibility of online media. The sample should include university students from different parts of the world and educational institutions. Also, researchers can use interviews and focus group discussions in combination with computational text analysis to get more detailed information on how university students view digital media and its content.

References

Aïmeur et al., 2023 – *Aïmeur, E., Amri, S., Brassard, G.* (2023). Fake news, disinformation and misinformation in social media: a review. *Social Network Analysis and Mining*. 13(1): 30. DOI: https://doi.org/10.1007/s13278-023-01028-5

Bonaki et al., 2025 – *Bonaki, H.N., Sadeghi, S., Esfahani, A.A., Alishahi, F., Nasab, N.A.* (2025). Algorithmic amplification of surgical misinformation: How social media prioritizes engagement over accuracy and distorts patient choices. *InfoScience Trends*. 2(7): 38-48. DOI: https://doi.org/10.61882/ist.202502.07.04

Buckingham, 2003 – *Buckingham, D.* (2003). Media education: Literacy, learning and contemporary culture. Cambridge: Polity Press.

Buckingham, 2007 – *Buckingham, D.* (2007). Digital media literacies: Rethinking media education in the age of the Internet. *Research in Comparative and International Education*. 2(1): 43-55. DOI: https://doi.org/10.2304/rcie.2007.2.1.43

Clarke, Braun, 2017 – *Clarke, V., Braun, V.* (2017). Thematic analysis. *The journal of positive psychology*. 12(3): 297-298. DOI: https://doi.org/10.1080/17439760.2016.1262613

Fedorov, Levitskaya, 2015 – *Fedorov, A., Levitskaya, A.* (2015). The framework of media education and media criticism in the contemporary world: the opinion of international experts. *Comunicar*. 23(45): 107-115.

Georgopoulou et al., 2025 – *Georgopoulou, M.S., Troussas, C., Krouska, A., Sgouropoulou, C.* (2025). Digital literacy in higher education: Examining university students' competence in online information practices. *Computers*. 14(12): 528. DOI: https://doi.org/10.3390/computers14120528

Hemmatian, Sohrabi, 2019 – *Hemmatian, F., Sohrabi, M.K.* (2019). A survey on classification techniques for opinion mining and sentiment analysis. *Artificial intelligence review*. 52(3): 1495-1545.

Hobbs, 2010 – *Hobbs, R.* (2010). Digital and media literacy: A plan of action. Washington, DC: Aspen Institute.

Hobbs, Coiro, 2019 – *Hobbs, R., Coiro, J.* (2019). Design features of a professional development program in digital literacy. *Journal of Adolescent & Adult Literacy*. 62(4): 401-409. DOI: https://doi.org/10.1002/jaal.907

Liu, 2012 – *Liu, B.* (2012). Sentiment analysis and opinion mining. Morgan & Claypool Publishers.

Maor, Fraser, 2005 – *Maor, D., Fraser, B.J.* (2005). An online questionnaire for evaluating students' and teachers' perceptions of constructivist multimedia learning environments. *Research in Science Education*. 35(2): 221-244.

McDougall, 2019 – *McDougall, J.* (2019). Media literacy versus fake news: Critical thinking, resilience and civic engagement. *Medijske Studije*. 10(19): 29-45.

Mettler, 2025 – *Mettler, T.* (2025). Computational text analysis for qualitative IS research: A methodological reflection. *Communications of the Association for Information systems*. 56(1): 349-378.

Nariman, 2024 – *Nariman, D.* (2024). Sentiment analysis of hotel reviews using lexicon-based methods: A comparative study of VADER and TextBlob. *International Conference on Broadband and Wireless Computing, Communication and Applications*. Cham: Springer Nature. Switzerland: 263-274.

Nichols, LeBlanc, 2021 – *Nichols, T.P., LeBlanc, R.J.* (2021). Media education and the limits of literacy: Ecological orientations to performative platforms. *Curriculum Inquiry*. 51(2): 210-229. DOI: https://doi.org/10.1080/03626784.2020.1865104

Obilor, 2013 – *Obilor, E.I.* (2023). Convenience and purposive sampling techniques: Are they the same. *International Journal of Innovative Social & Science Education Research*. 11(1): 1-7.

Orhan, 2023 – *Orhan, A.* (2023). Fake news detection on social media: The predictive role of university students' critical thinking dispositions and new media literacy. *Smart Learning Environments*. 10: 29. DOI: https://doi.org/10.1186/s40561-023-00248-8

Potter, 2013 – *Potter, W.J.* (2013). Media literacy. Sage Publications.

Sweta, 2024 – *Sweta, S.* (2024). Emerging trends and challenges in educational sentiment analysis. *Sentiment Analysis and its Application in Educational Data Mining:* 79-97. DOI: https://doi.org/10.1007/978-981-97-2474-1_5

Saad, Seffah, 2025 – *Saad, B., Seffah, A.F.Z.* (2025). Role of social digital platforms in facilitating the creation of digital educational content-analytical study. *Ex Professo*. 10(1): 56-74.

Tinák, Gálik, 2026 – *Tinák, T., Gálik, S.* (2026). On the epistemological and ethical conditions of information in journalism. *Communication Today*. 17(1): 26-36.

Viviani, Pasi, 2017 – *Viviani, M., Pasi, G.* (2017). Credibility in social media: opinions, news, and health information – a survey. *Wiley interdisciplinary reviews: Data mining and knowledge discovery*. 7(5): e1209. DOI: https://doi.org/10.1002/widm.1209

Voitovych et al., 2025 – *Voitovych, N., Kitsa, M., Mudra, I.* (2025). Media education and media literacy as a factor in combating disinformation. *Journalism and Media*. 6(4): 188.

Von Gillern et al., 2022 – *Von Gillern, S., Gleason, B., Hutchison, A.* (2022). Digital citizenship, media literacy, and the ACTS framework. *The Reading Teacher*. 75(6): 735-742.

Zamir et al., 2024 – *Zamir, M.T., Ullah, F., Tariq, R., Bangyal, W.H., Arif, M.* (2024). Machine and deep learning algorithms for sentiment analysis during COVID-19: A vision to create fake news resistant society. *PLOS ONE*. DOI: https://doi.org/10.1371/journal.pone.0315407

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Fostering Media and Digital Literacies to Visually Impaired Students: Challenges and Solutions

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Abstract

Visually impaired students (VIS) face challenges in developing media and digital literacies, which are essential for academic success, personal independence, and social participation. This review article synthesises theoretical and empirical research on these challenges and corresponding solutions within higher education. The analysis reveals that while visually impaired students often possess strong technical and operational digital skills due to their reliance on assistive technologies, persistently they experience difficulties with cognitive and social-emotional dimensions. The former concerns critical evaluation of the information and trustworthy information sources; the latter implies collaboration, secure online communication and media product creation. Meanwhile, students with visual impairment encounter a number of obstacles that hinder their development and efficiency, such as digital content that turns out to be inaccessible, sighted peers and faculty which do not realise challenges VIS are permanently faced with, assistive technologies that even being updated do not allow some ordinary activities, for instance, skimming and scanning texts. Solutions operate at multiple levels: societal awareness campaigns, proactive university policies, lecturer training, advance preparation of accessible materials, alternative assessment formats, and technological innovations including screen-reader-compatible collaborative tools, audio description for films, and real-time image quality feedback. Digital competence for visually impaired students should explicitly prioritise accessibility, self-advocacy, and troubleshooting skills. Fostering media and digital literacies among visually impaired students is framed as a matter of equity, human rights, and social justice requiring coordinated efforts from researchers, educators, policymakers, and technology developers.

Keywords: visually impaired students, information literacy, media literacy, digital literacy, digital competence, screen readers, information access, inclusive environment, sighted peers.

1. Introduction

Media literacy is a continuously developing skill that cannot be finally formed as new technologies, agencies, factors, aspects, circumstances, etc. appear, and an individual has to master this skill intentionally and persistently. Nowadays when we interact with a huge amount of information sources and innumerable media texts, constantly identify trustworthy and fake information, become familiar with new technologies, we clearly realise that this skill is indispensable. Moreover, we should always remember that access to information is considered to be a fundamental human right. Owing to researchers, educationalists, and specialists in various fields, an extensive array of approaches, methods, techniques, means, and instruments aimed at developing media literacy is available. Scientists all over the world contribute to its growth and

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expansion for various target audiences, different spheres, and diverse goals. But just close your eyes and imagine that you need to find some information, access it, evaluate it, analyse it, and create a new media text without seeing anything. Studies show that people with disabilities face functional barriers in both analogue and digital technologies, leading to widespread exclusion due to limited access and usability tailored to their needs (Malik et al., 2024). Those without disabilities often fail to grasp or prioritise these accessibility requirements. Everyday tasks – like answering phone calls, reading bills and invoices, captioning audio, or navigating websites – demand inclusive design to integrate people with disabilities into mainstream social networks. Thus, visually impaired (VI) people have to acquire these skills like anyone else as they are required to possess the same depth and width of knowledge in all subjects they study and progress but they should do even more, as their interaction with numerous sources of information is mediated with some additional technology. Media literacy and corresponding skills are the crucial elements for personal independence and augmented quality of life for VI people as they help "take jobs, communicate and learn, and thus expand the world of blind and visually impaired persons in many significant ways" (Weigand et al., 2013: 191). As for everyday life, researchers state (Khowaja, 2021) that persons with visual impairments need double education in comparison with the sighted ones because they cannot get many professions such as plumbers, drivers, constructors and others, so, education becomes crucial for them, gives financial autonomy and independence.

According to World Health Organization (https://www.who.int/news-room/fact-sheets/detail/blindness-and-visual-impairment) at least 2.2 billion people have a near or distance vision impairment. The reasons of the impairment can be different as well as the level of it but every third or fourth person can face challenges incited by eye issues. Here one disputable situation arises: in official and non-official documents people with an impairment (visual, hearing, etc.) are named disabled. Meanwhile, an individual with the impairment may not pay attention to how they are perceived and they do not perceive themselves as disabled, but their peculiarity can determine how the society conceptualise them due to powerful social constructions of disability (Quirke et al., 2018). Although many visually impaired students (VIS) have positive social experience, one-third of all students with visual impairment certified that they feel lonely, isolated and dissatisfied with social interaction (Miyauchi, 2020). Considering schoolchildren who are younger than students, they "have difficulties with technical and communicative aspects, lack knowledge about risks and dangers of on-line communication, it is hard for them to create a media product" (Voronova, 2021: 157). It turns out that visually impaired people may often have rather high levels of technical and cognitive sub-factors of digital skills but lower levels of the social sub-factor (Arslantas, Gul, 2022). As digital instruments are indispensable for VIS to access information, they master them quickly and confidently, whereas skills in information management, effective collaboration, communication, and proper media texts creation can lag behind.

Social media are an integral part of the contemporary society, and people with visual impairments are their active users but quite often the content of social networks such as pictures, videos remains inaccessible for VI users (Bühler, Pelka, 2014). Complexity of the information, its amount, difficult language, navigation options, pop up advertisements, timed response requirements, etc. worsen the situation.

In the domain of higher education, it is vital for all students to develop digital literacy (Arslantas, Gul, 2022; Fedorov, Levitskaya, 2015; Tinák, Gálik, 2026). And it is much more vital for visually impaired students as modern technologies offer wide possibilities to mitigate the impairment and actively participate in society. Computers have become instruments that help people with visual impairment to carry out "their ADL (activities of daily living) tasks at home and at work" (Bühler, Pelka, 2014: 17). It is realised in two ways. Firstly, digital media support everyday life offline tasks, for example, communication, and orientation. Books turn out to be easily reachable due to audio versions of e-books (Fume et al., 2014). Secondly, they facilitate access to societal offers and discourses. Thus, some barriers become surmountable. Meanwhile, new technologies require new knowledge, skills and competencies that could empower VI people to manage constantly upgrading technologies (Bühler, Pelka, 2014). Hence, digital literacy becomes indispensable for VI individuals to boost their media education and master their media literacy, meanwhile ICT is considered to be "the great equaliser" for visually impaired persons (Arslantas, Gul, 2022) as it helps overcome barriers people with impairments can face. Groupmates as well as university teachers should also be aware of and handy with the digital instruments used by VIS as

this knowledge and skill allow them to facilitate interaction with VIS, increase their participation in education, and enhance their professional growth.

Nowadays digital literacy is a comprehensive concept that embraces three dimensions (Arslantas, Gul, 2022). These key dimensions include: technical or operational aspects (such as locating and installing software, storing and transferring data, managing peripherals); cognitive skills (involving critical thinking when searching for and evaluating information, choosing appropriate software, and producing one's own media content); and social-emotional components (using technology for social interaction, communication, and learning while being conscious about personal privacy and safety) (Arslantas, Gul, 2022).

However, studies have shown that individuals, so called "digital natives" who were born after the digital technologies became a part and parcel of everyday life, tend to be skilled at locating and retrieving information, navigating search engines with ease, and engaging in online communication without hesitation. Yet, they may struggle with critically evaluating the information they find, telling reliable sources apart from unreliable ones, and even producing their own digital content (Arslantas, Gul, 2022). This finding led researchers to the conclusion that being born in a digital world does not mean empowering one's digital literacy.

As for visually impaired students, research proves (Arslantas, Gul, 2022) that most of them possess basic ICT skills (they can write and manage documents, send e-mails, communicate, realise online banking, search, for instance, health information, etc.), they know how to face technology-related obstacles but there are more options to increase their participation and performance in education. Researchers (Arslantas, Gul, 2022) highlight the fact that there are still cases when VI citizens lack digital literacy skills to master mobile learning technologies and environment and they are not keen on checking the accuracy of the information retrieved. Moreover, the researchers studied factors that may influence the digital literacy skills of VI people and concluded that these can be types of visual impairment, the duration of technology usage, the age of starting to use the technology, and school type. Nonetheless in our research we do not focus on the reasons and factors that determine the level of media and digital literacy of an individual but try to make challenges that face visually impaired students more visible and salient for the community and motivate for the search of solutions to handle the current situation.

Therefore, this article seeks to provide a systematic review and analysis of contemporary scholarly research concerning the obstacles that students with visual impairment encounter when acquiring media and digital literacy skills, to identify and present evidence-based solutions and recommendations for mitigating these challenges within higher education and digital society. To achieve the aim, a number of objectives should be fulfilled. Firstly, we conceptualise the key frameworks of media literacy, digital literacy, and digital competence specifically tailored to the needs and contexts of visually impaired students. Secondly, we identify the primary challenges that visually impaired students encounter when accessing information, evaluating digital content, using assistive technologies, collaborating, communicating, and creating their own media texts in academic and everyday settings. Thirdly, we synthesise existing solutions, pedagogical models, technological innovations, and recommendations proposed by researchers and practitioners. Finally, we formulate a set of practical, multi-level recommendations for lecturers, university management, technology developers, and society to foster a more inclusive digital environment for visually impaired students.

2. Materials and methods

This article is a narrative review of the scientific literature concerning the development of media and digital literacies among visually impaired students, with a particular focus on the challenges these students face and the corresponding solutions proposed by researchers and practitioners. The review synthesises theoretical and empirical studies published in peer-reviewed journals, conference proceedings, and other academic sources. Studies were included in the review if they met the following criteria: (a) they addressed media literacy, digital literacy, or digital competence in the context of visual impairment; (b) they focused on educational settings (primarily higher education, though some studies on schoolchildren were also considered); (c) they presented empirical findings, theoretical frameworks, pedagogical models, or practical recommendations; and (d) they were published in academic sources such as peer-reviewed journals, books, or conference proceedings. The selected sources were analysed using theoretical methods, including analysis, synthesis, comparison, and generalisation.

3. Discussion

Nowadays media education and media literacy of people with visual impairment depend on digital technologies and assistive technologies that are utilised "to increase, maintain, or improve the functional capabilities of persons with disabilities" (Ayiah, 2017: 3) and include "hardware, software, and web-based resources like touch-screen technologies, large-screen monitors, optical scanners, light boxes, specialised keyboards, headsets with microphone, screen readers (such as JAWS, NVDA, Window Eyes, VoiceOver, etc.), speech-to-text converters, and browser add-ons with easy access to magnification or talking dictionaries" (Ayiah, 2017: 3), Braille displays and speech output (Weigand et al., 2013). The list can be enlarged with virtual worlds, virtual reality, etc.

One more concept should be cited – inclusive media, "a term that describes techniques, methods and theories for making media, in its many forms, more accessible to persons with disabilities" (Fels, 2014: 1). To name a few, inclusive media comprise, for example, closed captions or subtitles designed for individuals who are deaf or hard of hearing (when spoken speech is transformed into the written one) and audio description for people with visual impairments (when the audio track is complemented with audio description of meaningful visuals). Here one challenge arises – when the text is translated from one medium to another, meaning can be lost as the context and specific elements become unavailable, thus, the quality of the original text may be reduced or lost (Fels, 2014).

When students with some disabilities enter the higher education institutions, they face a number of obstacles although they already have experience in studying and research. One of the obstacles is readiness of the institution to accept such students, even if the institution possesses various assistive technologies and equipment (Amin et al., 2021; Quirke et al., 2018). Researchers emphasise that the reason of a low level of VIS entering the university is not the impairment itself but insufficiency of learning opportunities and support (Quirke et al., 2018). Frequently, the faculty staff, peers, lecturers and students lack appropriate detailed knowledge about particular impairment and are not familiar with services and equipment available on campus. This hampers not only educational process but communication as well.

According to the research (Amin et al., 2021), five visually impaired students were exposed to an in-depth interview. Later, the responses were thoroughly analysed and the researchers formulated five main challenges visually impaired students face in their life: financial issues, social stigma, accessibility, peer acceptance, and difficulty in studying at higher educational institutions. The first challenge, financial one, is common for many university students (both visually impaired and sighted) who do not receive scholarship or consider it inadequate.

The second challenge is the stigma of society when some deviations from the established norms may lead to negative perception and labelling. Although university students are mainly accepted by their peers, it happens that their impairment can overweight their abilities in peers' perception. Besides, it was also emphasised that campus residents, even support staff, sometimes have low level of understanding of VIS needs and limitations, the number of staff and lecturers qualified to support VIS is limited or they feel unprepared (Miyauchi, 2020).

The third challenge lies in twofold accessibility. One of it is accessing information, reference materials, etc. both in digital and print forms. To read print materials, a special computer or device is needed, whereas not all departments, faculties and services are equipped. As for digital form, not all screen-readers decipher all formats, for example, some of them can hardly read PDF format or tables, almost none of them can access formulae. Moreover, as the research shows (Bohnsack, Puhl, 2014), only one out of five MOOC-platforms tested was accessible for persons with visual impairment, others had some technical shortcomings from the point of view of VIS with respect to accessibility and navigation; meanwhile, MOOCs (Massive Open Online Courses) are a feasible opportunity for VIS to pursue their studies. Thus, a new term was introduced – E-Accessibility – that refers to the fact that assistive technologies used by VI people guarantee the accessibility of digital content (AlOshan, 2013).

Furthermore, accessing information with special equipment requires additional time. The study proved that students with visual impairment need triple amount of time for an assignment as compared with sighted peers (Al-Mouh et al., 2014).

Another accessibility challenge is a spatial one. Though visually impaired students orient rather well in the space they are familiar with, they may encounter difficulties when traveling to locations they seldom visit. Although most universities offer walkways and other pedestrian infrastructure, these facilities can sometimes fall into poor conditions, caused by factors like

precipitations and weather in general or vehicles breaking the traffic regulations on campus. The fourth challenge concerns peers' acceptance. Peers can be supportive and understanding but only few of them become close friends to VIS. The fifth challenge is educational process at the university that requires attending lectures, completing assignments, taking exams and quizzes. All these activities frequently include visual teaching aids, whiteboards that are inaccessible for students with visual impairments or require special equipment and time.

Assistive technologies intended to help VI people still may not always be supportive due to the following factors: 1) the use of the computer mouse is out of reach and is replaced by keyboard functions that is not so handy, 2) screen readers recognise text-based materials leaving graphic information aside or requiring additional software, and 3) screen overview is inaccessible for VI people depriving them of fast survey or quick understanding but requiring enduring line by line reading.

Meanwhile, some competencies and skills of VI people can counterbalance the abovementioned challenges: 1) fluent typewriting enhances chances to interact with the text, 2) reading and writing Braille becomes an alternative and proves patience and self-discipline, 3) courage to familiarise with additional software and hardware such as Braille displays, video magnifiers, scanner, etc. master their practical skills. The challenges VI people face and training they undergo to meet challenges result in additional competencies, namely, the ability to visualise concepts mentally, a more profound technical grasp of how applications and devices operate, improved knowledge of navigating an application's layout, features, and controls, along with strong memory retention to recall all commands and functions effectively (Weigand et al., 2013).

Talking about required skills and competencies, we should specify several concepts, namely, information literacy, media literacy, digital literacy, and digital competence, as they all are crucial and indispensable for people with visual impairment.

Should *information literacy* of VI people be on basic level or should it achieve higher levels? Generally, information literacy can be interpreted as a repertoire of skills involved in determining the extent of information needed, then accessing, evaluating, and synthesising it for a specific purpose (AlOshan, 2013). To search for information, the vast majority of VI participants interviewed (94 %) rely on search engines as their primary daily information source; they also trust their friends and relatives (78 %) and social media (67 %) when they need information on the topic. Official websites and libraries are among the rarely cited sources. To evaluate the information, VI respondents pay attention to timeliness and authority when assessing web-based information, ranking currency (n = 31) as the most important criterion, followed by author credentials (n = 26). They also assessed accuracy through citation (n = 24), author subjectivity (n = 22), and website familiarity (n = 21). Conversely, mentions by librarians or URL origins were of minimal concern. The most commonly cited difficulty among VIS (n = 25) was determining the credibility of sources, reflecting their efforts to validate information. Similar difficulties were connected with assessing information (n = 23), being aware that an answer is available online but failing to find it (n = 22), creating prolific search queries (n=21), and rejecting irrelevant results (n = 21) (AlOshan, 2013). According to the same research (AlOshan, 2013), starting a search, clarifying the search scope, and finalising the search were considered the least challenging tasks.

The definition of *media literacy* was summarised by A. Voronova as "the whole set of ideas regarding the rules of behaviour and communication, risks and dangers of media space, skills and capabilities necessary for work in the media sphere in order to solve educational tasks and to communicate with the society" (Voronova, 2021: 156), the skills to operate both hardware and software for work in the media sphere are also incorporated. With the focus on the inclusive education context, the researcher introduced a model of media literacy training with its peculiarities, mechanisms and conditions (Voronova, 2021). The aim of the model was to foster media literacy among students with special needs in the context of media education. The objectives to be realised were to: 1) "teach the notion "media literacy" to the school children with special needs, 2) teach the rules of behaviour, communication, risks and dangers in the media sphere to the students, 3) teach the necessary skills for work in media sphere to the school children with special needs" (Voronova, 2021: 158).

The suggested model relies on the theory of media education, activity approach to personality development, systematic approach, and reflexive approach. The principles underlying the model are: "principle of taking individual abilities into consideration, "no harm" principle, principle of motivation and personal motives formation in order to lay foundation for media literacy, and principle of pedagogical optimism" (Voronova, 2021: 158). The content incorporates

"the awareness of "media literacy" concept; knowledge of behaviour rules, rules of communication, risks and dangers in the media space; skills of using computers, gadgets and media space; media space understanding, the ability to create media products; the development of critical thinking, communicative skills, cognitive activities, creative thinking; the development of value systems regarding the use of media" (Voronova, 2021: 158).

The model will be feasible while meeting the following conditions: 1) information support both for parents and teachers, 2) extracurricular activities focused on media literacy training such as trainings themselves, thematic sessions, individual project activities, panel discussions, debates, and visual materials (Voronova, 2021). The researcher claims (Voronova, 2021) that if all the prerequisites are met, the model is supposed "to develop critical thinking, information selection skills (for the information coming from media sphere) among children with special needs; to develop communicative skills among the children with special needs via Internet use; to train media literacy among school children with special needs and to teach them the ideas concerning the role media literacy plays nowadays; to decrease the risks of internet addiction disorder among school children with special needs" (Voronova, 2021: 159).

Digital literacy is a comprehensive concept encompassing the skills required for effective functioning in a digital environment. The researchers conceptualise digital literacy through three intersecting dimensions: technical, cognitive, and social-emotional. The technical dimension involves operational proficiencies, including device management, file protection, troubleshooting, and data transfer. The cognitive dimension pertains to critical thinking for evaluating digital information, selecting appropriate software, and creating content that demonstrates understanding. The social-emotional dimension addresses responsible online interaction, communication, learning, and the safeguarding of personal safety and privacy (Arslantas, Gul, 2022).

The research carried out in Turkey analysed digital literacy experiences of people with VI (60 interviewees) (Arslantas, Gul, 2022). The results can be grouped in five themes. The first one is ICT knowledge and usage. This theme covers technical proficiency with devices and software for text editing, browsing, file management, software installation, and Web 2.0 tools. The respondents claimed that smartphones dominated daily use and computers were only for homework. A significant gap was identified: all students were confident smartphone users, but only two felt similarly about computers due to mobility, voice-over quality, voice recognition, navigation, and keyboard usability. iOS was universally preferred over Android for voice-over quality. Most had basic computer skills (navigation, file management), but only two could install software independently. Text editing was common but limited to basic operations; only two had spreadsheet skills; none used presentation software or knew formatting/layout. Browsing was unproblematic, though information accuracy was rarely checked. Summing up, the respondents highlighted such key challenges as software accessibility, limitations in image recognition and voice-over apps. These barriers, particularly affecting digital content creation, prevented progression beyond basic skills.

The second theme was communication. Social media was the primary communication channel for all, reducing dependency on others and enabling quick help access. Email was universally used for homework and file sharing. Two digital literate participants used video-based tools; others preferred text or voice via messaging apps. The most frequent challenges turned out to be miscommunication through dictation apps and image-based content. Some interviewees avoided photo-based platforms due to anxiety about understanding image content, despite auto-captioning improvements.

The third theme was collaboration. ICT collaboration tool was mostly unfamiliar and avoided. Though some respondents were aware of such tools, none had online collaboration experience. The interactive complexity prevented usage.

The fourth theme was information management. Most interviewees accessed online information (digital libraries, news, Wikipedia, forums) and could locate specific content. Digitally competent participants organised information via note-taking apps and cloud services; others used only basic computer functions (folders, file operations). Information evaluation was a major challenge, assessing source reliability and extracting pertinent information was the most difficult aspect.

The final theme was professional development. All respondents viewed digital literacy as essential for professional environments and career development. One teaching student noted digital literacy skills were necessary to avoid ridicule from future students. These skills were seen as enabling computer-based task management despite physical difficulties. One participant planned to learn programming for remote work (Arslantas, Gul, 2022).

The question is if the definition of *digital competence* for VI people differs from the common one. Such question arises as people with visual impairment need some specific skills and technology competencies to cope with search, access, analysis and evaluation of the information required. The recent research (Kamei-Hannan et al., 2023) summarises the general definition of digital competence as a comprehensive skill set that enables individuals to interact with technology and digital content in a thoughtful, proficient, and ethical manner. It involves the practical capacity to operate digital devices and navigate online structures, along with the intellectual ability to seek out, scrutinise, and determine the reliability of digital information. Moreover, it should include the creativity to produce content and the awareness to communicate and share it effectively. Crucially, it also demands a strong sense of responsibility, encompassing the protection of personal privacy, adherence to legal and ethical standards, and the demonstration of respectful and constructive behaviour within online communities.

With respect to VI people and their needs, the same research broadens the definition of digital competence needed by people with visual impairment considering four components: 1) selection, use, and troubleshooting technology, 2) creation of content, 3) critical evaluation of information, and 4) safe and responsible behaviour in digital environments (Kamei-Hannan et al., 2023). The definition claims that "digital competence is the knowledge, skills, and ability to efficiently and effectively select, use, and troubleshoot technology tools to access, design, create, consume, synthesise, and communicate information, while critically evaluating the authenticity, validity, usefulness, and appropriateness of content, including the ability to engage with others through safe and responsible behaviour in digital environments" (Kamei-Hannan et al., 2023: 11). Thus, the definition of digital competence for students with visual impairments emphasises accessibility, including access to multiple devices for task completion, it encompasses skills in problem-solving, self-determination, and self-advocacy, enables students to troubleshoot technology and articulate technical needs.

The researchers critically analysed skills required by VIS and provided a list of digital competencies that included 41 competencies, among them such as "Braille transcription, customising settings, device gestures, device procurement, digital citizenship, email, embosser and printer use, environmental awareness and individual adjustments, Internet access, keyboard commands, learning platforms, low vision accessibility skills, multi-media presentations, recreational use, touch typing, troubleshooting, accessibility knowledge, digital advocacy, media selection, resource awareness, science instruments, visual interpreting, wearable technology, webinar software" (Kamei-Hannan et al., 2023: 13) and others.

Finally, the researchers provided a scheme (Kamei-Hannan et al., 2023: 15) interpreting digital competence for VI citizens, where 1) digital literacy is a component of digital competence being of a higher order, and 2) digital access is an indispensable element for all VI people as they interact with the information mainly with the help of digital tools (Figure 1).

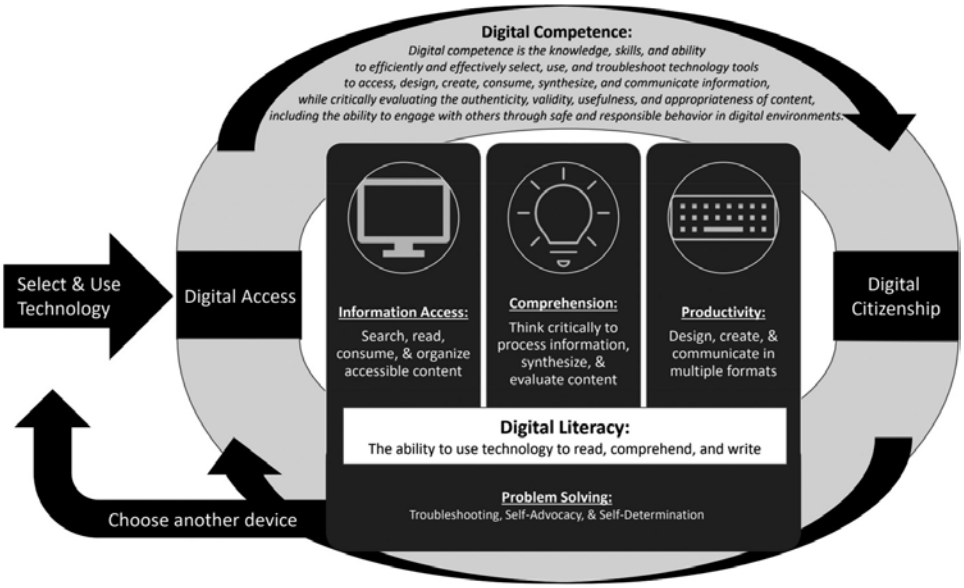

Fig. 1. Digital competence framework

At the university students are taught to create academic texts where text structure plays a significant role. Whether it is an oral presentation or a written research paper, the structure predetermines the logic and the form. For instance, one of the conventional structures of a research paper is IMRaD structure. So, the readers are sure to find some background information and the aim of the study in the introduction section, methodology used in the research – in the material and methods section, findings of the investigation – in the results section, and interpretation of the outcomes – in the discussion section. The only glance at the texts allows to choose the required section or find appropriate information, even if the sections are not titled. But perception of the text and creation of one's own texts remain a challenge for visually impaired students (Sorin et al., 2014). Digital materials – including web pages, spreadsheets, text files, and similar formats – are primarily designed for visual perception. For this reason, a large amount of information is conveyed through spatial arrangement in such formats as text or more complex formats, for example, tables, charts, images, etc. Every salient block in the text has its aim and structures the message of its author; every structural object of the text has different properties and interacts with other text's objects, making visual perception of the text crucial for its understanding by the readers (Sorin et al., 2014). The challenge is how to make these objects and logic outlined by them accessible for students with visual impairment. Keeping in mind that the interaction of VIS with the text is realised with a text-to-speech instrument, some recommendations should be considered. Firstly, titles and subtitles can highlight logical structure of the text as headings properties will help VIS build a better mental representation of the document, enhance memorisation and stimulate prior knowledge (Sorin et al., 2014). Headings can be typed in bold or emphasised with indents making them salient for text-to-speech instruments. If possible, headings should be read by a different voice than the rest of the text. Secondly, enumerations can focus on a hierarchy or a variety of objects, especially, if the lists are presented with the indentation.

Formatting still remains time-consuming and challenging for VIS, though they are required to present numerous academic texts throughout their studies at the university and professional texts afterwards. If the text is edited awkwardly, it is likely to be misinterpreted and dismissed. Although word processors along with a screen reader software can tackle the issues, "the task can be painstaking, tedious, slow, frustrating, overwhelming, and sometimes impossible" (Morales et al., 2014: 635). Meanwhile, the skill to format the documents is crucial for VIS as it maintains their independence, mitigates a barrier towards equality, makes them more competitive in educational and professional settings, and finally, ensures one's quality of life. Sometimes, in the cases when written texts are required, people with visual impairment frequently could rely on sighted peers to meet the text standards, namely, formatting and layout. But occasionally such help is not available or not cheap and visually impaired people still need a tool to format their documents independently. Within the research, scientists (Morales et al., 2014) interviewed both VIS and sighted people who helped the former format the documents to identify formatting strategies and problems. The results show that most VIS start writing their documents with the plain text without any formatting, afterwards they scrutinise the text line by line to find out content errors, and finish with rereading line by line to format it. Doing so, they encounter some problems such as indentation, font styles, footers and headers when using Braille technologies, or listening to every space, moving back and forth while listening to screen readers. Some prototype tools were created but still they are not in widespread use.

In academic and professional settings, collaborative writing has become increasingly prevalent, supported by a range of digital tools such as Google Docs, Overleaf, and Microsoft Word. However, the accessibility of these platforms remains a critical concern for individuals who are visually impaired. Based on semi-structured interviews with 20 visually impaired academics and professionals, the study (Das et al., 2019) identifies four interconnected challenges: 1) managing an evolving ecosystem of largely inaccessible tools, 2) navigating complex collaborative awareness features, 3) weighing the burdens of advocating for accessibility against their benefits, and 4) contending with power dynamics shaped by ableist and professional hierarchies. Addressing these issues is essential for reducing inequities in higher education and the workplace.

The researchers (Das et al., 2019) formulated recommendations how to make collaborative writing more efficient with respect to VI peers: 1) adopt screen reader-compatible practices: use inline comments with special characters (e.g., initials, semicolons) for inline readability; avoid nested replies or overlapping comments; employ divide-and-conquer for independent sections to minimise real-time conflicts; 2) enhance awareness negotiation: sighted collaborators should read

changes aloud in co-located sessions, flag key edits via email, and tolerate asynchronous workflows; teams should establish norms early, humanising accessibility discussions with humour or transparency; 3) design implications for tools: integrate spatial audio, varied voice qualities (pitch, timbre), or summarisations for edits/comments; enable bidirectional notifications (e.g., unread alerts to sighted users); display screen reader compatibility pre-update; 4) realise organizational strategies: leaders in power should mandate accessible tools; train on interdependence to redistribute invisible labour; prioritise usability beyond basic compliance, fostering inclusive socio-material configurations.

Challenges of VI people in taking pictures can also be vanquished. Thus, the researchers (Mandal et al., 2023) elaborated a new database intended to serve as a basic tool for developing models, and algorithms derived from them, that are able to accurately predict and provide feedback on the perceptual quality and distortions present in pictures. This multi-task deep learning model simultaneously predicts overall image quality and seven distortion types (blur, shakiness, overexposure, underexposure, noise, none, other) and a guided photography framework provides real-time audio/text feedback on distortions and suggests corrective actions.

While interacting with social media, we cannot but face emoji – a thing that can be challenging for VI people. Therefore, to mitigate the challenge, recommendations were formulated for both parties: sighted and VI communicators (Tigwell et al., 2020). The former are kindly requested to: 1) limit the number of emoji. Repeated emoji cause screen readers to announce each descriptor individually, leading to frustration. That is why one emoji would suffice; 2) be mindful of placement. It is reasonable to avoid putting emoji in usernames or at the beginning of posts. It is better to place decorative emoji at the end of content so screen reader users can skip them. Communicators should remember that a screen reader reads an emoji as its text descriptor (e.g., "sun"), not the intended emotion ("sunny"); 3) not convey critical information via emoji alone. Descriptors often do not match visual intent or context. The addresser should ensure that essential meaning is also expressed in plain text; 4) consider the reader. On public platforms while posting any text the addresser should keep in mind that emoji will be encountered by visually impaired people. That is why it is important to evaluate the content's accessibility before sharing.

For visually impaired people (especially screen reader users) the researchers suggest to: 1) learn screen reader's settings. Some screen readers (e.g. NVDA) allow to reduce repeated emoji announcements (e.g. reading "three laughing faces" instead of repeating the descriptor); 2) use alternative non-textual methods when needed. Emoticons (e.g., :-), ^^, :-/) are often easier to type and more reliably interpreted than emoji, especially when using Braille or dictation. GIFs, audio, and video can provide richer context; 3) copy previously used emoji. If searching for an emoji is too difficult, an old instance of it in a conversation can be found and copy-pasted; 4) be aware of cultural and platform differences. Emoji descriptors vary across screen readers (e.g., JAWS vs. VoiceOver), and visual designs differ across devices. When misunderstandings occur, it can be helpful to ask the sender for clarification. Thus, although technology develops, it should not be over relied on, both senders and recipients must adapt to improve emoji accessibility.

Visually impaired individuals face significant exclusion from cinema due to inaccessible infrastructure and a lack of audio descriptions in films. Entering a cinema hall is a challenging task, and once inside, they often rely on sighted companions to explain non-verbal elements like actions, settings, costumes, facial expressions, and silent pauses. Without such assistance, they struggle to connect scenes in sequence, especially during flashbacks, long silences, or background music. Horror and thriller films are particularly difficult because they rely heavily on visual and sound effects. Even when dialogues are present, the absence of description for non-verbal cues makes it impossible to accurately visualise the director's intended scene. Furthermore, filmmakers rarely acknowledge blind audiences during story conception, and mainstream cinema is not produced with accessibility in mind. Respondents noted that even popular films about disability are often not fully accessible to them (Tripathi, Tripathi, 2020).

The primary solution is the widespread adoption of audio description (AD) – a pre-recorded narration that describes scenes, settings, costumes, body language, and actions during natural pauses in dialogue. Films like "Sanju" (the first Indian film released with AD) and "Dangal" (AD added later) demonstrated that AD allows visually impaired viewers to synchronise scenes, visualise flashbacks, understand the filmmaker's vision, and develop critical film literacy skills. Assistive technologies such as the XL Cinema App synchronise AD tracks with a mobile phone's headphones, enabling an independent cinema experience without disturbing others. Experts

advocate making AD mandatory and integrating it during production to reduce costs. Additionally, alternative techniques like “audio film” (enhanced sound design), “auteur description” (incorporating the director’s vision), and audio introductions can further enrich comprehension. With these tools, visually impaired people can achieve satisfaction levels comparable to sighted audiences (Tripathi, Tripathi, 2020).

Based on the study (Zhang et al., 2023), VI people have diverse digital content creation needs that extend far beyond currently accessible tasks. While many comfortably create text-based and audio content (e.g., documents, podcasts), they express strong interest in visually heavy content such as static visuals (slides, photos), videos, and interactive media (websites, apps). However, these remain highly challenging to create. Their key needs include: 1) professional success: meeting workplace and educational demands for visually formatted documents, slides, and resumes; 2) self-expression: pursuing personal artistic interests like photography, video editing, and visual design, which sighted society often assumes VI individuals do not care about; 3) social participation: sharing visual content with sighted family/friends and ensuring their own creations are accessible to other disabled people. To meet these needs, participants desire several improvements that can be grouped into technical improvements (real-time, non-visual feedback for evaluating visual components (e.g., colours, alignment, fonts, lighting), along with an automatic “visual grammar checker” that assesses how professional or visually appealing a design is, together with accessible advanced editing features in mainstream tools (e.g., for contrast, filters, precise audio/video trimming); physical or tactile controls to replace inefficient keyboard commands) and social and systemic changes (greater accessibility awareness from creative software companies, including involving VI people in development teams); standardised, screen-reader-friendly interfaces across platforms; training resources and “roadmaps” for accessible plugins and tools; inclusive educational and workplace standards that do not overemphasise visual formatting; combating societal biases that assume people with visual impairment cannot or should not engage in visual creativity.

4. Results

One of our objectives is to formulate several recommendations to mitigate issues faced by the visually impaired students but these recommendations do not include such needs as transportation, accommodation, access to the campus and so on. They concern informational and operational aspects as explained below.

The first recommendation to start with is to enhance the society’s understanding of people with visual impairment. As this medical condition does not concern the majority of population, the topic is not widely covered in the media or does not get comprehensive visibility. Thus, in case of occurrence sighted people do not clearly realise how to behave, communicate, facilitate, or perceive people with visual impairment (Amin et al., 2021; Khowaja, 2021). More active disclosure and awareness could overcome the stigma of the society and empower both parties. Here the mass media can manifest to the best advantage disseminating information on the issues.

University management could take a more proactive position and be at the leading edge, as the number of students with visual impairment who proceed to higher education is increasing. Special courses can be organised for administrative and academic staff, as well as for students to provide knowledge about physiological, psychological and technical aspects that will result in a more supportive and mindful environment. Special units or departments can be set to get and disseminate information about novelties of all types related to the issue concerned. University online systems, official website and official portal should be upgraded to meet challenges of the VIS. The plan of activities for students with visual impairment (educational, recreational, research, volunteering, etc.) can also be systematically widened. Assistive technologies should be regularly updated and maintained by corresponding university services. Libraries, especially university ones, often become empowerment institutions, as they provide free IT infrastructure, internet access, courses and individual support for people with visual impairment to ease their access to the digital society (Bühler, Pelka, 2014).

Although the administration and faculty staff define the mainstream guidelines, perhaps the most responsibility lies with lecturers and teachers as their perception, knowledge, and attitude determine their willingness to foster a successful inclusive environment (Miyauchi, 2020). Specified teacher training programmes are needed even if they take time. Such programmes should incorporate both theoretical and practical content as well as face-to-face interaction and teaching experience with VIS. Training programmes should be complemented with internal and external

support that facilitates teachers' work at different levels, such as adaptation of learning materials, consultations and support for students (Miyauchi, 2020). But even when the environment is supportive, there are still subjects hardly accessible for VIS, for instance, Science as it remains challenging to carry out laboratory experiments and observe chemical, physical or biological reactions (Miyauchi, 2020).

Faculty staff and lecturers should prepare print copies for VIS in advance, as the students with visual impairment need more time to read these materials with the help of special devices or they can read them beforehand to orient themselves during the lecture or practical class. It is not enough to read the text but students are supposed to navigate the text, find and make footnotes, cite a particular quotation, make references, etc. Visually impaired students study and are evaluated on an equal basis with their sighted peers, so they should not lag behind because they are unable to access textbooks and print materials (Quirke et al., 2018). In their condition, reading a text, whatever innovative technologies they use, remains a time-consuming process. The written text is converted into an audio format but it excludes the opportunity to skim or scan the text to find required information – the student has to listen to the whole text. Thus, the text in any format prepared in advance can minimise this barrier. But before preparing print materials for VIS it is necessary to clarify what formats are read by student's devices or what software they use to access print materials.

Lecturers and academic staff could follow some recommendations that are not so difficult to follow (Al-Mouh et al., 2014). Firstly, they can divide text information into small and easily understandable blocks with simple layout and noticeable headings. Secondly, they should provide text alternative for visuals (images, tables, graphs, etc.) whether in an audio or print description. Thirdly, fill-in the gaps assignments are also accessible for VIS, not with conventional underscores but with a question instead.

We should add a small note to the recommendation. Some subjects imply that students are to read a number of books, articles, dissertations and so on. For lecturers it signifies that a list of texts for reading should be ready several weeks or months in advance to guarantee that students with visual impairment have enough time to read the required texts.

If during the lectures, seminars or practical classes computers are used, lecturers should inquire about special hardware or software beforehand and in case when the proper equipment is missing, be sure to provide it. Otherwise, it could be impossible to solve the problem in situ or it could take time, disturb all the other students and disrupt the lesson plan. As for time for reading, it can take three times longer than sighted students, result in fatigue or headache.

Some assignments can be completed by VIS in online format but the lecturer should be sure that such format does not interfere with social aspect when a student does not isolate himself/herself from his/her peers and groupmates.

Preparing and planning in advance become a prerequisite for faculty staff and lecturers. This also concerns both formative and summative assessment. Standard exam formats can be inappropriate for VIS to demonstrate their knowledge, skills and competences. Thus, lecturers, tutors or administration should make adjustments to enable students with visual impairment to demonstrate their abilities. The examination process can be shifted to computerised exams, VIS can be given extra time or a tutor/facilitator can read and write the exam assignments while a student with visual impairment completes the tasks orally (Quirke et al., 2018).

People around VIS should be informed and ready that their assistance may be needed because even with all innovative technologies some aspects remain challenging, for instance, proof-reading and editing a bibliography, meeting the presentation requirements, etc.

Communicating with others presumes non-verbal elements such as gestures, posture, facial expression, and gaze as they impart a significant amount of information that turns out to be missed by VIS (Kunz et al., 2020). Hence, in mixed groups of VIS and sighted peers the emphasis is laid upon verbal channel of communication that results in slowing down of interaction and adding cognitive load. In cases of instantly changing situations, for instance, brainstorming sessions or mindmap creation when notes are constantly extended and the layout is transformed, students with visual impairment need permanent comments.

Modern technologies allow people with visual impairment to be active game players as game developers target blind and visually impaired users as well. One of the examples of online games or mobile applications is a gamebook – a book that depicts a fictional world where the readers make choices while participating in the story (Dobosz et al., 2014). The choice made defines the further

narration directing the user to the appropriate paragraph or page. The experiment revealed that visual impairment did not have a significant impact but previous experience did and the age of the users – young players were more efficient than the older ones. As for other online or mobile games, their range is rather extensive for visually impaired people. The variety of games includes action games, MUD (Multi-User Dungeon) games, arcade games, shooter games, horror games, strategy games, sports games and many others. Some of them can be found on websites, for instance, https://tiflo-games.ru or http://www.tiflocomp.ru.

5. Conclusion

This review article has examined the current state of research on fostering media and digital literacies among visually impaired students, with a particular emphasis on the challenges these students encounter and the solutions proposed to address them. The synthesis of theoretical and empirical studies leads to several key conclusions.

First, media and digital literacies are indispensable for visually impaired students, not only as tools for academic success but also as enablers of personal independence, financial autonomy, social participation, and overall quality of life. Second, while many visually impaired students possess strong technical and operational skills – largely due to their reliance on digital instruments to access information – they often lag behind in cognitive and social-emotional dimensions of digital literacy. Specifically, difficulties persist in critical evaluation of information, distinguishing trustworthy from untrustworthy sources, creating media products, effective collaboration, and safe online communication. These gaps are exacerbated by inaccessible digital content, poorly designed platforms, and a lack of awareness among sighted peers, faculty, and administrative staff. Third, the challenges faced by visually impaired students in higher education are multifaceted. They include financial issues, social stigma, twofold accessibility barriers (informational and spatial), limited peer acceptance, and difficulties inherent in the educational process itself. Assistive technologies, while invaluable, are not a panacea; they introduce their own challenges, such as the inability to skim or scan texts, incomplete recognition of graphic information and complex formats (e.g., tables, formulae), and the need for additional time – often three times longer than sighted peers – to complete assignments.

Specific domains such as academic text perception, formatting, collaborative writing, photography, emoji communication, cinema, and digital content creation present unique and often under-researched obstacles. Fourth, the literature offers a range of solutions that operate at multiple levels. At the societal level, enhanced media coverage and awareness campaigns can reduce stigma and improve understanding of visual impairment. At the institutional level, it is essential for universities to take initiative by implementing proactive policies, enhancing their digital platforms, setting up specialised assistance departments, ensuring implementation of innovative assistive technologies, and offering ongoing training for both administrative and teaching personnel.

At the pedagogical level, lecturers are urged to prepare materials in advance, clarify accessible formats, provide text alternatives for visuals, divide information into manageable blocks, adjust assessment formats, and allow extra time for examinations. At the technological level, advances such as deep learning models for image quality assessment, screen reader-compatible collaborative writing practices, audio description for cinema, and accessible emoji communication strategies show promise in mitigating specific barriers. Fifth, the review highlights that definitions of digital competence for visually impaired students must be broadened beyond standard conceptualisations. Digital competence for this population should explicitly prioritise accessibility, self-determination, self-advocacy, troubleshooting skills, and the ability to articulate technical needs.

Finally, several gaps and directions for future research emerge from this review. There is a need for more empirical studies that test the effectiveness of specific interventions and training programmes across diverse educational and cultural contexts. Additionally, the voices of visually impaired students themselves remain underrepresented in the literature; participatory and co-design approaches could yield more relevant and practical solutions. With ongoing advancements in technology – such as artificial intelligence, virtual reality, and more advanced assistive devices – we need to continue research in order to prevent the creation of new obstacles and to ensure that the goal of digital inclusion is fully achieved for all people with special needs around the world.

All in all, facilitating media and digital skills among students with visual impairment goes beyond technical or teaching concerns – it is an issue of fairness, human rights, and social equality.

With coordinated efforts from researchers, educators, policymakers, technology developers, and society, the barriers that currently exclude visually impaired students from full participation in the digital world can be progressively broken.

References

Al-Mouh et al., 2014 – *Al-Mouh, N.A., Al-Khalifa, A.S., Al-Khalifa, H.S.* (2014). A first look into MOOCs accessibility: The case of Coursera. *International conference on computers for Handicapped persons*. July: 145-152. DOI: 10.1007/978-3-319-08596-8_22

AlOshan, 2013 – *AlOshan, M.S.* (2013). Media information literacy: The perspective of Saudi blind and visually impaired university students. *European Conference on Information Literacy*. October: 198-204. DOI: 10.1007/978-3-319-03919-0_25

Amin et al., 2021 – *Amin, A.S., Sarnon, N., Akhir, N.M., Zakaria, S.M., Badri, R.N.F.R.Z.* (2021). Main challenges of students with visual impairment at higher education institutions. *International journal of academic research in business and social sciences*. 10(1): 734-747. DOI: 10.6007/IJARPED/v10-i1/9682

Arslantas, Gul, 2022 – *Arslantas, T.K., Gul, A.* (2022). Digital literacy skills of university students with visual impairment: A mixed-methods analysis. *Education and Information* Technologies. 27: 5605-5625. DOI: 10.1007/s10639-021-10860-1

Ayiah, 2017 – *Ayiah Mrs, E.M.* (2017). Provision of assistive technologies in academic libraries to students with visual impairment in Ghana: A case study of the University of Education, Winneba, Ghana. *Library Philosophy and Practice (e-journal)*. 1679. [Electronic resource]. URL: https://digitalcommons.unl.edu/libphilprac/1679/

Bohnsack, Puhl, 2014 – *Bohnsack, M., Puhl, S.* (2014). Accessibility of MOOCs. *International Conference on Computers for Handicapped Persons*. 8547: 141-144. DOI: 10.1007/978-3-319-08596-8_21

Bühler, Pelka, 2014 – *Bühler, C., Pelka, B.* (2014). Empowerment by digital media of people with disabilities: Three dimensions of support. *Computers Helping People with Special Needs*. Part I. 8547: 17-24. DOI: 10.1007/978-3-319-08596-8_4

Das et al., 2019 – *Das, M., Gergle, D., Piper A.M.* (2019). "It doesn't win you friends": Understanding accessibility in collaborative writing for people with vision impairments. *Proceedings of the ACM on Human-Computer Interaction*. 3(CSCW): 1-26. DOI: 10.1145/3359293

Dobosz et al., 2014 – *Dobosz, K., Ptak, J., Wojaczek, M., Depta, T., Fiolka, T.* (2014). Mobile gamebook for visually impaired people. *International Conference on Computers for Handicapped Persons*. July: 309-312. DOI: 10.1007/978-3-319-08596-8_49

Fedorov, Levitskaya, 2015 – *Fedorov, A., Levitskaya, A.* (2015). The framework of media education and media criticism in the contemporary world: the opinion of international experts. *Comunicar*. 23(45): 107-115.

Fels, 2014 – *Fels, D.I.* (2014). Accessible Media. Introduction to the Special Thematic Session. *Computers Helping People with Special Needs*. July: 1-3. DOI: 10.1007/978-3-319-08596-8

Fume et al., 2014 – *Fume, K., Kuroda, Y., Ashikawa, T., Mizuoka, Y., Morita, M.* (2014). TTS-based DAISY content creation system: Implementation and evaluation of DaisyRingsTM. *Computers Helping People with Special Needs*. Part I. 8547: 69-76. DOI: 10.1007/978-3-319-08596-8_11

Kamei-Hannan et al., 2023 – *Kamei-Hannan, C., Tuttle, M.J., Songkhao, R.* (2023). A conceptual framework for digital competence of students with low vision and blindness. *Journal of Visual Impairment & Blindness*. 117(1): 7-18. DOI: 10.1177/0145482X221149979

Khowaja, 2021 – *Khowaja, Sh.* (2021). Visual impairment and tertiary education in Karachi. *4th International Academic Conference on Education*. December: 117-129. [Electronic resource]. URL: https://www.dpublication.com/wp-content/uploads/2021/12/41-54000.pdf

Kunz et al., 2020 – *Kunz, A., Miesenberger, K., Mühlhäuser, M.* (2020). Accessibility of non-verbal communication: making spatial information accessible to people with disabilities: Introduction to the special thematic session. *International Conference on Computers Helping People with Special Needs*. September: 3-10. DOI: 10.1007/978-3-030-58805-2_1

Malik et al., 2024 – *Malik, S., Elbatal, I., Khan, S.U.* (2024). People with disabilities, the age of information and communication technology and the prevailing digital divide – A descriptive analysis. *Journal of Disability Research* 3.2 (2024): 20240011. DOI: 10.57197/JDR-2024-0011

Mandal et al., 2023 – *Mandal, M., Ghadiyaram, D., Gurari, D., Bovik, A.C.* (2023). Helping visually impaired people take better quality pictures. *IEEE Transactions on Image Processing*. 32(2023): 3873-3884. DOI: 10.1109/TIP.2023.3282067

Miyauchi, 2020 – *Miyauchi, H.* (2020). A systematic review on inclusive education of students with visual impairment. *Education sciences*. 10(11): 346. DOI: 10.3390/educsci10110346

Morales et al., 2014 – *Morales, L. M., Arteaga, S.M., Cottrell, P., Kurniawan, S.* (2014). Design guidelines of tools for facilitating blind people to independently format their documents. *International Conference on Computers for Handicapped Persons*. July: 634-641. DOI: 10.1007/978-3-319-08596-8_98

Quirke et al., 2018 – *Quirke, M., McCarthy, P., Mc Guckin, C.* (2018). "I can see what you mean": Encouraging higher education educators to reflect upon their teaching and learning practice when engaging with blind/vision impaired learners. *AISHE-J: The All Ireland Journal of Teaching & Learning in Higher Education*. 10(1): 12-16. DOI: https://doi.org/10.62707/aishej.v10i1.337

Sorin et al., 2014 – *Sorin, L., Lemarié, J., Aussenac-Gilles, N., Mojahid, M., Oriola, B.* (2014). Communicating text structure to blind people with text-to-speech. *Computers Helping People with Special Needs*. Part I. 8547: 61-68. DOI: 10.1007/978-3-319-08596-8_10

Tigwell et al., 2020 – *Tigwell, G.W., Gorman, B.M., Menzies, R.* (2020). Emoji accessibility for visually impaired people. *Proceedings of the 2020 CHI conference on human factors in computing systems*. 1-14. DOI: 10.1145/3313831.3376267

Tinák, Gálik, 2026 – *Tinák, T., Gálik, S.* (2026). On the epistemological and ethical conditions of information in journalism. *Communication Today*. 17(1): 26-36.

Tripathi, Tripathi, 2020 – *Tripathi, G., Tripathi, S.D.* (2020). Accessibility of films and level of film literacy in visually impaired people: An exploration of media literacy skills. *Global Media Journal: Indian Edition*. 12(2).

Voronova, 2021 – *Voronova, A.* (2021). Student's media literacy training as a factor of personality development in the inclusive education. *European Proceedings of Social and Behavioural Sciences*. 112: 153-160. DOI: 10.15405/epsbs.2021.06.04.18

Weigand et al., 2013 – *Weigand, M., Zylka, J., Müller, W.* (2013). Media competencies in the context of visually impaired people. *European Conference on Information Literacy*. 397: 190-197. DOI: 10.1007/978-3-319-03919-0_24

Zhang et al., 2023 – *Zhang, L., Sun, S., Findlater, L.* (2023). Understanding digital content creation needs of blind and low vision people. *Proceedings of the 25th International ACM SIGACCESS Conference on Computers and Accessibility*. October 1-15. DOI: 10.1145/3597638.3608387

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Online Academic Conferences as Media Education Platforms in Higher Education: Faculty Digital Competence and Professional Identity

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Abstract

As digital technologies continue to reshape professional development in higher education, online academic conferences have emerged as accessible spaces where university teachers engage with new pedagogies, digital tools, and professional networks. This study explores how online academic conferences contribute to university teachers' digital competence in contemporary higher education in Pakistan. Drawing on the DigCompEdu framework, the study adopts a qualitative interpretivist approach to examine the experiences of 25 university teachers from three public universities in Multan, Pakistan, who participated in online academic conferences. Data was collected through semi-structured interviews and written reflections and was analyzed thematically. The findings indicate that online academic conferences supported participants' professional engagement, use of digital resources, and teaching and learning practices, while more limited evidence emerged in the areas of digital assessment and facilitating learners' digital competence. Participants also described shifts in confidence, professional identity, and sense of belonging within wider academic networks. At the same time, gendered access, infrastructural limitations, and lack of institutional follow-up affected the depth and sustainability of these experiences. The study argues that online academic conferences can function as meaningful spaces for faculty professional learning in under-resourced higher education contexts when supported through intentional design and institutional recognition.

Keywords: digital competence, DigCompEdu, online academic conferences, university teachers, higher education, professional development.

1. Introduction

The rapid expansion of digital technologies in education has reshaped how university teachers engage in professional development. Online academic conferences have emerged as one of the most accessible and scalable professional learning opportunities for educators worldwide, particularly after the disruptions caused by the COVID-19 pandemic (Cutri et al., 2020; König et al., 2020). These virtual conferences allow university teachers to access current research, emerging pedagogies, digital tools, and professional networks — often at minimal cost and across geographical boundaries (Niner, Wassermann, 2021; Seidenberg et al., 2021). However, despite their growing popularity, these spaces are rarely examined as media education platforms, which go beyond access and attendance to consider the learning ecology, digital identity construction, and media-mediated pedagogical transformation they enable.

The term media education traditionally refers to the development of critical understanding and responsible use of media (Buckingham, 2003), but in the context of teacher professional

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development, it can also encompass digital immersion, collaborative engagement, and pedagogical reflection fostered in technology-mediated spaces (Jenkins, Ito, 2015). Online conferences are more than delivery mechanisms, they represent interactive and participatory environments where meaning is constructed through both content and the digital medium itself. As such, they can function as media ecologies that influence how teachers see themselves, their roles, and their capacity to teach in a digital world (Rapanta et al., 2020; Selwyn, 2021).

In Pakistan, this shift is both promising and complex. Although there has been a marked increase in the number of online professional learning events organized by universities, NGOs, and independent networks, university teachers still face systemic barriers to digital participation, including poor connectivity, limited access to devices, and uneven institutional support (Fernández-Batanero et al., 2022; Jamil, Muschert, 2023). Teachers' experiences in these conferences are likely shaped not only by their digital proficiency but also by their sense of agency, emotional readiness, and perceived value of technology in teaching (Artino et al., 2012; Jang, 2024).

To better understand the professional learning potential of online conferences, this study draws upon the Digital Competence Framework for Educators (DigCompEdu) developed by the European Commission (Redecker, Punie, 2017). This framework identifies six core domains of educator competence in digital contexts: Professional Engagement, Digital Resources, Teaching and Learning, Assessment, Empowering Learners, and Facilitating Learners' Digital Competence. While prior research often applies this framework in quantitative evaluation studies (SEM or regression models), this study uses DigCompEdu qualitatively as an interpretive lens to explore how these domains manifest through teachers' reflective experiences of participating in online conferences.

From the above rationale, this study aims to:

1. Explore how university teachers in three public universities experience participation in online academic conferences, with particular attention to digital interaction, pedagogical reflection, and professional growth.
2. Interpret how the domains of the DigCompEdu framework are reflected in university teachers' narratives and how these shape their digital competence and instructional practices.
3. Examine how participation in online academic conferences influences university teachers' confidence, professional identity, and perceived agency in digital teaching environments.

Research Questions: aligned with the objectives, the study addresses the following research questions:

1. How do university teachers in three public universities in Multan, Pakistan, perceive and interpret their participation in online academic conferences?
2. Which domains of digital competence, as described in the DigCompEdu framework, are evident in university teachers' reflections, and how are these applied in practice?
3. In what ways does participation in online academic conferences influence university teachers' professional identity, confidence, and perceived agency in digital teaching environments?

Literature Review: the integration of media education into teacher professional development (PD) has gained renewed importance in the digital era, particularly in response to the global pivot toward remote and hybrid learning. Traditionally, media education was concerned with fostering critical literacy, the ability to understand, analyze, and produce media content responsibly (Buckingham, 2003). However, in the context of teacher PD, media education must be reimagined as an immersive and reflective practice. This perspective moves beyond the acquisition of digital tools to include the development of pedagogical insight, professional identity, and critical engagement with the digital environments in which teachers operate (Fedorov, Levitskaya, 2015; Potter, McDougall, 2017; Selwyn, 2021).

One growing area within this discourse is the role of online academic conferences as transformative spaces for teacher learning. Such conferences offer more than exposure to content; they create opportunities for dialogic interaction, collaboration, and identity reconstruction (Rapanta et al., 2020). Teachers engaging in these virtual spaces often reframe their professional roles as they participate in global conversations, encounter diverse perspectives, and explore new pedagogical paradigms. These experiences are especially important in low- and middle-income countries (LMICs), where limited access to traditional PD models makes online formats more accessible and potentially empowering (Niner, Wassermann, 2021; Tschannen-Moran, Hoy, 2001).

The notion of digital competence has also evolved significantly. Once limited to operational or technical skills, it is now recognized as a broader construct that includes pedagogical innovation, reflective practice, assessment literacy, and learner empowerment (Ferrari, 2013; Redecker, Punie,

2017). Frameworks like DigCompEdu have formalized these competencies, yet many studies continue to treat them as measurable outcomes rather than lived experiences. This creates a need for more detailed, qualitative investigations into how teachers actually develop and express digital competence within mediated learning environments.

In the Pakistani context, research has documented persistent digital inequities, particularly between public and private institutions, urban and rural settings, and male and female educators (Jamil, Muschert, 2023; Shoaib et al., 2025). While some studies have explored the effectiveness of online PD programs (Mahmood, 2021), most have relied on surveys or assessments that offer limited insight into teachers' reflective processes or identity shifts. Media exposure in PD is often treated as peripheral or secondary, despite its central role in shaping how teachers perceive themselves and their students in a digital learning culture.

Importantly, a significant gap in the literature lies in the limited number of qualitative studies that explore how university teachers experience digitally mediated professional development through online academic conferences, particularly in under-resourced higher education contexts. Most existing research emphasizes quantifiable impacts, such as gains in knowledge or frequency of tool use, without exploring how teachers construct meaning from their participation in online conferences. This study addresses that gap by centering university teachers' narratives and using the DigCompEdu framework to investigate digital professional learning as a reflective and contextually situated process.

Conceptual Framework: this study draws upon interrelated theoretical perspectives to examine how online academic conferences shape university teachers' digital competence, professional identity, and engagement in digitally mediated professional learning. First, the study is informed by media ecology theory, which views learning environments as dynamic systems shaped by technologies, communication practices, and culture (McLuhan, 1994; Selwyn, 2021; Tinák, Gálik, 2026). From this perspective, online academic conferences can be understood as media-rich and participatory environments in which university teachers interact with knowledge, peers, and digital pedagogies in flexible ways (Jenkins, Ito, 2015). Within this framework, media education is not only about content consumption but about reflective, identity-forming experiences enabled by digital platforms (Buckingham, 2003).

The second pillar of the framework is the DigCompEdu model (Redecker, Punie, 2017), which outlines six domains of digital competence: Professional Engagement, Digital Resources, Teaching and Learning, Assessment, Empowering Learners, and Facilitating Learners' Digital Competence. In this study, DigCompEdu is applied qualitatively as a coding framework to interpret how these domains appear in teachers' narratives and reflections during their online conference participation.

Thirdly, the study integrates perspectives on teacher identity and self-efficacy. Teachers' identities evolve through social interaction and experience, particularly in digital contexts where roles and expectations shift (Beijaard et al., 2004). At the same time, self-efficacy, teachers' beliefs in their ability to use technology effectively, shapes how they engage with and apply new learning (Bandura, 1997; Jang, 2024). High self-efficacy supports confidence and experimentation; low self-efficacy may lead to resistance or disengagement.

Together, these concepts provide a lens to examine online conferences as complex environments of digital transformation, where teachers' competence, identity, and agency intersect, as shown in Figure 1.

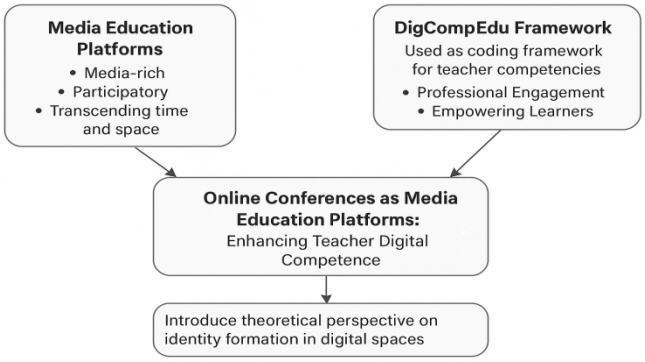

Fig. 1. Conceptual framework of the study

2. Materials and methods

This study is guided by the interpretivist paradigm, which assumes that reality is socially constructed and best understood through the subjective experiences of individuals. Interpretivism aligns with the study's aim to explore teachers' lived experiences of online academic conferences as spaces for media education and digital transformation. Unlike positivist approaches that seek objective truths, this paradigm supports deep, contextualized understanding by emphasizing meaning-making and reflective narratives (Creswell, Poth, 2017; Merriam, Tisdell, 2016).

Given the focus on meaning, experience, and professional change in digital learning spaces, the study adopts a qualitative interpretive design. This design is appropriate because it allows an in-depth exploration of how university teachers make sense of their participation in online academic conferences and how they connect these experiences to their pedagogical practices, confidence, and professional identities.

The participants in this study were 25 university teachers from three public sector universities in Multan, Pakistan. Participants were selected through purposive and snowball sampling and were required to have attended at least one online academic conference in the previous two years. The sample was intended to reflect variation in gender, discipline, teaching experience, and levels of digital access in order to capture a range of perspectives relevant to the study objectives.

Data collection was conducted through semi-structured interviews, complemented by written reflection prompts sent to participants prior to the interview. This two-step strategy encouraged deeper introspection, allowing participants to articulate their experiences before expanding on them during the interview sessions. Each interview lasted 45–60 minutes and was conducted in English or Urdu, depending on participant preference. All interviews were recorded with permission and transcribed verbatim for analysis.

The collected data was analyzed using thematic analysis as outlined by Braun and Clarke (Braun, Clarke, 2006). The process began with open coding, during which recurring concepts and insights were identified. These initial codes were then mapped onto the six domains of the DigCompEdu framework (Redecker, Punie, 2017), including Professional Engagement, Digital Resources, Teaching and Learning, Assessment, Empowering Learners, and Facilitating Learners' Digital Competence. In addition to domain alignment, the analysis focused on identifying narrative threads around themes such as media engagement, professional identity, emotional responses, and pedagogical change. This dual-layered approach allowed for both structured analysis and open-ended exploration of meaning.

Ethical considerations were central throughout the research process. All participants provided informed consent and were briefed on the voluntary nature of their participation. Pseudonyms were used to anonymize identities, and all digital files were stored securely. Ethical approval for the study was obtained from the relevant university ethics committee. Participants were also informed of their right to withdraw at any point without consequence.

3. Discussion

This study suggests that online academic conferences should not be viewed merely as content delivery events, but as digitally mediated professional learning environments in which university teachers engage with new tools, pedagogical ideas, and professional networks in complex ways. Participants described experiences of overload, reflection, experimentation, and redefinition, indicating that conference participation influenced not only what they learned but also how they understood their roles as digital educators.

These findings show that digital professional learning involves more than technical skill acquisition; it also includes the development of teacher identity, self-efficacy, and professional agency (Beijaard et al., 2004; Rapanta et al., 2020). Faculty engaged deeply with conference content and formats, yet this engagement varied based on personal background, digital access, and contextual support.

When mapped onto the DigCompEdu framework (Redecker, Punie, 2017), the findings show a strong presence in domains like Professional Engagement, Digital Resources, and Teaching & Learning. Faculty actively participated in online academic communities, explored new digital tools, and began to reimagine their pedagogical approaches. However, there were evident gaps in Assessment and Facilitating Learners' Digital Competence, two domains critical for sustainable

digital transformation (Ferrari, 2013). Very few participants discussed revising their assessment methods, and most admitted to overlooking strategies for developing students' own digital skills.

Contextual challenges specific to the Global South, such as low bandwidth, limited institutional mentorship, and gendered expectations, shaped participants' engagement and constrained the implementation of new practices (Jamil, Muschert, 2023; Shoaib et al., 2025). Female university teachers in particular highlighted domestic disruptions and digital hesitation, while others noted a disconnect between personal learning and institutional recognition structures. This reflects a larger pattern where teacher growth is not matched by supportive policy or infrastructure.

These findings resonate with international literature that highlights the identity-forming potential of online PD (Rapanta et al., 2020), the importance of digital pedagogical design (Selwyn, 2021), and the democratizing effect of virtual formats (Niner, Wassermann, 2021). Yet, most global studies assume a level of access and institutional responsiveness that may not exist in the Pakistani context, pointing to the need for localized research and policy alignment.

If online conferences are to function as true media education platforms, they must be intentionally designed not just to deliver content, but to engage identity, reflection, and professional transformation. Organizers should consider including follow-up mentoring, institutional recognition, and student-focused modules, so that digital engagement leads to systemic change. In short, the move from participation to transformation requires designing with media, not just through media.

Implications: This study highlights that online conferences must be designed not just as content delivery tools but as media-rich environments that support teacher identity, reflection, and pedagogical change. Organizers should align content with all DigCompEdu domains, especially those often neglected, such as Assessment and Facilitating Learners' Digital Competence. Institutions should recognize participation through formal incentives, appraisal integration, and structured mentoring, helping sustain post-conference transformation. Addressing gender and access disparities is essential for equitable engagement, particularly in low-resource settings.

Furthermore, educators need ongoing support to translate digital exposure into classroom innovation, which requires local ownership, follow-up workshops, and contextually relevant resources. Ultimately, professional development should adopt a media education lens, treating online spaces as opportunities for deeper learning, identity formation, and long-term digital empowerment.

Limitations: This study has several limitations. First, it is based on a relatively small qualitative sample of 25 university teachers from three public universities in Multan, Pakistan; therefore, the findings are not intended to be generalized to all higher education contexts. Second, the study relies on self-reported experiences rather than classroom observation or longitudinal follow-up. Third, participants' reflections were shaped by differences in digital access, institutional support, and personal circumstances, which may have influenced the depth of engagement reported in the study. Future research may build on these findings through comparative, mixed-method, or longitudinal designs across a wider range of universities.

4. Results

The analysis of interviews and written reflections with 25 university teachers revealed multiple intersecting layers of experience, emotion, and professional change related to participation in online academic conferences. These experiences were shaped not just by content exposure but by how participants navigated the media environment, perceived their own evolving competence, and positioned themselves within digital professional spaces. Using thematic analysis (Braun, Clarke, 2006), the data was first inductively coded and then mapped onto the DigCompEdu framework (Redecker, Punie, 2017), while also attending to broader patterns of identity, self-efficacy, and media engagement. The findings are organized below as thematic narratives that reflect both convergence and diversity across participant stories.

Theme 1: Online Conferences as Disruptive Media Spaces: many participants described online conferences as overwhelming yet eye-opening experiences, particularly for those attending for the first time. The media-rich nature of these platforms, slides, breakout rooms, chat flows, pre-readings, and simultaneous sessions created a sense of "information flooding". Yet, this exposure also acted as a disruption to conventional, passive PD formats.

"*I remember entering this international Zoom conference and, within 15 minutes, I was completely lost. People were talking in the chat, others speaking on screen, links being shared,*

my mind couldn't process all of it. But slowly I started to pick up patterns, and I realized that learning wasn't just from the speaker but from everything happening around".

Participant 4, Male, Public University A.

"It was a bit of a shock. I've been teaching for 18 years, but this was the first time I felt like a student again, confused, trying to follow different speakers, seeing tools I had never used. But it was exciting too. I felt like I was in a global classroom". Participant 9, Female, Public University C.

These responses suggest that online conferences function as disruptive media ecologies, aligning with the idea of media education spaces that challenge familiar pedagogical rhythms. They create not only access to new ideas but also *awareness of one's digital limitations*.

Theme 2: From Tool Use to Pedagogical Change: Several participants noted a shift from simply learning digital tools to rethinking their teaching strategies, marking a movement along the DigCompEdu continuum from basic resource use to applied pedagogy.

"Initially, I was just learning how to use Menti or Padlet. But after the second or third session, I started thinking, what is the purpose of these tools? Am I using them just to impress students or to really change how I teach? That reflection came from listening to other educators in the conference". Participant 7, Male, Public University B.

"Earlier, I was just uploading slides. After attending a digital pedagogy session, I started redesigning my entire module to include student interaction, using asynchronous forums and digital feedback. It wasn't just about the tool, it was about the mindset". Participant 12, Female, Public University C.

These experiences map onto the Teaching and Learning and Digital Resources domains of DigCompEdu, with participants evolving from passive users to reflective practitioners.

Theme 3: Confidence, Resistance, and Gendered Digital Experience: Confidence levels varied sharply, particularly along gender and access lines. Female faculty often reported challenges related to technology anxiety, lack of institutional support, or domestic interruptions.

"I had to fight for quiet space at home to attend the conference. My children were around, and I didn't feel confident turning on my camera. Also, some of the tools were being discussed as if everyone already knew them; it was intimidating". Participant 15, Female, Public University A

"As a woman, I felt like I had to prove I could manage the tech just as well as my male colleagues. There was resistance in me; I thought this was not for me. But after hearing stories from other female educators in the sessions, I started feeling more capable". Participant 22, Female, Public University B.

This theme touches on self-efficacy, professional identity, and the Empowering Learners domain, showing how media engagement is also filtered through sociocultural and gendered realities.

Theme 4: Emergent Digital Identity: A major theme was the evolution of digital identity; participants began to see themselves as not just teachers, but as digital actors in a global professional space.

"Earlier, I thought of myself as a traditional lecturer. After the conference, I started using the term 'digital educator', and I meant it. I changed my LinkedIn bio. I felt like I belonged in a global academic network". Participant 6, Male, Public University C.

"When I saw other faculty sharing their digital teaching portfolios, I was inspired. I realized that I could curate my work too. I wasn't just surviving online; I was shaping my digital self". Participant 13, Female, Public University B.

This shift reflects intersections between Professional Engagement, media identity, and teacher agency. Online conferences became spaces for re-authoring one's role in a digital academic landscape.

Theme 5: Community and Professional Belonging: Several faculty members spoke of gaining a sense of connection and community through repeated participation in conferences, especially during the isolation of the COVID era.

"I joined a WhatsApp group with people I met during the session. We now exchange resources and ideas regularly. It doesn't feel like I'm working alone anymore". Participant 1, Male, Public University A.

"That session gave me my first professional network outside my university. I now co-host webinars with two educators I met at that event. It was empowering to feel part of something bigger". Participant 8, Female, Public University C.

This relates strongly to the Professional Engagement domain of DigCompEdu and shows how media spaces cultivate peer mentorship and knowledge networks.

Theme 6: Gaps in Facilitating Student Digital Competence: A notable silence across most interviews was in actively enabling students' digital skills. While teachers improved their own competence, few integrated strategies to empower learners technologically.

"I became more confident using digital tools, but honestly, I didn't think about whether my students were becoming digitally literate. That wasn't part of the conversation in the conference". Participant 17, Male, Public University B.

"We discussed assessment tools and feedback, but nothing about how to teach students to critically use or create digital content. Maybe we assumed they already knew". Participant 11, Female, Public University A.

This absence highlights a major gap in the DigCompEdu domain of Facilitating Learners' Digital Competence, suggesting an area where conference design and follow-up could improve.

Theme 7: Need for Institutional Follow-up and Recognition: Despite positive experiences, participants expressed frustration that their learning was not formally recognized or integrated into institutional PD structures.

"I attended five conferences last year. None of it counts for promotion or appraisal. It feels like my effort is invisible unless I publish something". Participant 5, Male, Public University C.

"I gained so much, but there is no system to implement what I learned. No workshops, no support group, no follow-up. So, the ideas just stay in my head". Participant 20, Female, Public University B.

This indicates a disconnect between individual growth and institutional frameworks, reinforcing the need for structured integration of online PD into university policies.

Table 1. Themes Extracted through Thematic Analysis

Initial Coding	Sub-Themes	Theme
Zoom fatigue, multitasking, rapid chat flow, breakout rooms, screen overload, media noise, session hopping, cognitive strain.	Media intensity, fragmented attention, unfamiliar environment, information chaos, digital overwhelm.	Online Conferences as Disruptive Media Spaces.
Slide sharing, tool demonstration, audience response tools, content redesign, digital lesson planning, formative feedback, active learning, asynchronous delivery.	Pedagogical reflection, practice redesign, meaningful tool use, learning transformation, instructional shift.	From Tool Use to Pedagogical Change.
Camera anxiety, gender norms, household duties, digital stress, tool unfamiliarity, silence in sessions, access gap, self-doubt.	Confidence barriers, digital exclusion, unequal access, gendered experiences, resistance to tech.	Confidence, Resistance, and Gendered Digital Experience
LinkedIn update, digital CV, tech-savvy label, visibility, sharing work online, content curation, professional image, online presence.	Reinvention of self, digital agency, identity expansion, global belonging, self-recognition.	Emergent Digital Identity.
WhatsApp groups, networking, follow-up meetings, mutual invitations, knowledge sharing, emotional support, collaboration, mentorship.	Peer connection, shared learning, emotional validation, ongoing dialogue, professional bonding.	Community and Professional Belonging.
Student neglect, tech assumption, no training, critical use ignored, limited support, passive learners, content delivery only, one-way interaction.	Overlooked student needs, unplanned digital skills, teacher-centric sessions, student disengagement, low digital transfer.	Gaps in Facilitating Student Digital Competence.
No credit, lack of recognition, appraisal mismatch, administrative silence, institutional disconnect, no PD policy, unsupported growth, frustration.	Recognition gap, unvalued learning, policy vacuum, misaligned evaluation, implementation failure.	Need for Institutional Follow-up and Recognition.

Table 1 presents the thematic analysis, revealing a rich ecosystem of teacher experiences shaped by their engagement with online conferences as media education platforms. These environments often began as disruptive media spaces, marked by cognitive overload, multitasking, and digital fatigue. However, for many educators, this exposure catalyzed a shift from basic tool use to pedagogical transformation, enabling them to rethink lesson delivery and assessment practices. Simultaneously, participants, especially women, encountered confidence challenges and gendered digital resistance, stemming from cultural expectations and household pressures. Despite these barriers, teachers reported the emergence of digital identities, reshaping their professional self-image and gaining visibility in virtual spaces. Informal connections fostered through WhatsApp groups and follow-up collaborations nurtured a strong sense of community and professional belonging, validating their efforts emotionally and intellectually. Yet, a significant gap remained in the translation of these learnings to student digital empowerment, with limited focus on learner-centered strategies. All these themes eventually converged into a critical tension: the lack of institutional follow-up and recognition, where teachers' growth was neither formally acknowledged nor supported through policy or appraisal systems. As shown in Figure 2, these interconnected dimensions illustrate that online conferences function as transformative yet incomplete media education experiences, demanding more intentional design and systemic integration.



Fig. 2. Word cloud map of thematic analysis

5. Conclusion

This study concludes that online academic conferences hold significant potential as professional learning spaces for university teachers, particularly in public-sector higher education settings where access to continuous development opportunities may be limited. Conferences become truly meaningful when they go beyond tool demonstrations to include reflective spaces, opportunities for post-conference mentoring, and engagement with media-critical pedagogies. These elements allow educators not only to acquire digital skills but also to rethink their professional identities and practices in response to evolving digital landscapes.

While the DigCompEdu framework provided a helpful structure for analyzing teacher competence development, the findings suggest that its application in contexts like Pakistan requires local adaptation. Factors such as infrastructure gaps, cultural norms, and institutional inertia must be considered to make such frameworks genuinely effective and inclusive.

Based on these insights, several recommendations are proposed. For policymakers, there is a need to support blended professional development models and digital equity initiatives that ensure all educators, regardless of gender or location, can participate meaningfully in digital learning spaces. For conference organizers, it is essential to embed emotional, collaborative, and context-sensitive support into event design, ensuring that conferences nurture not just knowledge, but also community and confidence. Finally, for researchers, there is a growing need to explore teacher

identity, self-efficacy, and narrative change within digital PD environments, especially in under-researched Global South settings.

References

Artino et al., 2012 – *Artino, A.R., Holmboe, E.S., Durning, S.J.* (2012). Can achievement emotions be used to better understand motivation, learning, and performance in medical education? *Medical Teacher*. 34(3): 240-244. DOI: https://doi.org/10.3109/0142159X.2012.643265

Bandura, 1997 – *Bandura, A.* (1997). Self-Efficacy: The Exercise of Control. Freeman.

Beijaard et al., 2004 – *Beijaard, D., Meijer, P.C., Verloop, N.* (2004). Reconsidering research on teachers' professional identity. Teaching and Teacher Education. 20(2): 107-128. DOI: https://doi.org/10.1016/j.tate.2003.07.001

Braun, Clarke, 2006 – *Braun, V., Clarke, V.* (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*. 3(2): 77-101. DOI: https://doi.org/10.1191/1478088706qp063oa

Buckingham, 2003 – *Buckingham, D.* (2003). Media Education: Literacy, Learning and Contemporary Culture. Polity Press.

Creswell, Poth, 2017 – *Creswell, J.W., Poth, C.N.* (2017). Qualitative inquiry and research design: Choosing among five approaches (4th ed.). SAGE Publications.

Cutri et al., 2020 – *Cutri, R.M., Mena, J., Whiting, E.F.* (2020). Faculty readiness for online crisis teaching. *European Journal of Teacher Education*. 43(4): 523-541. DOI: https://doi.org/10.1080/02619768.2020.1815702

Fedorov, Levitskaya, 2015 – *Fedorov, A., Levitskaya, A.* (2015). The framework of media education and media criticism in the contemporary world: the opinion of international experts. *Comunicar*. 45: 107-115.

Fernández-Batanero et al., 2022 – *Fernández-Batanero, J.M., Montenegro-Rueda, M., Fernández-Cerero, J., García-Martínez, I.* (2022). Digital competences for teacher professional development. Systematic review. *European journal of teacher education*. 45(4): 513-531. DOI: https://doi.org/10.1080/02619768.2020.1827389

Ferrari, 2013 – *Ferrari, A.* (2013). DIGCOMP: A framework for developing and understanding digital competence in Europe (JRC-IPTS Report). Publications Office of the European Union. DOI: https://doi.org/10.2788/52966

Jamil, Muschert, 2023 – *Jamil, S., Muschert, G.* (2023). The COVID-19 pandemic and E-Learning: the digital divide and educational crises in Pakistan's universities. *American Behavioral Scientist*. 68(9): 1161-1179. DOI: https://doi.org/10.1177/00027642231156779

Jang, 2024 – *Jang, J.* (2024). Exploring emotional vulnerability and sense of agency in the digital realm: A Three-Year case study of an EFL teacher in South Korea. *Education Sciences*. 14(9): 950. DOI: https://doi.org/10.3390/educsci14090950

Jenkins, Ito, 2015 – *Jenkins, H., Ito, M.* (2015). Participatory culture in a networked era: A conversation on youth, learning, commerce, and politics. John Wiley & Sons.

König et al., 2020 – *König, J., Jäger-Biela, D.J., Glutsch, N.* (2020). Adapting to online teaching during COVID-19 school closures. *European Journal of Teacher Education*. 43(4): 608-622. DOI: https://doi.org/10.1080/02619768.2020.1809650

Mahmood, 2021 – *Mahmood, S.* (2021). Instructional strategies for online teaching in COVID-19 pandemic. *Human Behavior and Emerging Technologies*. 3(1): 199-203. DOI: https://doi.org/10.1002/hbe2.218

McLuhan, 1994 – *McLuhan, M.* (1994). Understanding Media: The Extensions of Man (2nd ed.). MIT Press.

Merriam, Tisdell, 2016 – *Merriam, S.B., Tisdell, E.J.* (2016). Qualitative research: A guide to design and implementation (4th ed.). Jossey-Bass.

Niner, Wassermann, 2021 – *Niner, H.J., Wassermann, S.N.* (2021). Better for whom? Leveling the injustices of international conferences by moving online. *Frontiers in Marine Science*. 8: 638025. DOI: https://doi.org/10.3389/fmars.2021.638025

Potter, McDougall, 2017 – *Potter, J., McDougall, J.* (2017). Digital Media, Culture and Education: Theorising Third Space Literacies. Palgrave Macmillan.

Rapanta et al., 2020 – *Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., Koole, M., Rapanta, C., Botturi, L., Guàrdia, L.* (2020). Online university teaching during and after the COVID-19 crisis: Refocusing teacher presence and learning activity. *Postdigital Science and Education*. 2(3): 923-945. DOI: https://doi.org/10.1007/s42438-020-00155-y

Redecker, Punie, 2017 – *Redecker, C., Punie, Y.* (2017). Digital competence of educators. Edited by Yves Punie. DOI: https://doi.org/10.2760/159770

Seidenberg et al., 2021 – *Seidenberg, N., Scheffel, M., Kovanović, V., Lynch, G., Drachsler, H.* (2021). Virtual academic conferences as learning spaces. *Journal of Computer Assisted Learning*. 37(6): 1694-1707. DOI: https://doi.org/10.1111/jcal.12614

Selwyn, 2021 – *Selwyn, N.* (2021). Education and technology: Key issues and debates. Bloomsbury Publishing.

Shoaib et al., 2025 – *Shoaib, M., Waris, T., Iqbal, S.* (2025). Assessing gendered participation spaces in online learning environments in higher education in Pakistan. *The Knowledge*. 4(2): 63-74. DOI:https://doi.org/10.63062/tk/2k25b.42054

Tinák, Gálik, 2026 – *Tinák, T., Gálik, S.* (2026). On the epistemological and ethical conditions of information in journalism. *Communication Today*. 2026. 17(1): 26-36.

Tschannen-Moran, Hoy, 2001 – *Tschannen-Moran, M., Hoy, A.W.* (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*. 17(7): 783-805. DOI: https://doi.org/10.1016/S0742-051X(01)00036-1

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Media Literacy as a Factor in the Development of Youth Professionalization

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Abstract

The purpose of this article is to analyze the demand for media literacy skills among Russian students, assess their importance for the professional development of young professionals, and explore the specifics of media literacy development in young people during their university studies. The primary research method was a series of semi-structured interviews (N = 12) with students at Russian universities. The article presents a conceptual model of media literacy, incorporating knowledge and skills across three blocks: analytical (navigation and search, critical analysis of information, including situational conditions, assessing its reliability, countering the intentional distortion or selective presentation of data to create a false perception), group work of users on the development of media content (preparation of an information message, positioning of the author's ideas, unification of like-minded people in the digital space, reflection and providing feedback, social activity) and the ethical aspects of the behavior of young people in the media space (personal safety, self-control in the posting and consumption of content, a focus on continuous skill development and self-education, compliance with legal norms and ethical standards). The study results revealed that, despite students' high scores on the first set of competencies, they lacked creative content creation skills, demonstrated self-control in digital behavior, and struggled with ethical standards for information dissemination. Most interview participants believed that media literacy is an important factor in the successful professional development of young professionals. Furthermore, the study revealed a predominance of an external locus of control among students in the context of media literacy development, as evidenced by an expectation of ready-made educational solutions from the university, minimal personal initiative, and low motivation for self-education.

Keywords: media literacy, professionalization, safe media activities, self-regulation of behavior in the media environment, gamification, education.

1. Introduction

The rise of political and social activism among today's youth and the expansion of their participation in the media emphasize the role of media education among young people and their readiness for conscious action in the consumption and production of information. Increased interest in politics in the modern world is leading to a broader focus on issues related to a person's ability to navigate the global information space, emphasizing the relationship between political culture and media literacy (Kazakov, 2017).

According to A.V. Fedorov, new trends in media development in modern conditions include two opposing vectors: first, the use of the audience as an object of manipulation; second, the involvement of the audience as an accomplice and partner in information practices (Fedorov et al.,

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2022). Both trends highlight the importance of media literacy among young people in the context of increasing information flows and the popularization of social networks (Sutikna et al., 2024).

On the one hand, media literacy allows one to resist manipulative influences, assess the reliability of information, and understand the media's desire for sensationalism, attracting new audiences, and achieving commercial profitability. On the other hand, media literacy skills enable young people to be full partners in the production of information, the generation of new knowledge, and the development of effective communication within professional communities.

However, as international research shows, the current education system does not fully prepare young professionals for the challenges of the digital age. In particular, young Americans experience a lack of media literacy skills, due to inadequate educational standards and deficiencies in traditional university education. A national survey of educators in the US found that professional structures in higher education institutions are failing to address the challenges of developing media literacy in young professionals (Foster et al., 2024). A large-scale media literacy study conducted in Latvia indirectly confirms these findings. Specifically, the majority of respondents acknowledged their insufficient knowledge and skills in this area. The problem is compounded by the fact that, despite acknowledging media literacy deficits among adults, more than half of respondents are uninterested in ways to address them. A very low level of awareness of government-sponsored activities aimed at implementing media literacy educational programs was also recorded (Rožukalne et al., 2020).

The results of other studies highlight the particular vulnerability of young people, caused by both a lack of critical information perception skills and the extreme immersion of young people in information flows (De Leyn et al, 2022). An analysis of Russian practices also shows that young people's activity on social networks, dynamic integration into information flows, and basic digital literacy skills are not accompanied by fundamental competencies in working with media.

Insufficient media literacy skills also negatively impact the competitiveness of young professionals in the labor market. In particular, modern universities fail to emphasize such in-demand skills as self-presentation on social media, the ethics of public interactions in the media, and media content creation. Research findings indicate that there is a particular need for media literacy development in professions such as advertising and public relations, journalism, librarianship, sociology, politics and management, social work, and others. The role of media literacy in the professionalization of social workers is driven by the expansion of social support measures and advisory assistance to vulnerable socio-demographic groups, including in the digital environment (Chauke, Kakuru, 2025). Experts believe that the concept of civic media literacy plays a key role in improving the professional training of students studying in the humanities and socioeconomics. This concept involves reflecting on the socioeconomic context of contemporary transformations and critically interpreting political conditions and the determinants of modern life (Gálik et al., 2024; Mihailidis, 2018; Tinák, Gálik, 2026).

A review of the importance of media literacy for the professional development of young people, presented in modern scientific discourse, articulates the need for the academic community to pay closer attention to the content of the educational process, the tools of which should contribute to the development of relevant knowledge and competencies in young people when working with the media.

2. Materials and methods

The research problem is presented by the contradiction between, on the one hand, the increasing demands on the media literacy of an individual, allowing him/her to successfully realize himself/herself in social and professional activities, and, on the other hand, the functional weakness of the educational institution, which does not ensure the formation of knowledge and skills of young people when working with media.

The purpose of this study is to examine the demand for media literacy skills among students, assess their importance in the context of professionalization, and analyze subjective assessments of university performance in developing relevant media competencies.

Objectives:

1. To analyze self-assessments of contemporary students' media literacy level and their perceptions of the relationship between media literacy and professionalization.

2. To analyze students' interest in developing media literacy skills within the education system.

3. To evaluate the effectiveness of educational practices in developing contemporary students' media literacy.

The study utilized both general and specialized scientific methods. Specifically, an analytical approach was used to decompose the conceptual model of media literacy into individual components related to information consumption, critical perception, assessment of reliability, and skills in generating and disseminating information. A generalization approach was used to identify general trends in the development of students' media literacy, and a systematization approach was used to identify and group the most relevant educational practices for developing knowledge and skills in working with media.

Specialized research methods included a series of semi-structured interviews (N = 12) with third- and fourth-year undergraduate students enrolled in programs such as public and municipal administration, sociology, and political science. The selection of respondents studying in these programs was motivated by the importance of media literacy skills for their successful professional development. Specifically, students who chose this career path mostly associate their careers with data analytics, engaging with a broad media audience, and presenting themselves on social media.

3. Discussion

The role of media literacy in the development of youth professionalization encompasses the development of not only soft skills (critical analysis of information, its evaluation, analytical reflection), but also hard skills for a wide range of professions in modern mediatized societies. An analysis of scientific discourse suggests that the systematic acquisition of reliable, high-quality information is the foundation for the meaningful processing of professional content, the generation of new knowledge, and the development of positive behavioral models in work practices (Orlova, 2021). A study of media literacy models in Germany, the UK, and the USA showed that learning effectiveness can be achieved through the mutually complementary educational practices implemented in both formal and informal educational environments. Incorporating media literacy into the concept of lifelong learning is becoming an important task (Stix, Jolls, 2020). The complexity of this task indicates the need to consolidate the efforts of the state, educational institutions, and opinion leaders in developing youth media literacy (Nhat et al., 2025).

Given the significant transformation of the media landscape, scholars' conclusions about the need to modernize the educational paradigm of media literacy, seamlessly integrating the skills of information consumption and production (Ugurhan et al., 2022), are entirely logical. In today's environment, the successful professional development of young professionals is determined by the effective development of analytical skills, the transformation of data into various media formats, and the ability to use media monitoring tools and work with digital algorithms.

N. Cho, J. Cannon, R. Lopez, and W. Li substantiate an important conclusion about the causal relationships between the choice of messages/networks and users' self-awareness. The researchers conclude that a new concept of media literacy should take into account the influence of media platforms on the boundaries of reality construction in social media (Cho et al., 2024).

A similar conclusion is reached in the work of J. Swart, who draws attention to the formation of attitudes, motivations, and users' perception of their subjectivity under the influence of situational factors associated with the specifics of media platforms (Swart, 2023). Based on the above, it can be assumed that developing media literacy in young professionals requires special attention to digital algorithms and media platform design. These aspects of the modern digital reality shape the user's expected outcome and, if there are dysfunctions in their competencies, can lead to the use of distorted and unreliable information. The consequences of using information selected by algorithms can also include a narrowing of professional horizons and a distortion of the professional self-determination of future professionals (Valle et al., 2025). This is why the educational process must ensure that young people develop skills to understand the goals, strategies for use, and personal values when choosing media content.

A.A. Aljalabneh emphasizes the importance of educational practices that utilize visual content, which is often perceived as more credible and has the greatest potential to influence user memory and perception. Media literacy training in universities should be based on the use of reverse image search strategies and analysis of the content creator's biographies and motivations (Aljalabneh, 2024).

A comprehensive concept for developing media literacy is presented in the work of S. Yang, J. Lee, A. Kim, and K. Ga Byun. The researchers identify the following elements of the conceptual

model of media literacy: consumption, prosuming, and being. The consumption sphere integrates skills such as functional assimilation/perception of information, analysis, and evaluation. The prosuming sphere consists of skills in content generation, representation, and distribution/sharing. The being sphere in the media literacy framework includes skills for ensuring safety, striving for self-improvement, knowledge of legal and ethical norms of behavior in the media environment, and collaborative problem-solving skills (Yang et al., 2024).

Based on the findings of these researchers, it can be concluded that media literacy in the modern digital world is not limited to knowledge and skills for navigating the information field, critically analyzing information, assessing its reliability, and resisting manipulation. Much more significant than the analytical component is the component of user co-creation, which seamlessly combines collaboration and participation skills, media content production competencies, presenting one's own ideas, disseminating information, engaging like-minded individuals in the media, providing feedback, and promoting civic initiatives in the media. The third component (ethical and behavioral) in the media literacy framework ensures the internalization of acquired knowledge and values into the individual's internal structures, enabling the practical application of skills such as safe media practices, self-regulation of behavior, adherence to ethical and legal norms, risk forecasting in the media environment, and motivation to update knowledge (Table 1).

Table 1. Conceptual model of media literacy

Analytical block	User co-creation unit	Ethical and behavioral unit
Navigation (searching for information in various sources)	Media content production	Safe media activities
Critical analysis of information	Presentation of the author's position	Self-regulation of behavior in the media environment, information selectivity
Assessment of information reliability	Attracting like-minded people to the media	Independent identification of competency gaps when working in the media space
Resistance to the influence of distorted/false information	The use of media technologies to create and publicize socially significant initiatives	The desire for continuous self-education throughout life
Reflection of situational factors (tasks, interests of the media content creator, hidden preferences)	Feedback, interaction with comments	Compliance with ethical and legal standards

4. Results

During the interviews, students expressed their opinions unequivocally, confirming that the development of media literacy is an important substantive part of their professional development process.

Informant 1, female, "State and Municipal Administration": "For me, as a future civil servant, or municipal employee... it's very important to be able to build media interactions and showcase the results of my work on social media".

Informant 2, female, "Sociology": "Media literacy is, of course, important. Today, with so much lies... And for professional growth, of course, networking in professional communities and the ability to analyze information are all important for a sociologist".

Informant 3, male, "Political Science": "In my professional work, media literacy is essential; it requires an advanced level... (laughs). Well, I'll list the first things that come to mind: monitoring media activity, building a political brand on social media, assessing how information will influence the electorate, how to present it, and so on... ".

An analysis of student subjective assessments is supported by the findings of Russian scientists. According to I.N. Titarenko, developing a high level of media competence increases the demand for specialists in the labor market (Titarenko, 2019).

The interview results revealed relatively high self-assessments of media literacy among today's students. The respondents were most confident in assessing the first component of media literacy-analytical.

Informant 4, male, "State and Municipal Administration": "I approach information quite critically. If it's something unexpected, I double-check it. For example, when the media reported Maduro's capture, I double-checked it with several sources".

Informant 3, male, "Political Science": "When I read the news, I always look for the other side. Only by comparing the two sides can you find the truth. It'll be somewhere in the middle...".

The discussion of digital algorithms generated skepticism among most respondents. Young people are confident in their information search strategies and believe they are not subject to the limitations associated with the provision of algorithmically selected content. A lack of reflection on this issue indicates cognitive biases in assessing their own competencies and inflated self-assessments of their media literacy. Self-assessments of media literacy elements in the user co-creation block did not reveal such a clear picture. In particular, among the respondents were students who had experience managing their own digital media channels. These respondents are characterized by cautious optimism in assessing their prospects for creating media content and an understanding of the role of knowledge and experience in developing a high level of media literacy. They also noted certain difficulties in effectively presenting their own ideas to attract new users.

Informant 5, female, "Sociology": "I understand this is difficult for me. The screen time report shows that it can be 6 or 8 hours a day on social media. This time could have been spent more productively... I even practiced a digital detox, deleting all social media for 3 months... But then I got back into it... After the detox, I probably improved my self-control skills. Now I spend less time... ".

Self-restraint skills in media consumption are considered by contemporary scholars to be essential competencies in media literacy. K. Good and M. Ciccone, in their work, presented the concept of media quiteracy, which can be used in modern educational practices. According to the scholars, refusing to use new media or suspending media activity can be not only an act of individual learning but also a collective action, preventing the destruction of the large-scale development of a highly mediated and commercialized information environment (Good, Ciccone, 2025). It can be assumed that self-regulation skills in the media environment will become critically important in the medium and long term. As artificial intelligence algorithms improve to retain user attention, the ability to create information filters and limit information flows is the most significant resource for preserving one's identity and focusing efforts on the personal goals of one's media presence. The development of self-restraint and self-regulation skills in the media environment demonstrates a transformation in information processing models: a shift from recognizing the importance of accumulation and assimilation to emphasizing a selective approach and selectively ignoring incoming content.

It is alarming that informants have a rather superficial attitude toward observing ethical standards in social media. It can be assumed that the drive for commercialization, anonymity in social media, and the blurring of social boundaries are leading to a decline in ethical responsibility.

Informant 6, male, "Political Science": "I run my own channel, and yes, sometimes I post unverified information...if it, let's say, has a response... ".

The findings resonate with the analysis of the media arts curriculum implementation in Australian schools. The curriculum was aimed at developing the skills necessary for creative and productive participation in media culture. However, an analysis of educational experience 10 years later indicates the need for curriculum modernization. The upgrading of creative content creation skills determines increased attention to strategies for promoting and consuming media content, reflecting on the social consequences and risks of its impact on individuals and society as a whole (Dezuanni, 2021).

Despite confidence in their skills in safe media practices and in predicting risks in the media environment, most respondents noted that they rarely thought about predicting the social consequences of digital behavior.

Informant 5, female, "Sociology": "I think this problem is greatly exaggerated. Perhaps, of course, if someone is planning to become a major politician, then, yes, they need to monitor everything they say... But otherwise, no, it's not that important".

In this context, it can be noted that one of the most important aspects of media education in the professional training of future specialists is anticipating the social consequences of the

dissemination of personal opinions on career development. The study results revealed significant information gaps among students on this issue, as well as insufficient reflection and understanding of the possible negative consequences of destructive activity on social media. Educational practices for developing media literacy should be aimed at reflecting on the risks associated with the destruction of students' personal professional image.

The interview results illustrate a dichotomy in student attitudes: despite a pronounced interest in educational technologies for developing media literacy, they report inflated subjective assessments of their own knowledge and skills. Most respondents present themselves as experienced participants in the media environment. It can be assumed that young people equate their operational skills with analytical competencies. A false sense of total competence is illustrated by statements such as: *"I filter information very well, I can easily spot fakes", "I multitask well, I can listen to an online lecture and simultaneously read the news", "I'm an experienced user, I understand media safety and the rules I need to follow".*

Students' cognitive optimism regarding media literacy becomes a limiting factor in the development of their motivational attitudes in media education. While recognizing its importance, students demonstrate a low level of initiative in this area and a lack of readiness for self-education. A pressing pedagogical issue is the prevalence of students' external locus of control in the context of developing media literacy knowledge and skills. This externalized position is characterized by an expectation of ready-made educational solutions from the university and teachers, while minimizing personal initiative.

Informant 7, female, "State and Municipal Administration": "If the university had such programs, that would be great. I'd like to hone my skills in creating high-quality media content. Or, as we discussed, professional branding — that would also be interesting".

At the same time, students believe that universities pay insufficient attention to developing young people's media literacy. Analytical competencies are an exception; respondents believe that during the study of professional disciplines, instructors focus on developing critical thinking skills. The main deficiencies in university training relate to the development of creative competencies aimed at creating exclusive content capable of attracting a mass audience. It is worth noting that when assessing the effectiveness of educational practices for developing media literacy, students favored game-based methods. Similar conclusions have been reached in the works of international scholars. In particular, the use of gamification methods, which are successfully applied to the assimilation of topics such as fake news, digital privacy, and personal media habits, is considered an additional factor in the successful development of media literacy (Glas et al., 2023). It can be assumed that game-based methods of developing media literacy integrate such advantages as a practice-oriented approach, adaptability, and increased involvement and interest.

5. Conclusion

In the context of total digitalization, media literacy is no longer just an applied skill for navigating social media, but rather a core professional competency. Selectivity and consistency in the acquisition and analysis of professional information, as well as the skills to create and distribute media content, enable young professionals to improve their competitiveness in the labor market. A theoretical analysis has allowed us to formulate a conceptual model of media literacy, comprising three components: analytical, user co-creation, and ethical-behavioral. The analytical component encompasses knowledge and skills in navigating media, critically analyzing information and the context of its creation, assessing the reliability of data, and countering manipulative influences in the media. The user co-creation component encompasses competencies in media content production, presenting an author's position, scaling it, engaging like-minded individuals in the media, fostering sustainable feedback, and civic engagement. The third block (ethical and behavioral) in the media literacy framework includes skills for safe media activities, self-regulation of behavior in the media environment, risk forecasting, motivation for self-education, and adherence to ethical and legal norms in the information space.

The study results revealed a clear consensus among participants regarding the role of media literacy as a factor in the successful professionalization of young people. The interviews revealed the following challenges in developing media literacy, especially with inflated self-assessments of one's own competencies: low motivation for self-education, insufficient skills for self-regulation of behavior in the media environment, and insufficient skills for presenting content effectively to attract new users. The study also revealed a distorted locus of control among young people in the

context of media literacy development: high expectations for ready-made educational solutions from the university, while personal initiative is diminished. Students were highly critical of the universities' efforts to develop media literacy, with the exception, according to the respondents, of skills for critical analysis of information, which are emphasized in specialized courses. Students noted limited opportunities to develop creative competencies that would enable them to create exclusive, in-demand content. They considered the use of game-based methods to be the most appropriate way to acquire media literacy skills.

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References

Aljalabneh, 2024 – *Aljalabneh, A.A.* (2024). Visual media literacy: educational strategies to combat image and video disinformation on social media. *Frontiers in Communication*. 9. DOI: 10.3389/fcomm.2024.1490798

Chauke, 2025 – *Chauke, T.A., Kakuru, D.* (2025). Youth health and wellbeing: integration of digital media technologies in youth work practices in the non-governmental organisation sector. *SAGE Open*. 15(4): 21582440251

Cho, 2024 – *Cho, H., Cannon, J., Lopez, R., Li, W.* (2024). Social media literacy: A conceptual framework. *New Media & Society*. 26(2): 941-960. DOI: 10.1177/14614448211068530

De Leyn, 2022 – *De Leyn, T., Waeterloos, C., De Wolf, R., Vanhaelewyn, B., Ponnet, K., De Marez, L.* (2022). Teenagers' reflections on media literacy initiatives at school and everyday media literacy discourses. *Journal of Children and Media*. 16(2): 221-239. DOI: 10.1080/17482798.2021.1952463

Dezuanni, 2021 – *Dezuanni, M.* (2021). Re-visiting the Australian media arts curriculum for digital media literacy education. *Australian Educational Researcher*. 48(5): 873-887. DOI: 10.1007/s13384-021-00472-6

Fedorov, 2022 – *Fedorov, A.V., Levitskaya, A.A., Tselykh, M.P., Novikov, A.* (2022). Media manipulations and media literacy education. Moscow.

Foster, 2024 – *Foster, B., Mihailidis, P., Johnson, P.R., Burth, S., Tully, M., Ramasubramanian, S., Riewestahl, E.* (2024). Designing equitable media literacy interventions for critical youth agency. *Global Studies of Childhood*. 14(4): 462-476.

Gálik et al., 2024 – *Gálik, S. et al.* (2024). How competencies of media users contribute to deliberative communication. In: Peruško, Z., Lauk, E., Halliki-Loit, H. (eds.). European media systems for deliberative communication: risks and opportunities. New York: Routledge: 98-116. DOI: https://doi.org/10.4324/9781003476597

Glas, 2023 – *Glas, R., van Vught, Ja., Fluitsma, T., De La Hera, T., Gómez-García, S.* (2023). Literacy at play: an analysis of media literacy games used to foster media literacy competencies. *Frontiers in Communication*. 8. DOI: 10.3389/fcomm.2023.1155840

Good, 2025 – *Good, K., Ciccone, M.* (2025). Media quiteracy: Why digital disconnection belongs in the media literacy curriculum. *Journal of Media Literacy Education*. 17: 150-165. DOI: 10.23860/JMLE-2025-17-1-10.

Kazakov, 2017 – *Kazakov, A.* (2017). Political aspect of media literacy. *International Journal of Media and Information Literacy*. 2-2(2): 90-98. DOI: 10.13187/ijmil.2017.2.90

Mihailidis, 2018 – *Mihailidis, P.* (2018). Civic media literacies: re-Imagining engagement for civic intentionality. *Learning, Media and Technology*. 43: 1-13. DOI: 10.1080/17439884.2018.1428623.

Nhat, 2025 – *Nhat, H.H., Ibrahim, A.M., Vi, P.T., Freeman, B.C.* (2025). Digital authenticity and media literacy integration in vietnam's social media: influencer-endorsed verification and audience critique. *Media Education*. 3: 370-391. DOI: 10.13187/me.2025.3.370

Orlova, 2021 – *Orlova M.V.* (2021). The role of mass media in the formation of ecological media literacy. *Dynamics of Media Systems*.1: 340-345.

Rožukalne, 2020 – *Rožukalne, A., Skulte, I., Stakle, A.* (2020). Media education in the common interest: public perceptions of media literacy policy in Latvia. *Central European Journal of Communication*. 13(2): 202-229.

Stix, 2020 – *Stix, D.C., Jolls, T.* (2020). Promoting media literacy learning - a comparison of various media literacy models. Media Education. 11(1): 15-23. DOI: 10.36253/me-9091

Sutikna, 2024 – *Sutikna, N., Pangestuti, S., Nuryanti, N., Parasdya, S.D.* (2024). Adolescent media literacy in social media utilization. *International Journal of Media and Information Literacy*. 9(1): 195-202. DOI: 10.13187/ijmil.2024.1.195

Swart, 2023 – *Swart, J.* (2023). Tactics of news literacy: How young people access, evaluate, and engage with news on social media. *New Media & Society*. 25(3): 505-521. DOI: https://doi.org/10.1177/14614448211011447

Tinák, Gálik, 2026 – *Tinák, T., Gálik, S.* (2026). On the epistemological and ethical conditions of information in journalism. *Communication Today*. 2026. 17(1): 26-36.

Titarenko, 2019 – *Titarenko, I.N.* (2019). Rol' mediaobrazovaniya v podgotovke politicheskih tekhnologov: opyt YUzhnogo federal'nogo universiteta [The Role of media education in the training of political technologists: the experience of Southern Federal University]. *Crede Experto: transport, obshchestvo, obrazovanie, yazyk*. 4: 176-183. [in Russian]

Ugurhan, 2020 – *Ugurhan, Y.Z.C., Genc Kumtepe, E., Kumtepe, A.T., Saykili, A.* (2020). From media literacy to new media literacy: a lens into open and distance learning context. *Turkish Online Journal of Distance Education*. 21 (Special Issue-IODL): 135-151. DOI: 10.17718/tojde.770953

Valle, 2025 – *Valle, N., Zhao, P., Freed, D., Gorton, K., Chapman, A.B., Shea, A.L., Bazarova, N. N.* (2025). Towards a critical framework of social media literacy: a systematic literature review. *Review of Educational Research*. 95(4): 701-746. DOI: 10.3102/00346543241247224

Yang, 2024 – *Yang, S., Lee, J., Kim, A., Byun, K.Ga.* Study on the media literacy framework for media literacy education in elementary, middle, and high schools. *The Institute for Education and Research Gyeongin National University of Education*. 44(1): 89-112. DOI: 10.25020/je.2024.44.1.89

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Bridging the Chasm: A Mixed-Methods Analysis of the Skills and Media Literacy Gap between Industry Demands and Academic Curricula in Media and Communication

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Abstract

Currently, the modern digital media environment is experiencing a radical and disruptive shift, the greatest influence of which is the accelerated development of Generative AI (GenAI), the system of automatic content moderation, and the emergence of synthetic media. With the rate of change in industry "tech stacks" increasing at an unprecedented rate, academic curricula in higher education are often unable to keep up with pedagogical speed leading to an increasing skills gap that is threatening graduate employability. Through a strong mixed-method design, the research design critically measures this disparity in Media and Communication roles; that is, in terms of the alignment between institutional learning and professional exigencies. The authors use a triple-core data gathering approach, where data by three key stakeholder groups final-year students and recent graduates (n = 100), academic faculty (n = 10) and industry hiring managers or media executives (n = 10) is synthesized. The study uses a mixed method approach of quantitative survey-based and qualitative thematic analysis, that is, the application of open, axial, and selective coding, to pinpoint three essential systemic mismatches. To begin with, the AI Integration Gap indicates that there is a lack of AI Literacy because industry expectations of algorithmic verification and machine workflows are much higher than the theoretical exposure offered in class rooms. Second, the Mismatch of Glamour points out a wide gap in perception; although the students tend to crave the perceived glamour of media positions, the transportation has turned into technical and data-driven production and metadata control. Third, the article finds a Soft Skill Scarcity, in which standardized academic tests do not develop the flexibility, critical thinking, and flexible stamina needed in highly stressful workplace settings. Its results are that the existing scholarly paradigm is still too theory oriented and there is an urgent need to transition to a more workflow approachable academic model. In 2026, simulation labs, practitioner-led courses, as well as agile curricula will need integration. The study is a strategic roadmap on how the stakeholders can cultivate a co-creative ecosystem that sees to it that graduates are not digitally native but also professionally fluent in the era of AI.

Keywords: media convergence, AI literacy, skill gap, experiential learning, media education, digital literacy.

1. Introduction

The Media and Communication industry has traditionally been a multidisciplinary field that mediates the creative aspects of the arts with the mathematical structures of the social sciences (Braun et al., 2024). Historically, educational institutions of this area oriented their activities on the conveyance of information, journalism ethics, and the sociological influence of mass media

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(Matory-Sylvester, 2025; Tinák, Gálik, 2026). Nevertheless, the modern world, which is characterized by a fast Digital Transformation, has radically changed this premise. It is no longer a narrative-driven, human-focused industry but an ecosystem that is data-driven and incorporates AI and emphasizes algorithmic efficiency and real-time content optimization.

Recent industry literature suggests that media literacy has ceased to be focused on critical information consumption; it has turned into a technological fluency needed to navigate convoluted digital architecture (Livingstone, Third, 2023). This is not a simple case of incremental change, but structural change because the creation, distribution, and consumption of media have become automated.

The global media industry is currently being redefined by four key drivers:

Generative AI (GenAI): the use of Large Language Models (LLMs) has transformed the process of creativity. In addition to basic automation, GenAI can be applied to advanced ideation, multi-perspective scripting, and fast multi-language localization so that media houses can scale content at a small fraction of the traditional expenses (Pavlik, 2023).

Audience Analytics: AI-driven, real-time telemetry has substituted the use of delayed feedback loops (circulation figures or TV ratings). The contemporary media professionals are required to make sense of multifaceted streams of data in order to comprehend the behavior, feelings, and engagement patterns of the users in real-time.

Synthetic Media: spread of deepfakes and AI-generated images is a two-fold problem. Although they promise new creative frontiers, they also present deep ethical and technical dangers, necessitating a new kind of forensic media literacy to be able to tell between true and fake content (Westerlund, 2019).

Policy Shifts by the Platform: The media ecosystem is becoming more dependent on the platformization of news and entertainment. Visibility and feasibility in the online market is determined by the fast development of Search Engine Optimization (SEO) software and automated systems of distributing content through the social media networks..

Despite these seismic industry shifts, many higher education institutions remain anchored in a "theory-first" approach. Curricula continue to emphasize "Long-term Research Methodologies" and "Classical Media Ethics" in isolation, often failing to provide the technical counterparts necessary to navigate modern, high-velocity workflows. This creates a significant "Skills Gap" where graduates possess high-level theoretical knowledge but lack the "workflow readiness" demanded by 21st-century newsrooms and digital agencies (Dolce, 2021).

The core research problem lies in this misalignment. There is an urgent need to measure specifically where academic curricula fail to intersect with industry requirements (An et al., 2023). However, the challenge for academia is not merely to teach specific software, which may become obsolete within months, but to foster "durable technical mindsets." These mindsets involve a hybrid form of media literacy that combines ethical skepticism with technical proficiency in AI-assisted environments. As noted by academic critics, if the gap is not bridged, the relevance of traditional media degrees may diminish in favor of short-term technical certifications (Schmidt, 2022). This study, therefore, seeks to quantify these gaps and propose high-impact curricular updates that ensure graduates are both conceptually grounded and technically agile.

2. Material and methods

Research Design: The Mixed-Methods Framework

This study incorporated a Convergent Parallel Mixed-Methods Research Design to thoroughly include the gap between the media academia and the industry in terms of skills. This method was chosen because it was needed to offer both the quantitative breadth, in terms of an ability to identify broad trends across a large student body, and the qualitative depth, in terms of a nuanced appreciation of the systemic predicaments of faculty and the high-stakes demands of hiring managers. Through this combination of the two streams of data, the study will get a complete picture of the ecosystem and therefore the final recommendations will be statistically effective and contextually sensitive.

This two-layered approach is necessary because Media Literacy is a complex issue nowadays. Although the number of students who are ready to work in an AI-driven workforce may be measured through surveys, semi-structured interviews are the only ones that may reveal why certain curricula are in stagnation or how industry leaders understand what workflow readiness will mean in a 2026 world (Creswell and Plano Clark, 2018).

Sample Selection and Participant Profiling

The research sample followed purposive and stratified sampling method to make sure that all the key stakeholders in the media education pipeline are covered. The overall sample was split into three different cohorts:

– Students (Final Year/Recent Graduates) (n = 100): This group of students is the main product of academic institutions. Students were recruited in final-year undergraduate and postgraduate courses in Journalism, Advertising and Digital Communication. This population group presented valuable information on the perceived preparedness of graduates, their own perceived competency in new tech stacks, and their professional expectations and the reality of the entry-level labor market.

– Faculty Members (n = 10): It was represented by senior academics and department heads that designed the curriculum. The qualitative emphasis here saw the internal impediments to change, namely the inertia of institutional structures, absence of Train-the-Trainer programs on the new AI tools, and the difficulty of reconciling underlying mass communication theory and the fast-evolving needs of the industry.

– Industry/Hiring Managers (n = 10): This group represents the demand side of the labor market, and they consisted of creative directors, newsroom editors, and leads of digital marketing. Their contribution played a crucial role in determining the exact missing links in the current media education, that is, in terms of technical media literacy, algorithmic verification and real-time content operations.

Data Collection and Instrumentation

The data collection phase was carried out in a period of five months (April to August) to enable a longitudinal view of student development and industry changes.

– Quantitative Phase: The student cohort was engaged in structured surveys that were conducted with Likert-scale questions. These questionnaires targeted four pillars including familiarity with AI, technical software skills, awareness of audience analytics and perceived value of theoretical coursework.

– Qualitative Phase: Semi-structured interviews were carried out with faculty and industry managers. These sessions were to be open ended in order to give way to the appearance of themes which could have been overlooked with the use of a strict survey like the ethical implication of synthetic media and the psychological sense of glamour mismatch (Kvale, 1996).

3. Discussion

Traditionally, the tension between philosophical questioning and professional training was the hallmark of the development of media education. However, as the global media ecosystem undergoes a so-called tectonic shift to algorithmic governance and artificial intelligence, the divide between the two extremes has been widened into an organizational abyss (Murari, 2026). The literature review is based on the current state of media pedagogy, transformation of the meaning of media literacy during the age of AI and the systematic failure of the traditional theory of Mass Communication to address the high-velocity requirements of digital processes in the contemporary working environment.

The media studies, during decades, has had its cornerstone in the social sciences, where the importance has been focused on the theories of message effect, semiotics, and normative ethics. Classical theories such as Agenda-Setting Theory (McCombs, Shaw, 1972) and Uses and Gratifications (Katz et al., 1973) provided a powerful vocabulary on how centralized media institutions were being utilized to influence the opinion of people. In these models, it was the human editor, the so-called gatekeeper that had the hand; and ethics were ruled by professional judgment and legal constraints. Although these formational theories continue to be central to the creation and establishment of a critical consciousness, modern theorists contend that they are becoming less and less sufficient once they are detached of technical reality. Nonetheless, the gatekeeper of 2026, as Schmidt (Schmidt, 2022) notes, is no longer a human being, but a multifaceted proprietary algorithm. The traditional curriculums placing significant emphasis on the sociology of the message rather than the math of its distribution would be poorly prepared to operate in the industry where the prominence of a message is dictated not by the editorial value alone but by the Search Engine Optimization and algorithmic weight (Rantanen et al., 2021).

Another theme that has been reiterated in recent literature is the difference between "Digital Nativity" and "Digital Literacy." The coined name, Digital Native, which was popularized by

Prensky (Prensky, 2001), implied that all students who were born into the era of the internet would automatically have the skills that were needed to work in the digital world. This is however an assumption that has been refuted after ten years of research. The fact that a person is well-oriented with the interface of the social media (scrolling, posting, and consuming) is not a reflection of the infrastructure (metadata, IP-based workflows and data analytics) understanding. The recent studies by Livingstone and Third (Livingstone, Third, 2023) stress that students are highly skilled users but it does not imply that they possess the skills of critical digital literacy, the capacity to comprehend how the data are gathered, how the algorithms generate the echo chambers, and how the synthetic media are manufactured. This paradox is especially acute in the Indian media industry. Instagram Reels can be mastered by graduates but the "Industry Stack," the particular set of tools applied to automate content distribution, store real-time audience analytics, and operate multi-platform content, becomes challenging (Choudhary, 2024).

Media Literacy has been radically changed in definition. It was traditionally understood as the skill to access, scrutinize, gauge and generate media (Aufderheide, 1993). The definition of 2026 has grown to encompass the notions of Algorithmic Literacy and AI Fluency. Westernlund (Westernlund, 2019) suggests that media literacy needs a forensic approach due to the emergence of synthetic media and deepfakes. It is now necessary to teach students to apply AI-assisted source checking tools to verify the source, which is hardly a skill taught in conventional Media Jurisprudence or Ethics courses. Moreover, Pavlik (Pavlik, 2023) asserts that the introduction of Large Language Models (LLMs) such as ChatGPT into the newsrooms involves a change in writing pedagogy. It is no longer merely a skill of the craft of the sentence, but of the expediency engineering and algorithmic auditing that must be carried out in order to make sure that AI-generated scripts are correct, unbiased, and ethical.

The main challenge which was found in the recent literature is the one known as institutional Lag – the lag in a university updating its curriculum against the pace of technological change. Although the media industry is based on "agile" cycles (the software and workflows are frequently updated every month), academic boards tend to have cycles of review of 3-to-5-year (Witschge, Deuze, 2020). This is the cause of the lag which culminates into a curriculum that emphasizes on the "Long-term Research Methodologies" that though rigorous academically, are usually unable to capture the "Real-time Social SEO" and the Content Ops that characterize current agencies. According to industry observers, the underlying war is that academia is educating to a permanently-centered world (print, broadcast schedules and dead archives) when the industry operates in a permanently-shifting one (live streams, disposable content and dynamic platform policies).

The technical management of content is one of the most important lost links in the modern media education. The traditional journalism programs pay attention to the inverted pyramid of writing but disregard the metadata pyramid needed to be digitally discoverable. The study of Digital Journalism (Scholarship, 2021) has pointed out that this field has identified that the effects of a story are now hinged on its findability. This involves the knowledge of organized information, grouping of keywords and inter-platform distribution measures. By not addressing such technical counterparts in the academic programs, they compromise their own students in an environment where, in reality, Workflow Readiness is one of the main employment requirements (Bouters et al., 2016).

4. Results

Key Findings and Analysis

The Operational Literacy and AI Integration Gap

The most noticeable difference is in the sphere of Artificial Intelligence. Despite the industry already reaching a tipping point with some 90 percent of media jobs requiring basic AI Literacy, there is still a lag in the transition to practice by higher education institutions.

– The Literacy Paradox: the needs of the industry are no longer a matter of mere digital literacy but rather a triple set of skills: generative prompting, workflow automation, and the rigid verification of AI-created work.

– Theory vs. Production: there is a lab-to-lecture deficit that is pointed out in the study. Practical AI settings are provided in approximately a quarter of media curricula. It results in a situation where academia regards AI as a sociological issue of discourse, and the industry regards it as a production tool. Students graduate knowing what AI is, yet lacking any skills of how it is used to create media without having any practical experience.

The Mismatch in Glamour and Technical Pivot

The expectations between the aspirant and the employer have a great psychological and functional discrepancy. Studies show that there is a tendency that market demand is no longer linked to student motivation.

– The aesthetic fallacy: approximately 75 percent of the students are attracted to media programs through the glamour of the profession, that is, high-profile, on-air assignments or high profile investigative reporting.

– The technical reality: the business is heading in the opposite direction, emphasizing the invisible technical expertise. Metadata management, engineered production pipelines and technical production backend have become a vital part of modern newsroom and agency workflows.

– The readiness deficit: when graduates enter, they receive a reality shock, discovering themselves ill equipped to do the technical heavy lifting that comprises most of the modern media work.

Soft skills and paucity and evaluation inflexibility.

Although academia is doing well in standardized tests and long-term intellectual growth, high-velocity adaptability and thinking on its feet is becoming the focus of employers.

– The constraint of ambiguity: the classical model of universities is based on rigid tests with well-defined rubrics and extended deadlines. This forms an aseptic space that does not reflect the ambiguity of the real-world and the speedy iterative cycles of professional media.

– The deadline disconnect: within a business whose operations are characterized by breaking news and real-time social interaction, the scholarly rhythm places students in a poor position to meet the psychological and logistical challenges of strict, non-negotiable deadlines on production.

The Core Conflict: a comparative summary.

Table 1. The following table synthesizes the divergence between academic priorities and industry imperatives, highlighting the specific areas where curricular reform is most urgently required

S. No.	Pillar of Practice	Academia Focus (Theory-Centric)	Industry Demand (Skill-Centric)
1.	Legal & Ethical	Traditional Media Ethics & Jurisprudence	AI Ethics & Algorithmic Verification
2.	Audience Insight	Mass Communication Theory	Data-Driven Audience Analytics
3.	Narrative Style	Linear Journalism & Essay Writing	Multi-platform "360" Storytelling
4.	Research Speed	Long-term Research Methodologies	Real-time Social SEO & Content Ops
5.	Workflow	Individualized Creative Projects	Collaborative Agile Production Pipelines

Source: Author's own compilation

The data suggests that the "Media Degree" is currently functioning as a theoretical foundation rather than a professional certification. To bridge this gap, institutions must transition from a model of knowledge acquisition to one of applied competency, specifically by integrating technical production and AI-driven workflows into the core curriculum.

5. Conclusion

Combining the results of students, faculty, and industry practitioners, one can see the truth of the matter: the gap between media education and media practice in academia is at the boiling point. This study has proven the fact that the Skills Gap in 2026 is no longer a mere facade of knowing software or understanding particular hardware. Rather, it is essentially defined by structural discrepancy in the thinking pattern, workflow preparedness, and culture of verification. With the media industry becoming more and more dominated by generative AI and automated systems, the standard academic theory-first model is being challenged on an existential level, which cannot be addressed solely by adding more curriculum-related changes.

The main problem is that it is the shift in the paradigm of content-creation to the paradigm of content-operation. As universities remain masters of the art of narrating stories and the subtleties of media ethics, the industry has shifted to a high-velocity, data-driven ecosystem in which content is handled by intricate technical stacks. The study finds that even the so-called digitally native students do not have profound technical media literacy to negotiate such IP-based workflows. This results in a lack of readiness that impedes the process of graduate placement into professional industries as they would need to be retrained onsite to respond to real time social SEO, algorithm auditing and metadata management.

Moreover, the advent of synthetic media has changed the ethical scene of a mere philosophical argument to a technical requirement. The culture of verification – the possibility of forensically analyzing and verifying the outputs of AI – should become a central pillar of media literacy in the present day. Academia can no longer afford to regard AI as a fringe subject of discussion. Institutional frameworks need to incorporate AI as a fundamental production tool and object of verification in order to stay relevant. This involves a change of academic thinking that is based on permanence and tradition to that of agility and experimentation.

To bridge this chasm, the media industry and academia must move beyond the current model of transactional partnerships, such as guest lectures or surface-level internship placements. Instead, the path forward lies in the creation of a co-creative ecosystem. This involves a radical reimagining of the pedagogical pipeline:

– Agile curricula: moving away from rigid, multi-year review cycles toward a modular, "Industry Pulse" approach that can adapt to technological shifts in real-time.

– Workflow simulation: replacing traditional, static assessments with interactive "simulation labs" that replicate the pressures and technical requirements of modern newsrooms and digital agencies.

– Shared responsibility: industry leaders must step beyond the role of "critics" and become active "co-designers" of the curriculum, ensuring that technical training is balanced with durable critical thinking skills.

Finally, by 2026, media education should not create technicians that can use a particular tool, but rather, it should create algorithmically aware professionals that can have a hybrid literacy of ethics and technology. With the culture of constant skills adjustment and strict AI verification, we will be able to equip our graduates with the training of the real life production conditions. Closing this divide is not only an educational undertaking but it is a required developmental process that will enable the coming generation of media practitioners to be able to lead the world in integrity and technical skills in an automated world.

References

An et al., 2023 – *An, H., Gu, X., Obrenovic, B., Godinic, D.* (2023). The role of job insecurity, social media exposure, and job stress in predicting anxiety among White-Collar employees. *Psychology Research and Behavior Management.* 16: 3303-3318. DOI: https://doi.org/10.2147/prbm.s416100

Aufderheide, 1993 – *Aufderheide, P.* (1993). Media literacy a report of the media literacy conference on media literacy. Aspen Institute. – References – Scientific Research Publishing. [Electronic resource]. URL: https://www.scirp.org/reference/referencespapers?referenceid=4024366

Bouters et al., 2016 – *Bouters, L., Mothersill, G., Nyström, T., Sutter, R., Westbomke, J.* (2016). Identification of skills gap in cross-media design and production in the creative industries at EU-level. *International Circular of Graphic Education and Research.* 9.

Braun et al., 2024 – *Braun, G., Rikala, P., Järvinen, M., Hämäläinen, R., Stahre, J., Andersson, J., Joshi, S., Malmsköld, L., Hanning, F.* (2024). Bridging skill gaps : a systematic literature review of strategies for industry. [Electronic resource]. URL: https://jyx.jyu.fi/jyx/Record/jyx_123456789_94425

Creswell, Plano Clark, 2018 – *Creswell, J.W., Plano Clark, V.L.* (2018). Designing and conducting mixed methods research. Sage Publications.

Dolce, 2021 – *Dolce, J.S.* (2021). Exploration of the skills gap: hype, perceptions, problem? – ProQuest. [Electronic resource]. URL: https://www.proquest.com/openview/37ecb9147f259977 99b494 e64606a73d/1?pq-origsite=gscholar&cbl=18750&diss=y

Kvale, 1996 – *Kvale, S.* (1996). Interviews: An Introduction to Qualitative Research Interviewing. Sage Publications.

Livingstone, Third, 2023 – *Livingstone, S., Third, A.* (2023). Children and Young People's Rights in the Digital Age: An Emerging Agenda. New Media & Society.

Matory-Sylvester, 2025 – *Matory-Sylvester, B.* (2025). Bridging the skills Gap: A design thinking mixed methods approach to workforce readiness. Digital Commons@Lindenwood University. [Electronic resource]. URL: https://digitalcommons.lindenwood.edu/dissertations/802/

Murari, 2026 – *Murari, K.* (2026). Bridging the employability skills gap in Indian higher education: A comparative study of engineering and management students in the Post-NEP era. *Industry and Higher Education*. DOI: https://doi.org/10.1177/09504222261423290

Pavlik, 2023 – *Pavlik, J.V.* (2023). Collaborating with ChatGPT: considering the implications of generative artificial intelligence for journalism and media education. *Journalism & Mass Communication Educator*.

Rantanen et al., 2021 – *Rantanen, J., Lyyra, P., Feldt, T., Villi, M., Parviainen, T.* (2021). Intensified job demands and cognitive stress symptoms: The moderator role of individual characteristics. *Frontiers in Psychology*. 12: 607172. DOI: https://doi.org/10.3389/fpsyg.2021.607172

Schmidt, 2022 – *Schmidt, T.R.* (2022). The Digital Transformation of Newsrooms: Strategy, Professionalism, and Resistance. Routledge.

Strauss, Corbin, 1998 – *Strauss, A., Corbin, J.* (1998). Basics of qualitative research: techniques and procedures for developing grounded theory. Sage Publications.

Tinák, Gálik, 2026 – *Tinák, T., Gálik, S.* (2026). On the epistemological and ethical conditions of information in journalism. *Communication Today*. 17(1): 26-36.

Westerlund, 2019 – *Westerlund, M.* (2019).The Emergence of deepfakes: from research to public policy. Technology Innovation Management Review.

Witschge, Deuze, 2020 – *Witschge, T., Deuze, M.* (2020). From suspicion to wonder in journalism and communication research. *Journalism & Mass Communication Quarterly*. 97(2): 360-375. DOI: https://doi.org/10.1177/1077699020912385