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Research Article

Journalists' perceptions, attitudes, and uses of artificial intelligence: Evidence from Türkiye, Iraq, and Syria

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ABSTRACT

This study aims to analyze the attitudes, perceptions, and usage practices of journalists working in Türkiye, Iraq, and Syria regarding artificial intelligence (AI). These countries are located in the Middle East region, where censorship and authoritarianism are on the rise, and regional conflicts are common. A survey was conducted with 620 practicing journalists across three countries using purposive and snowball sampling methods. The findings indicate that journalists in Türkiye hold more critical perceptions of AI tools and adopt a cautious and selective approach to their journalistic practices. In Syria, the use of AI was found to be pragmatic and comparatively more positive, being driven by professional necessity rather than by attitudinal factors. In Iraq, journalists were found to hold relatively neutral attitudes toward the use of AI. Therefore, the study provides a comparative and context-specific contribution to understanding Middle Eastern journalists' perceptions and use of AI. Accordingly, the study extends the existing journalism and AI literature beyond predominantly Western-centered perspectives.

Keywords: artificial intelligence, journalism, Middle East, Türkiye, Iraq, Syria

INTRODUCTION

Algorithms and digitalization have transformed the media industry both functionally and institutionally. At the center of this transformation are artificial intelligence (AI) technologies that are used in various journalistic applications, such as news production, distribution, fact-checking, and audience interaction (Noain-Sánchez, 2022; Sun et al., 2024). As journalistic production processes are being reshaped, new debates have emerged regarding the ethical boundaries, public responsibilities, and normative values of the profession (Jamil, 2021).

Discussions on the relationship between AI and journalism are largely dominated by Global North (GN) countries, such as the United States, the European Union, China, and the Nordic countries. These countries generally possess advanced technological infrastructures and comparatively freer media environments. In these countries, AI-related media research primarily focuses on topics such as automated content production, algorithmic news distribution, and robot journalism (Deuze & Beckett, 2022; Noain-Sánchez, 2022; Sun et al., 2024). However, in developing countries with different political, social, and economic structures, the effects of AI on journalistic practices have been examined only to a limited extent. Therefore, the relationship between journalism and AI in the context of the Global South (GS) is underrepresented in the literature (Soto-Sanfiel et al., 2022).

In this context, the Middle East (ME), which constitutes a significant part of the GS, is one of the regions with the most pronounced institutional and structural inequalities (Hassouni & Mellor, 2025). This situation stems from the coexistence of Gulf countries, where economic, technological, and cultural investments are rapidly increasing, and countries facing authoritarianism, political instability, economic crises, and censorship

(Møller et al., 2025). This heterogeneous structure contributes to cross-national differences in journalists' attitudes, perceptions, and use of AI. However, studies examining media professionals' perceptions of and attitudes toward AI in the ME remain limited.

This study aims to fill this gap in the literature by comparatively examining the attitudes, perceptions, and usage practices of journalists in Türkiye, Iraq, and Syria regarding AI. These three countries, each with distinct media systems, political regimes, and levels of technological development, provide a valuable comparative foundation for understanding the relationship between AI and journalism in the ME. The study seeks to move beyond existing GS-centered perspectives by providing region-specific empirical evidence and examining how AI influences journalistic practices across different political and sociodemographic contexts.

The Role of Artificial Intelligence in Journalism

Today, the media industry is undergoing a structural transformation driven by digitalization and technological innovation (Deuze, 2005). Consequently, journalism is required to continuously adapt to rapidly changing social, cultural, and algorithmic conditions (Moran & Shaikh, 2022). Economic instability, the declining practicality of traditional methods, and increasingly competitive digital platforms (Fridman et al., 2025, p. 1363) are driving journalism to adopt these technological innovations to maintain its presence in an information-rich environment (Jamil, 2021). AI technologies integrated into the media sector are increasingly influencing newsmaking processes by restructuring information flows between journalism and society (Sun et al., 2024). Consequently, AI tools are emerging as a dynamic force that is transforming the production, distribution, and consumption of journalism.

AI is transforming every stage of the media value chain and reshaping news production processes. This integration process has resulted in a 'hybrid newsmaking model' in which reporters and editors work alongside AI-assisted systems (Deuze & Beckett, 2022). Journalism, traditionally regarded as a highly human-centered activity, is evolving into a mode of work increasingly shaped by the automation capabilities of AI (Broussard et al., 2019). Functions such as information gathering, personalized news recommendation, cost reduction in news production (Soto-Sanfiel et al., 2022), automated text translation, and support for investigative journalism have expanded the range of AI applications in modern newsrooms (Noain-Sánchez, 2022). By streamlining research and writing processes, these tools enable journalists to save time and produce more comprehensive and creative news content (Jamil, 2021). As a result, newsmaking activities are becoming more efficient, and improvements have been observed in the institutional and professional standards of journalistic practice (Trang et al., 2024). Ultimately, the proliferation of AI tools has enhanced the competitiveness of mass media outlets operating within today's fragmented media environment.

H2. As journalists perceive AI technologies as a greater opportunity, their attitudes toward these technologies become more positive.

H6. Attitudes toward the use of AI in journalism differ significantly across demographic variables.

With the increasing adoption of AI applications, the relationship between journalism and technology is being redefined (Møller et al., 2025). This transformation has increased individuals' exposure to news content that is partially or fully produced with the assistance of AI tools (Guzman & Lewis, 2020, p. 170). Some studies suggest that the central position of human journalists in news production may gradually diminish in favor of AI systems, contributing to the automation of news production processes and the emergence of more standardized forms of news writing (Jamil, 2021, p. 1406). Consequently, such content has the potential to constrain critical journalistic practices, including questioning, establishing causal relationships, and generating original ideas. While algorithms may assist news production processes, they remain insufficient for fulfilling journalism's core functions, (Broussard et al., 2019) including holding governments and society accountable and safeguarding democracy and human rights (Deuze & Beckett, 2022). Nevertheless, the proliferation of AI technologies in the media has also generated multidimensional risks, including data security concerns, ethical violations, copyright disputes, the spread of disinformation, digital exclusion, social polarization, and foreign interference (Fridman et al., 2025). AI-supported tools are driving structural transformation not only in media production processes but also within the broader public sphere.

H1. As journalists perceive AI technologies as a greater threat, their attitudes toward these technologies become more negative.

H3. As journalists perceive greater risks associated with AI technologies, they are more likely to perceive data generated by these technologies as unreliable.

Newsrooms around the world use AI technologies to support and manage processes such as information gathering, content creation, editing, and distribution (Deuze & Beckett, 2022, p. 443). On the other hand, factors such as 'infrastructural capabilities, financial resources, language diversity, and education level' play a significant role in the use and adoption of AI in journalistic practices (Trang et al., 2024). As a result, news outlets with limited resources remain at a disadvantage compared to better-equipped competitors, contributing to a widening digital divide within the media sector (Møller et al., 2025). Therefore, institutional-level changes are needed to address structural inequalities in newsrooms. Accordingly, journalism education should incorporate innovative AI-driven practices and support sustainable media initiatives (Guzman & Lewis, 2020, p. 70). Such initiatives promote more equitable and efficient news production, aligning with the demands of the AI era.

H4. As journalists perceive a greater lack of resources for AI technologies, the use of these technologies in journalistic practices decreases.

AI tools present opportunities for journalism, but they may also introduce biases and disruptive effects (Sun et al., 2024, p. 549). AI systems operating within political structures reflect the cultural and social values embedded in their design by developers and programmers (Broussard et al., 2019, p. 679). This may create various challenges and inequalities in the application of AI systems across different countries and cultural contexts, as the values embedded in these systems cannot be automatically adapted to new cultural contexts (Trang et al., 2024). Research on AI adoption in journalism and journalists' responses to AI in marginalized countries remains limited (Moran & Shaikh, 2022). The study aims to examine the attitudes and professional practices of journalists in Türkiye, Iraq, and Syria toward the use of AI tools within the ME region, which constitutes a significant part of the GS.

H5. Greater use of AI technologies in journalism is associated with greater awareness of the impact of these tools on newsmaking processes.

The Media Industry in the Middle East and Artificial Intelligence

The technological dominance associated with AI tools, which are rapidly transforming the global media ecosystem, is largely concentrated in GN countries (Harb & Arafat, 2024, p. 373). From a geopolitical and theoretical perspective, AI tools developed in these centers reinforce technological centralization and further deepen the structural divide between the GS and the GN (Al-Rawi & Saad, 2025, p. 6635). This is because the ME and North Africa and Latin America, two major regions of the GS, have been shaped by colonialism, neo-imperialism, geopolitical fragility, and persistent historical and economic inequalities (Khalfan et al., 2024). Therefore, media studies in the GS, particularly in the ME, develop critical approaches aimed at resisting the hegemonic influence of Western-centric media narratives (Kraidy, 2024). This limits GS countries' access to communication technologies and their capacity to adopt them, thereby deepening the digital divide and information inequalities (Fahmy & Attia, 2021). Consequently, regional, digital, social, and economic disparities are critical to understanding the relationship between the media industry and AI tools.

Journalism models in the ME region are not uniform and are shaped by national characteristics (Moyo, 2022, p. 1568; Soto-Sanfiel et al., 2022, p. 1199). Oil-rich ME countries such as the United Arab Emirates (UAE), Saudi Arabia, Qatar, and Kuwait are among the regional leaders in the adoption of AI technologies in journalism due to their strong economic infrastructure (Hassouni & Mellor, 2025, p. 29). To increase newsroom efficiency and audience engagement, Al Jazeera Arabic uses AI tools and AI-based news presenters to combat misinformation (Harb & Arafat, 2024), while Al-Ain, based in the UAE, has developed a robotic columnist capable of generating content in multiple formats. The effective, consistent, and responsible use of AI technologies may support the development of innovative media ecosystems in certain regions of the GS (Fahmy & Attia, 2021), potentially contributing to cultural transformation, improvements in legal frameworks, strengthened human rights advocacy, and efforts to limit corruption and authoritarianism (Jamil et al., 2025).

However, countries such as Türkiye, Iraq, and Syria, which are characterized by authoritarianism, economic crises, regional conflicts, and restrictions on press freedom (Harb & Arafat, 2024), also constitute part of the ME region within the GS (Khalfan et al., 2024). Media organizations in these countries face multilayered

structural challenges, such as limited resources, technological inequalities, and repressive legal regulations (Hassouni & Mellor, 2025, p. 31). While these conditions slow the adoption and use of AI technologies, they also transform these technologies into instruments of political and institutional power rather than merely technical innovations (AlAshry & Al-Saqaf, 2026). Following the intensification of the Syrian civil war after 2011, security, surveillance, and censorship mechanisms increased significantly, resulting in restrictions on AI tools such as ChatGPT (AlAshry, 2024). As a result, journalists have been able to access these technologies only through indirect and potentially risky means, such as virtual private networks (Tawfiq, 2023).

In Iraq, journalists, particularly those working for satellite television channels, actively use AI tools for tasks such as news writing, content editing, and visual enhancement (Hameed, 2025). However, linguistic and cultural diversity, along with concerns regarding ethics and data accuracy, leads journalists to adopt a cautious and moderately dependent approach to the use of these tools (Segell, 2024). Finally, in Türkiye, AI technologies have been widely integrated into news production processes (Etike, 2023); but their use remains primarily focused on cost reduction and efficiency gains (Demirdiş, 2025). In practice, concerns about editorial autonomy, data reliability, and ethical responsibilities lead journalists to approach these tools critically and selectively in practice (Kırık et al., 2024). Consequently, journalists' perceptions of AI and media organizations' ideological orientations vary according to political contexts and competing understandings of technological innovation. This contributes to a fragmented and often contradictory media landscape across the GS (Shahghasemi et al., 2025).

As journalistic models in the ME vary across national contexts, assessments of AI cannot be based on uniform definitions and criteria (Hassouni & Mellor, 2025). Journalists in the ME may perceive AI as both an opportunity and an existential threat, depending on the political and media structure of their country (Sun et al., 2024). Research on journalists' attitudes toward AI in the ME has primarily focused on individual countries, whereas comparative studies spanning multiple countries remain limited (AlAshry & Al-Saqaf, 2026; Demirdiş, 2025). This study examines journalists' attitudes toward AI, perceived constraints of the application of AI to journalism, AI usage practices, and knowledge levels in ME countries such as Türkiye, Iraq, and Syria from an intercultural perspective. Accordingly, the study examines how the use of AI tools influences media practices across contexts characterized by different levels of press freedom, political regimes, and technological development, thereby providing a more comprehensive framework than existing country-specific studies.

METHODOLOGY

Study Design

This study is based on a quantitative survey designed to examine journalists' professional attitudes, perceptions, and usage practices regarding the use of AI tools in the ME. Data were collected in Iraq, Syria, and Türkiye in April 2026 through both face-to-face and online surveys administered by the researchers. This mixed data collection approach was used to increase participant diversity across countries and to overcome access restrictions. Country selection was based on the 2025 world press freedom index published by Reporters Without Borders (2025). The classification of Türkiye, Iraq, and Syria as countries in which press freedom is severely restricted played a decisive role in their selection as the study context.

Participants and Sampling

Because the target population could not be fully accessed due to political, security, and economic constraints, nonprobability sampling was employed. Snowball and purposive sampling methods were used together. Through this approach, journalists were recruited both directly and through professional networks (Neumann, 2008). Because purposive and snowball sampling methods were employed, the sample cannot be considered representative of the broader population. The generalizability of the findings is limited. However, only journalists who were actively engaged in journalism in the selected countries and who reported using AI tools in their professional practice were included in the study. Using these sampling procedures, a total of 774 journalists were contacted. However, 620 journalists completed the survey and constituted the final sample of the study. The demographic characteristics of the participants are presented in **Table 1**.

Table 1. Demographic characteristics of the sample

		Türkiye		Iraq		Syria	
		N	%	N	%	N	%
Total		214	34.5%	206	33.2%	200	32.3%
Sex	Male	129	30.6%	154	36.5%	139	32.9%
	Female	85	42.9%	52	26.3%	61	30.8%
Age	18-29	41	30.1%	25	18.4%	70	51.5%
	30-39	38	21.1%	71	39.4%	71	39.4%
	40-49	68	41.2%	71	43.0%	26	15.8%
	50-59	35	40.7%	29	33.7%	22	25.6%
	60 and over	32	60.4%	10	18.9%	11	20.8%
Income status	Income is lower than expenses	83	35.2%	51	21.6%	102	43.2%
	Income is equal to expenses	77	29.7%	118	45.6%	64	24.7%
	Income is higher than expenses	54	43.2%	37	29.6%	34	27.2%
Educational status	Below high school	16	66.7%	1	4.2%	7	29.2%
	High school	53	49.5%	12	11.2%	42	39.3%
	Bachelor's degree	118	31.1%	134	35.4%	127	33.5%
	Master's degree and above	27	24.5%	59	53.6%	24	21.8%
Professional roles of the journalists	Other	13	50.0%	5	19.2%	8	30.8%
	Editor	55	34.2%	67	41.6%	39	24.2%
	Photojournalist and cameraman	20	30.8%	9	13.8%	36	55.4%
	News coordinator	17	47.2%	11	30.6%	8	22.2%
	Reporter	49	31.6%	49	31.6%	57	36.8%
	Freelance journalist	11	40.7%	8	29.6%	8	29.6%
	Technical support	11	35.5%	10	32.3%	10	32.3%
	TV anchor	1	2.3%	33	75.0%	10	22.7%
	Broadcast director	37	49.3%	14	18.7%	24	32.0%

Measures

In this study, the three-dimensional scale developed by Soto-Sanfiel et al. (2022) was used to measure journalists' perceptions, attitudes, and usage practices regarding AI tools. The items were structured using a 5-point Likert scale. To ensure the suitability of the scale for journalistic practice in the ME, the survey items were adapted to the region's political, cultural, and professional context based on expert feedback. The adapted questionnaire was subsequently reviewed by three experts with expertise in journalism, communication studies, and AI. The experts evaluated the appropriateness, clarity, and contextual relevance of the items, and minor revisions were made in accordance with their feedback. The questionnaire was initially in English and was translated into Turkish and Arabic due to language diversity in the countries where the fieldwork was conducted. During the translation process, a professional translation agency was engaged to ensure conceptual equivalence and linguistic accuracy across the language versions. In addition, a back-translation procedure was employed to further verify conceptual equivalence across the different language versions. The translated questionnaires were independently back-translated into English by bilingual translators, and the resulting versions were compared with the original questionnaire to evaluate semantic consistency and conceptual accuracy.

Attitudes toward the application of AI to journalism (AAI): The scale consists of two dimensions: four items measuring perceptions of AI as a threat and three items measuring perceptions of AI as an opportunity. The validity of the scale was demonstrated in the original study ($\chi 2$ [13] = 40.93; $p < 0.001$; CFI = 0.987; TLI = 0.979; RMSEA = 0.05, 90% confidence interval [CI] [0.03, 0.06]). The Cronbach's alpha values for the subscales were 0.728 and 0.811, respectively. In this study, the Cronbach's alpha values were 0.849 for the threat subscale and 0.728 for the opportunity subscale.

Perceived constraints of the application of AI to journalism (PCAI): The scale consists of two three-item subscales measuring perceptions of AI as untrustworthy data and perceptions of AI as lacking resources. The scale was reported to be valid in the original study ($\chi 2$ [8] = 32.103; $p < 0.001$; CFI = 0.980; TLI = 0.963; RMSEA = 0.06, 90% CI [0.04, 0.08]). The Cronbach's alpha values for the subdimensions were 0.801 and 0.773, respectively. In this study, Cronbach's alpha values were 0.749 for the untrustworthy data subdimension and 0.787 for the lack of resources subdimension.

Knowledge on the current state of the art of AI applied to journalism (KAI): The scale consists of a six-item subscale measuring the use of AI in journalism and a four-item subscale measuring the use of AI in newsmaking. The validity of the scale was confirmed in the original study ($\chi 2$ [48] = 92.55; CFI = 0.97; RMSEA = 0.08). The Cronbach's alpha values for the subscales were 0.782 for AI use in journalism and 0.719 for AI use in newsmaking. In this study, the Cronbach's alpha values were 0.798 for AI use in journalism and 0.687 for AI use in newsmaking. Although the Cronbach's alpha value for the AI Use in Newsmaking subscale was slightly below the conventional 0.70 threshold (α = 0.687), the value was considered marginally acceptable given the limited number of items in the subscale and the exploratory nature of the adaptation process (DeVellis & Thorpe, 2022; Hair et al., 2019)

Confirmatory Factor Analysis and Measurement Invariance

First, the validity of the AAI, PCAI, and KAI scales used in the study was assessed. For this purpose, confirmatory factor analysis (CFA) and measurement invariance analyses were conducted using AMOS software. Initially, CFA was conducted using the full sample without distinguishing participants by country. The results indicated that the data fit the theoretical structure of the scales. After establishing the factor structure of the scales, measurement invariance analyses were conducted to determine whether the scales functioned equivalently across the three countries in which the survey was administered. Participants were grouped by country, and multigroup analysis was conducted by applying configural, metric, and scalar invariance tests for each scale, respectively.

Acceptable model fit indices are required for both confirmatory factor and measurement invariance analyses. In this regard, CFI and TLI values greater than 0.90 and RMSEA values less than 0.08 are considered acceptable (Gürbüz, 2021; Soto-Sanfiel et al., 2022). In the multigroup measurement invariance analyses, configural invariance (equivalent factor structure across countries), metric invariance (equivalent factor loadings), and scalar invariance (equivalent factor loadings and item intercepts) were tested sequentially. When comparing nested models, changes of less than 0.010 in CFI and TLI and less than 0.015 in RMSEA were considered evidence of measurement invariance (Chen, 2007; Cheung & Rensvold, 2002). Finally, Cronbach's alpha and McDonald's omega coefficients were calculated to assess the internal consistency of the scales following confirmation of their factor structure and measurement invariance (Viladrich et al., 2017).

Attitudes Toward the Application of AI to Journalism

First, the factor structure of the AAI scale was assessed using CFA. The results indicated that the data fit the theoretical structure of the AAI scale ($\chi 2$ [13] = 17.571; CFI = 0.996; TLI = 0.994; RMSEA = 0.027, 90% CI [0.000, 0.053]). Following the confirmation of the scale's factor structure, the measurement invariance of the AAI was examined. First, configural invariance was tested and supported (χ^2 [36] = 63.137; CFI = 0.985; TLI = 0.974; RMSEA = 0.035). Next, factor loadings were constrained to equality across groups, and metric invariance was tested and supported ($\Delta\chi^2$ [10] = 23.100; ΔCFI = 0.007; ΔTLI = 0.005; ΔRMSEA = 0.003). Finally, factor loadings and item intercepts were constrained to equality across groups, and scalar invariance was tested and supported ($\Delta\chi^2$ [14] = 30.233; ΔCFI = 0.009; ΔTLI = 0.002; ΔRMSEA = 0.001) (**Figure 1**).

Perceived Constraints of the Application of AI to Journalism

First, the factor structure of the PCAI scale was assessed using CFA. The results indicated that the initial model did not provide an adequate fit to the theoretical structure of the PCAI scale. Subsequently, modification indices were examined, and item 3 of the untrustworthy data dimension was removed because of substantial cross-loading. The CFA was then re-estimated. The revised CFA model demonstrated a good fit to the data (χ^2 [4] = 6.424; CFI = 0.997; TLI = 0.994; RMSEA = 0.031, 90% CI [0.000, 0.074]). Following the confirmation of the scale's factor structure, the measurement invariance of the PCAI was examined. First, configural invariance was tested and supported (χ^2 [12] = 19.843; CFI = 0.993; TLI = 0.982; RMSEA = 0.033). Next, metric invariance was tested and supported ($\Delta\chi^2$ [6] = 3.605; ΔCFI = 0.002; ΔTLI = 0.010; ΔRMSEA = 0.011). Scalar invariance was not supported in the initial model. Subsequently, the intercepts of item 2 in the untrustworthy data dimension and item 1 and item 2 in the lack of resources dimension were freed. Partial scalar invariance was then established because at least one indicator per factor remained constrained across groups (Beckstead et al., 2008) ($\Delta\chi^2$ [4] = 7.060; ΔCFI = 0.003; ΔTLI = 0.003; ΔRMSEA = 0.003) (**Figure 2**).

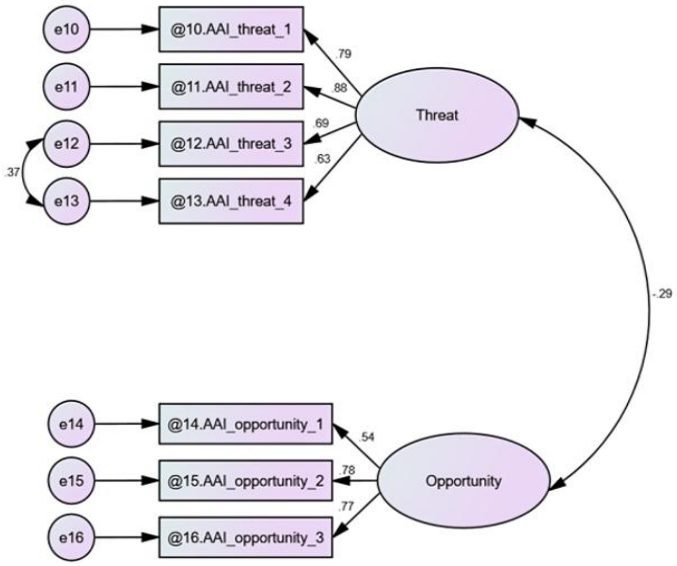

Figure 1. Factor structure of the AAI (prepared by the authors)

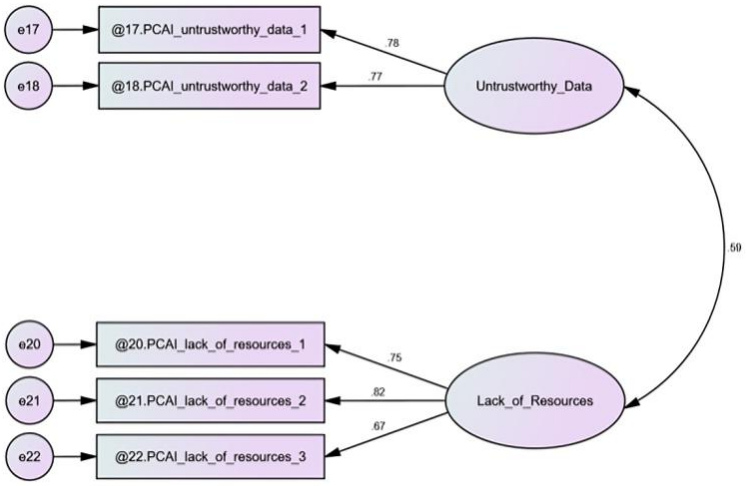

Figure 2. Factor structure of the PCAI (prepared by the authors)

Knowledge of the Current State of the Art of AI Applied to Journalism (KAI)

First, the factor structure of the KAI scale was assessed using CFA. The results indicated that item 4 of the newsmaking dimension was removed because of its low factor loading (Hair et al., 2014). The CFA was then re-estimated. The revised CFA model demonstrated an acceptable fit to the data (χ^2 [25] = 73.111; CFI = 0.971; TLI = 0.958; RMSEA = 0.056, 90% CI [0.041, 0.071]).

Following the confirmation of the scale's factor structure, the measurement invariance of the KAI was examined. First, configural invariance was tested and supported (χ^2 [75] = 207.416; CFI = 0.928; TLI = 0.896; RMSEA = 0.053). Next, metric invariance was tested but was not supported in the initial model. Consequently, the factor loadings of items 5 and 6 in the AI use in journalism dimension were freed. The model was then re-estimated, and partial metric invariance was established ($\Delta\chi^2$ [14] = 24.306; ΔCFI = 0.008; ΔTLI = 0.003; ΔRMSEA = 0.000). After partial metric invariance was supported, partial scalar invariance was tested and supported ($\Delta\chi^2$ [18] = 33.437; ΔCFI = 0.010; ΔTLI = 0.003; ΔRMSEA = 0.001) (**Figure 3**).

Descriptive Statistics for the Scales

Table 2 presents the descriptive statistics for the dimensions of the AAI, PCAI, and KAI scales used in the study. Because the skewness and kurtosis values for all dimensions ranged between -1.5 and +1.5, the data were considered to approximate a normal distribution (Tabachnick & Fidell, 2007). Furthermore, all

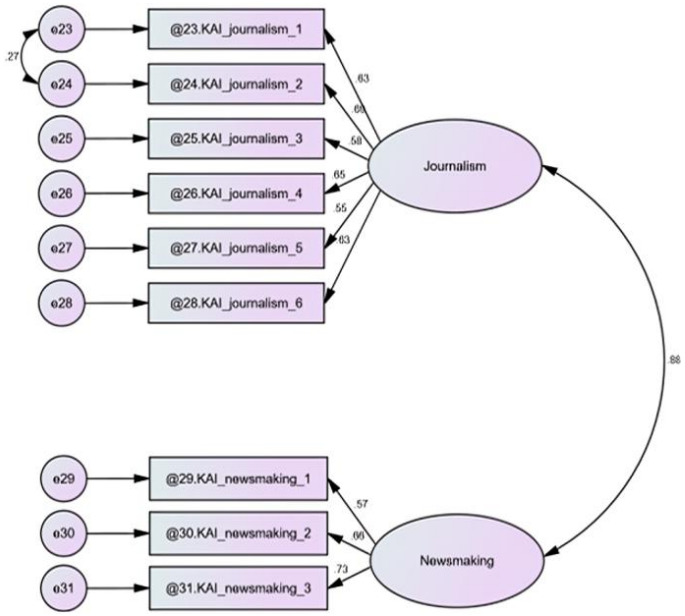

Figure 3. Factor structure of the KAI (prepared by the authors)

Table 2. Descriptive statistics results for the scale scores used in the study

Scale	M	SD	Skewness	Kurtosis	CA	MO
AAI – Viewing AI as a threat	2.900	1.081	-0.078	-0.905	.849	.847
AAI – Viewing AI as an Opportunity	3.236	0.928	-0.569	-0.142	.728	.734
PCAI – Viewing AI as untrustworthy data	3.142	1.008	-0.273	-0.537	.749	-
PCAI – Viewing AI as lacking resources	3.011	0.979	-0.246	-0.681	.787	.789
KAI – Use of AI tools in journalism	3.315	0.792	-0.929	0.910	.798	.797
KAI – Use of AI tools in newsmaking	3.202	0.864	-0.501	0.045	.687	.694

Note. M: Mean; SD: Standard deviation; CA: Cronbach's alpha; & MO: McDonald's omega

dimensions, with the exception of the KAI-newsmaking dimension, exhibited both Cronbach's alpha and McDonald's omega values above 0.70, indicating acceptable internal consistency (Viladrich et al., 2017). Since McDonald's omega cannot be calculated for scales consisting of only two items, it was not calculated for the PCAI-untrustworthy data dimension. Given that scales with a small number of items tend to yield lower Cronbach's alpha coefficients, the internal consistency of the KAI-newsmaking dimension was considered marginally acceptable despite its alpha value of 0.694, as this value is very close to the recommended 0.70 threshold (Field, 2005). Overall, the scales demonstrated acceptable levels of internal consistency.

Statistical Analysis

Statistical analyses were conducted using IBM AMOS 24.0 and IBM SPSS 29.0. First, confirmatory factor analyses were conducted on the scales, followed by measurement invariance analyses to determine whether the scales functioned equivalently across countries. Two-way ANOVAs were conducted to examine differences in scale scores across countries, demographic variables, and the interaction between country and demographic variables. In all statistical analyses, the significance level was set at $p < 0.05$.

FINDINGS

The findings are presented according to the research hypotheses and are summarized in the accompanying tables.

The findings presented in **Table 3** indicate that perceptions of AI as either a threat or an opportunity in journalism differ across countries and sociodemographic variables. In this regard, journalists in Türkiye were found to perceive AI more critically and to place greater emphasis on its potential risks. By contrast, journalists in Iraq and Syria exhibited more balanced and pragmatic perceptions of AI. Notably, female journalists and participants with higher levels of education in Türkiye were more likely to perceive AI as a threat.

Table 3. Comparison of attitudes toward AI as a threat and an opportunity across demographic variables (AAI)

		M±SD (country)			p	η^2
DV	Sex	Türkiye	Iraq	Syria		
AAI – Viewing AI as a threat	Male	2.61±1.02^{a}	2.80±1.04	2.91±1.03	.057	.009
	Female	3.66±1.03^{A,b}	2.92±1.02^{B}	2.70±1.10^{B}	< .001	.054
	p	< .001	.460	.159		
	η^2	.079	.001	.003		
AAI – Viewing AI as an opportunity	Male	3.54±0.79^{A,a}	3.32±0.87^{AB}	3.23±0.83^{B}	.013	.014
	Female	2.65±1.08^{A,b}	3.20±0.97^{B}	3.25±0.95^{B}	< .001	.032
	p	< .001	.388	.881		
	η^2	.077	.001	.000		
DV	Age					
AAI – Viewing AI as a threat	18-29	2.54±1.15^{a}	2.68±0.88	2.76±1.07	.567	.002
	30-39	2.94±0.91^{a}	2.94±0.99	2.94±1.10	.999	.000
	40-49	3.04±1.11^{a}	2.75±1.07	2.96±0.68	.267	.004
	50-59	3.31±1.14^{b}	2.73±1.17	2.93±1.27	.093	.008
	60 and over	3.40±1.27^{A,b}	3.15±1.11^{AB}	2.32±0.85^{B}	.016	.014
	p	.005	.594	.397		
	η^2	.024	.005	.007		
AAI – Viewing AI as an opportunity	18-29	3.56±0.94^{a}	3.51±0.92	3.37±0.94^{a}	.543	.002
	30-39	3.32±0.89^{ab}	3.35±0.71	3.22±0.91^{ab}	.677	.001
	40-49	3.18±0.96^{ab}	3.31±0.95	3.26±0.66^{ab}	.688	.001
	50-59	3.03±0.96^{ab}	2.89±1.08	2.65±0.61^{b}	.315	.004
	60 and over	2.75±1.22^{A,b}	3.40±0.89^{AB}	3.55±0.37^{B,ab}	.017	.013
	p	.003	.109	.019		
	η^2	.026	.012	.019		
DV	Income status					
AAI – Viewing AI as a threat	Income is lower than expenses	3.35±1.19^{A,a}	3.03±1.16^{AB}	2.88±1.11^{B}	.011	.015
	Income is equal to expenses	2.96±0.99^{ab}	2.81±0.98	2.77±1.00	.492	.002
	Income is higher than expenses	2.61±1.14^{b}	2.59±1.00	2.88±1.02	.416	.003
	p	< .001	.157	.777		
	η^2	.026	.006	.001		
AAI – Viewing AI as an opportunity	Income is lower than expenses	2.85±1.15^{a}	3.11±0.96	3.16±0.92^{a}	.055	.009
	Income is equal to expenses	3.25±0.81^{b}	3.36±0.86	3.15±0.77^{ab}	.326	.004
	Income is higher than expenses	3.62±0.87^{b}	3.32±0.92	3.60±0.81^{b}	.276	.004
	p	< .001	.259	.036		
	η^2	.038	.004	.011		
DV	Educational status					
AAI – Viewing AI as a threat	Below high school	3.92±1.40^{a}	1.75±0.00	3.32±0.40^{ab}	.086	.008
	High school	3.04±1.26^{b}	2.90±1.33	2.66±1.20^{ab}	.229	.005
	Bachelor's degree	2.88±1.02^{b}	2.86±1.05	2.99±1.02^{b}	.553	.002
	Master's degree and above	3.09±1.05^{A,ab}	2.76±0.95^{AB}	2.24±0.83^{B,a}	.016	.013
	p	.004	.706	.005		
	η^2	.022	.002	.021		
AAI – Viewing AI as an opportunity	Below high school	2.08±1.22^{a}	4.00±0.00^{ab}	3.00±1.25^{ab}	.017	.013
	High school	3.06±1.10^{b}	2.64±1.11^{a}	2.86±0.91^{a}	.262	.004
	Bachelor's degree	3.35±0.85^{b}	3.29±0.87^{ab}	3.32±0.72^{b}	.871	.000
	Master's degree and above	3.36±0.93^{b}	3.41±0.88^{b}	3.50±1.16^{b}	.849	.001
	p	< .001	.049	.012		
	η^2	.047	.013	.018		
DV	Professional role					
AAI – Viewing AI as a threat	Editor	3.18±1.08^{A}	2.69±0.98^{B}	3.01±1.06^{AB}	.039	.011
	Photojournalist and cameraman	3.03±1.26	2.56±0.91	2.99±1.19	.513	.002
	News coordinator	3.25±1.09	3.16±0.82	3.66±0.27	.579	.002
	Reporter	2.89±1.25	2.89±1.18	2.88±1.14	.997	.000
	Freelance journalist	2.66±0.90	3.09±1.21	2.03±1.01	.140	.007
	Technical support	3.50±1.09	2.65±0.76	2.63±0.91	.104	.008
	TV anchor	2.00±0.00	2.90±1.12	2.63±0.67	.579	.002
	Broadcast director	2.92±1.11	2.93±0.92	2.56±0.87	.404	.003
	Other	2.85±1.20	2.95±1.15	2.56±0.69		
	p	.467	.860	.093		
	η^2	.013	.007	.023		

Table 3 (Continued).

		M±SD (country)			p	η^2
	Editor	2.93±1.08	3.15±0.92	3.27±0.82	.157	.006
	Photojournalist and cameraman	3.15±0.91	3.41±0.78	3.42±0.77	.545	.002
	News coordinator	2.90 ± 0.93^{AB}	3.73 ± 0.63^{A}	2.58 ± 0.73^{B}	.012	.015
	Reporter	3.36 ± 1.03^{A}	$2.98\pm0.93^{AB,a}$	$2.92\pm0.92^{B,a}$	.028	.012
AAI – Viewing AI as an opportunity	Freelance journalist	3.61±0.79	4.21 ± 0.47^{b}	3.92 ± 0.99^{b}	.347	.004
	Technical support	2.79±1.02	3.60±0.81	3.47±0.88	.081	.008
	TV anchor	4.00±0.00	3.33±0.80	3.87±0.23	.214	.005
	Broadcast director	3.31±1.00	3.62±0.81	2.99±0.57	.101	.008
	Other	3.64±0.80	3.80±0.87	4.00±0.89	.671	.001
	p	.025	.003	< .001		
	η^2	.029	.038	.049		

Note. DV: Dependent variable & *Different uppercase letters in the same row and different lowercase letters in the same column indicate significant differences

Similarly, perceptions of AI as a threat increased with age in Türkiye and, to a lesser extent, in Syria, whereas a more balanced pattern was observed in Iraq. In contrast, perceptions of AI as an opportunity exhibited less variation across countries. Notably, higher income levels were associated with a greater tendency to perceive AI as an opportunity in Türkiye. In terms of professional roles, news coordinators in Iraq and reporters in Türkiye demonstrated more positive perceptions of AI. Overall, the findings suggest that perceptions of AI are associated not only with individual characteristics but also with national media structures, professional conditions, and levels of technological development.

The findings presented in **Table 4** indicate that perceptions of AI as a source of untrustworthy data and as constrained by insufficient resources differ across countries according to sex, age, income, education, and professional role.

Table 4. Comparison of attitudes toward AI as untrustworthy data and lacking resources across demographic variables (PCAI)

		M±SD (country)			p	η^2
DV	Sex	Türkiye	Iraq	Syria		
PCAI – Viewing AI as untrustworthy data	Male	2.90 ± 0.98^{a}	3.04±1.00	3.06 ± 0.97^{a}	.323	.004
	Female	$3.75\pm0.90^{A,b}$	2.99 ± 1.06^{B}	$3.39\pm0.93^{AB,b}$	< .001	.031
	p	< .001	.740	.025		
	η^2	.060	.000	.008		
PCAI – Viewing AI as lacking resources	Male	$2.65\pm0.85^{A,a}$	3.13 ± 0.92^{B}	$3.20\pm0.98^{B,a}$	< .001	.041
	Female	$3.24\pm1.01^{A,b}$	2.90 ± 0.78^{AB}	$2.81\pm1.23^{B,b}$	.017	.013
	p	< .001	.137	.008		
	η^2	.031	.004	.012		
DV	Age					
PCAI – Viewing AI as untrustworthy data	18-29	2.88±1.18	2.98±1.02	2.88 ± 1.07^{a}	.899	.000
	30-39	3.41±0.98	3.11±0.99	3.29 ± 0.91^{ab}	.300	.004
	40-49	3.22±0.97	3.06±0.93	3.08 ± 0.82^{ab}	.599	.002
	50-59	3.37 ± 0.86^{A}	2.66 ± 1.25^{B}	$3.64\pm0.76^{A,b}$	< .001	.023
	60 and over	3.36±1.18	3.45±0.76	3.36 ± 0.92^{ab}	.968	.000
	p	.109	.166	.015		
	η^2	.012	.011	.020		
PCAI – Viewing AI as lacking resources	18-29	2.57 ± 0.95^{a}	2.87±0.92	2.87 ± 1.21^{b}	.226	.005
	30-39	$2.73\pm0.85^{A,a}$	3.15 ± 0.92^{AB}	$3.40\pm0.87^{B,c}$	.002	.021
	40-49	$2.71\pm0.81^{A,a}$	3.20 ± 0.88^{B}	$2.91\pm0.94^{AB,bc}$	.008	.016
	50-59	$3.17\pm0.93^{AB,ab}$	2.75 ± 0.83^{A}	$3.52\pm0.77^{B,bc}$	.014	.014
	60 and over	$3.54\pm1.07^{A,b}$	3.07 ± 0.89^{A}	$1.91\pm1.04^{B,a}$	< .001	.040
	p	< .001	.162	< .001		
	η^2	.043	.011	.054		
DV	Income status					
PCAI – Viewing AI as untrustworthy data	Income is lower than expenses	$3.58\pm1.01^{A,a}$	3.12 ± 1.09^{B}	3.08 ± 1.16^{B}	.001	.021
	Income is equal to expenses	3.19 ± 0.92^{b}	3.10±0.98	3.16±0.70	.827	.001
	Income is higher than expenses	$2.77\pm1.04^{A,b}$	2.68 ± 0.94^{A}	3.41 ± 0.72^{B}	.003	.019
	p	< .001	.056	.234		
	η^2	.035	.009	.005		

Table 4 (Continued).

		M±SD (country)			p	η^2
		Türkiye	Iraq	Syria		
PCAI – Viewing AI as lacking resources	Income is lower than expenses	3.17±0.98^{a}	3.18±0.96	3.38±1.01^{a}	.249	.005
	Income is equal to expenses	2.89±0.78^{a}	3.12±0.88	2.99±0.92^{b}	.237	.005
	Income is higher than expenses	2.43±0.99^{b}	2.77±0.76	2.35±1.17^{c}	.119	.007
	p	< .001	.094	< .001		
	η^2	.032	.008	.049		
DV	Educational status					
PCAI – Viewing AI as untrustworthy data	Below high school	3.94±1.03^{a}	2.50±0.00	3.43±0.53	.241	.005
	High school	3.15±1.12^{b}	2.96±1.16	3.18±0.90	.792	.001
	Bachelor's degree	3.11±0.93^{b}	3.07±1.01	3.23±0.95	.413	.003
	Master's degree and above	3.52±1.13^{A,ab}	2.95±1.01^{B}	2.67±1.17^{B}	.007	.016
	p	.007	.801	.071		
	η^2	.020	.002	.011		
PCAI – Viewing AI as lacking resources	Below high school	3.96±0.93^{a}	4.00±0.00	3.00±0.00^{ab}	.082	.008
	High school	2.82±1.06^{b}	2.94±1.10	3.24±0.86^{a}	.109	.007
	Bachelor's degree	2.77±0.82^{A,b}	3.10±0.89^{B}	3.15±1.08^{B,a}	.004	.018
	Master's degree and above	2.88±0.99^{AB,b}	3.03±0.85^{A}	2.47±1.35^{B,b}	.053	.010
	p	< .001	.720	.009		
	η^2	.035	.002	.019		
DV	Professional role					
PCAI – Viewing AI as untrustworthy data	Editor	3.64±1.04^{A}	3.06±1.01^{B}	3.21±0.86^{AB}	.006	.017
	Photojournalist and cameraman	3.05±1.09	2.89±1.05	3.10±1.01	.855	.001
	News coordinator	3.21±1.06	2.95±0.88	3.94±0.68	.096	.008
	Reporter	3.05±1.08	2.83±1.03	3.10±1.12	.345	.004
	Freelance journalist	3.00±0.89	3.56±1.15	2.81±1.31	.290	.004
	Technical support	3.32±0.87	3.15±0.94	3.15±0.47	.905	.000
	TV anchor	4.00±0.00	2.94±1.03	3.55±1.17	.159	.006
	Broadcast director	3.09±0.93	3.25±0.91	3.06±0.77	.845	.001
	Other	3.00±1.00	3.90±0.89	3.06±0.32	.211	.005
	p	.086	.306	.427		
	η^2	.023	.016	.013		
PCAI – Viewing AI as lacking resources	Editor	3.16±1.00	3.11±0.85	3.50±0.78^{a}	.119	.007
	Photojournalist and cameraman	2.87±0.99	3.30±0.68	3.07±1.04	.514	.002
	News coordinator	2.82±0.84^{A}	3.33±0.56^{AB}	3.83±0.73^{B,a}	.044	.010
	Reporter	2.77±0.99	2.91±0.93	3.20±0.87	.063	.009
	Freelance journalist	2.94±0.63	3.17±0.99	2.63±1.51	.527	.002
	Technical support	3.06±1.06	3.27±0.80	2.67±1.08	.366	.003
	TV anchor	2.00±0.00	2.93±0.95	2.47±1.63	.289	.004
	Broadcast director	2.70±0.88	3.19±1.06	2.54±1.21^{b}	.127	.007
	Other	2.64±1.04	3.33±1.13	2.88±1.33	.391	.003
	p	.359	.803	< .001		
	η^2	.015	.008	.046		

Note. DV: Dependent variable & *Different uppercase letters in the same row and different lowercase letters in the same column indicate significant differences

The perception of AI as a source of untrustworthy data is particularly pronounced in Türkiye, where it is higher among female journalists. In Iraq, no significant sex differences were observed, whereas the pattern was less pronounced in Syria. Although age generally appears to have a limited association with this dimension, perceptions were higher among journalists aged 50-59 in Türkiye and Syria and lower in Iraq. With regard to income, perceptions of AI as a source of untrustworthy data were more pronounced among lower-income journalists in Türkiye, whereas the opposite pattern was observed in Syria, where such perceptions were higher among higher-income.

In terms of education, journalists in Türkiye, particularly those holding postgraduate degrees, exhibited higher levels of this perception. In contrast, perceptions of AI as constrained by insufficient resources exhibited a more variable pattern. In Türkiye, this perception tended to be higher among older journalists and differed by sex, whereas in Syria it was more pronounced among middle-aged and lower-income journalists. In Iraq, however, this perception was distributed more evenly across demographic groups. Although differences across education levels and professional roles were generally limited, higher levels of perceived

resource constraints were observed among journalists holding undergraduate degrees in Iraq and Syria. Additionally, perceived resource constraints were particularly pronounced among news coordinators in Syria.

The findings indicate that the use of AI in journalism and news production differs across countries and sociodemographic groups. In this regard, male journalists in Türkiye were found to use AI tools more extensively, whereas sex-based differences were less pronounced and more evenly distributed in Iraq and Syria. Similarly, age-related differences were observed in Türkiye, where AI use tended to decline with increasing age, particularly among older journalists. In Iraq, age-related differences were more limited, whereas a modest degree of differentiation was observed in Syria. A similar pattern was observed for the use of AI in news production, with lower levels of use reported among older age groups.

With respect to income, AI use in journalism tended to increase with income level in Türkiye, whereas higher levels of use were observed among lower-income journalists in Syria. In Iraq, no significant income-based differences were found. With regard to education, AI use tended to increase with educational attainment in Türkiye, with journalists holding bachelor's degrees reporting higher levels of use than their counterparts in Iraq. By contrast, journalists with lower levels of education in Syria reported higher levels of AI use. Across professional roles, the use of AI in journalism was generally similar, although some differences emerged with respect to AI use in news production. Notably, editors in Syria reported higher levels of AI use than editors in Türkiye, whereas no significant cross-country differences were observed for the remaining professional groups (see **Table 5**).

Table 5. Comparison of attitudes toward AI use in journalism and news production across demographic variables (KAI)

		M±SD (country)			p	η^2
DV	Sex	Türkiye	Iraq	Syria		
KAI – Use of AI tools in journalism	Male	$3.63\pm0.62^{A,a}$	3.26 ± 0.79^{B}	3.34 ± 0.76^{B}	< .001	.028
	Female	$2.88\pm0.95^{A,b}$	3.32 ± 0.63^{B}	3.34 ± 0.81^{B}	< .001	.027
	p	< .001	.620	.996		
	η^2	.075	.000	.000		
KAI – Use of AI tools in newsmaking	Male	$3.45\pm0.74^{A,a}$	3.19 ± 0.87^{B}	3.22 ± 0.91^{AB}	.018	.013
	Female	2.91 ± 0.87^{b}	3.26 ± 0.83	3.03 ± 0.87	.063	.009
	p	< .001	.574	.162		
	η^2	.033	.001	.003		
DV	Age					
KAI – Use of AI tools in journalism	18-29	3.52 ± 0.85^{a}	3.31 ± 0.83	3.39 ± 0.86	.508	.002
	30-39	3.41 ± 0.67^{a}	3.36 ± 0.63	3.49 ± 0.69	.605	.002
	40-49	3.38 ± 0.73^{a}	3.22 ± 0.84	3.15 ± 0.94	.323	.004
	50-59	3.33 ± 0.87^{ab}	3.18 ± 0.80	3.17 ± 0.53	.648	.001
	60 and over	2.88 ± 1.12^{b}	3.28 ± 0.60	2.83 ± 0.17	.311	.004
	p	.008	.795	.041		
	η^2	.023	.003	.016		
KAI – Use of AI tools in newsmaking	18-29	3.39 ± 0.86^{ab}	3.28 ± 0.85^{ab}	3.16 ± 0.98	.388	.003
	30-39	3.50 ± 0.81^{a}	3.38 ± 0.59^{a}	3.31 ± 0.92	.538	.002
	40-49	3.23 ± 0.79^{ab}	2.93 ± 0.99^{b}	2.90 ± 0.86	.077	.008
	50-59	3.15 ± 0.82^{ab}	3.30 ± 0.97^{ab}	3.26 ± 0.58	.777	.001
	60 and over	2.85 ± 0.84^{b}	3.43 ± 0.74^{ab}	2.61 ± 0.61	.070	.009
	p	.020	.019	.048		
	η^2	.019	.019	.016		
DV	Income status					
KAI – Use of AI tools in journalism	Income is lower than expenses	$3.03\pm1.00^{A,a}$	3.19 ± 0.81^{AB}	3.44 ± 0.84^{B}	.002	.021
	Income is equal to expenses	3.39 ± 0.64^{b}	3.30 ± 0.75	3.22 ± 0.75	.417	.003
	Income is higher than expenses	$3.71\pm0.68^{A,b}$	3.32 ± 0.69^{AB}	3.27 ± 0.51^{B}	.012	.014
	p	< .001	.640	.168		
	η^2	.040	.001	.006		
KAI – Use of AI tools in newsmaking	Income is lower than expenses	$2.98\pm0.91^{A,a}$	3.01 ± 0.97^{A}	$3.37\pm0.98^{B,a}$	.002	.020
	Income is equal to expenses	$3.23\pm0.72^{A,a}$	3.23 ± 0.78^{A}	$2.89\pm0.76^{B,b}$	.018	.013
	Income is higher than expenses	$3.65\pm0.70^{A,b}$	3.41 ± 0.89^{AB}	$3.04\pm0.75^{B,ab}$	.004	.018
	p	< .001	.082	< .001		
	η^2	.033	.008	.022		

Table 5 (Continued).

		M±SD (country)			p	η^2
		Türkiye	Iraq	Syria		
DV	Educational status					
KAI – Use of AI tools in journalism	Below high school	2.17±1.05^{A,a}	2.83±0.00^{AB}	3.29±0.36^{B}	.005	.017
	High school	3.25±0.96^{b}	2.89±0.83	3.33±0.81	.212	.005
	Bachelor's degree	3.51±0.63^{A,b}	3.21±0.75^{B}	3.36±0.80^{AB}	.008	.016
	Master's degree and above	3.41±0.79^{b}	3.52±0.69	3.28±0.66	.417	.003
	p	< .001	.015	.967		
	η^2	.068	.017	.000		
KAI – Use of AI tools in newsmaking	Below high school	2.44±0.77^{A,a}	3.33±0.00^{AB}	3.43±0.53^{B}	.029	.012
	High school	3.04±0.91^{ab}	2.92±1.13	3.03±0.79	.893	.000
	Bachelor's degree	3.38±0.76^{A,b}	3.12±0.84^{B}	3.14±0.97^{AB}	.030	.012
	Master's degree and above	3.48±0.70^{b}	3.46±0.79	3.42±0.75	.963	.000
	p	< .001	.046	.269		
	η^2	.036	.013	.006		
DV	Professional role					
KAI – Use of AI tools in journalism	Editor	3.13±0.95	3.25±0.74	3.50±0.70	.075	.009
	Photojournalist and cameraman	3.47±0.89	3.48±0.66	3.14±0.94	.246	.005
	News coordinator	3.24±0.71	3.50±0.49	3.71±0.17	.354	.004
	Reporter	3.37±0.92	3.16±0.84	3.33±0.77	.383	.003
	Freelance journalist	3.65±0.71	3.44±0.72	3.17±0.87	.423	.003
	Technical support	3.24±0.98	3.52±0.97	3.10±1.02	.491	.002
	TV anchor	4.00±0.00	3.15±0.70	3.43±0.60	.385	.003
	Broadcast director	3.42±0.65	3.42±0.70	3.40±0.57	.993	.000
	Other	3.47±0.79	3.57±0.83	3.31±0.78	.837	.001
	p	.429	.673	.510		
	η^2	.013	.010	.012		
KAI – Use of AI tools in newsmaking	Editor	3.02±0.90^{A}	3.23±0.81^{AB}	3.53±1.03^{B,a}	.019	.013
	Photojournalist and cameraman	3.33±0.82	3.44±0.67	3.04±0.73	.286	.004
	News coordinator	3.24±0.80	3.45±0.60	3.04±0.70	.576	.002
	Reporter	3.43±0.82	3.14±0.89	3.18±1.05	.196	.005
	Freelance journalist	3.18±0.87	3.67±0.44	3.21±0.71	.422	.003
	Technical support	3.45±0.72	3.37±1.07	3.23±0.97	.838	.001
	TV anchor	2.67±0.00	2.84±0.88	3.17±0.91	.546	.002
	Broadcast director	3.23±0.79^{A}	3.19±1.01^{AB}	2.67±0.46^{B,b}	.032	.012
	Other	3.21±0.86	3.87±0.77	3.21±0.31	.301	.004
	p	.502	.092	.040		
	η^2	.012	.023	.027		

Note. DV: Dependent variable & *Different uppercase letters in the same row and different lowercase letters in the same column indicate significant differences

DISCUSSION AND CONCLUSION

This study contributes to the literature by examining the role of AI technologies in journalistic practices through a comparative and empirical analysis of the Middle Eastern context. The findings from journalists in Türkiye, Iraq, and Syria suggest that the use of AI in journalism does not constitute a uniform or universally experienced process of transformation. This interpretation is supported by the finding that journalists' perceptions of AI vary across country-specific political, institutional, and professional contexts. Journalists in Türkiye appeared to evaluate AI more critically and cautiously, a pattern that may be associated with increasing editorial precarity, ethical uncertainties, and concerns regarding professional autonomy in the media field (Demirdiş, 2025). Editors in Türkiye perceived AI as posing greater risks to data reliability than their counterparts in Iraq (**H3**) suggests that AI may be viewed not only as a technological innovation but also as a factor with implications for editorial control. This pattern may be understood as reflecting broader debates on technological determinism and professional autonomy in the context of algorithmic systems. In contrast, the finding that news coordinators in Iraq perceived AI more as an opportunity than their counterparts in Syria (**H2**) may reflect efforts by media organizations to integrate technological change with established journalistic norms in a relatively balanced manner (Yasee & Jaefar Badran, 2025). In Syria, the higher level of AI use in news production reported by editors compared with their counterparts in Türkiye (**H5**) may suggest that these technologies are used pragmatically to support news production under

challenging political conditions (AlAshry, 2024). These findings suggest that, in authoritarian media environments, AI may function not only as a tool for production efficiency but also as a technology whose use is shaped by conditions of censorship, surveillance, and political pressure.

Significant differences were also observed in journalists' use of AI tools across Middle Eastern countries according to educational attainment. Journalists with higher levels of education in Türkiye were more likely to perceive AI as a threat than their counterparts in Syria and Iraq (**H1**) may suggest that greater familiarity with digital technologies is associated with increased awareness of the ethical, professional, and structural risks associated with AI (Sarısakaloğlu, 2021). This pattern may indicate that journalists with higher levels of education tend to view AI not only as a tool for improving efficiency but also as a technology with potential implications for editorial autonomy, professional security, and news verification practices. On the other hand, perceptions of insufficient AI-related resources increased with age in Türkiye and Syria, were more pronounced among journalists holding bachelor's degrees in Iraq and Syria and were particularly evident among news coordinators in Syria (**H4**) may reflect the influence of structural resource constraints and technological limitations on media production processes. This pattern may also be associated with adherence to traditional journalistic practices, uncertainties surrounding professional transformation, and concerns regarding job security (Etike, 2023). The findings suggest that perceptions of AI are associated not only with individual patterns of technology use but also with sociodemographic characteristics, such as education, age, and professional position, as well as broader institutional and political media contexts.

The findings indicate that journalists perceive AI simultaneously as an opportunity associated with greater professional efficiency and productivity and as a source of potential risks related to data security, professional autonomy, and structural inequalities (**H6**). This pattern is consistent with previous studies conducted in the GS, which suggest that journalists may simultaneously hold both optimistic and critical attitudes toward AI (Møller et al., 2025; Moran & Shaikh, 2022). Furthermore, the administration of the scale across different linguistic and cultural contexts—Turkish in Türkiye and Arabic in Iraq and Syria—provides additional evidence supporting its validity and reliability in cross-cultural settings. In this respect, the study contributes to the predominantly Western-centered literature on AI and journalism by providing context-sensitive, comparative, and systematic evidence regarding perceptions and usage practices of AI in fragile and non-Western media systems.

Future research should examine journalists' perceptions and usage practices of AI using not only quantitative approaches but also qualitative methods, such as in-depth interviews, digital ethnography, and comparative fieldwork. Studies focusing on how authoritarianism, censorship, economic vulnerabilities, and differences in technological infrastructure influence journalists' use of AI may provide a more comprehensive understanding of this phenomenon. Additionally, including a broader range of GS countries representing different media systems may contribute to a more comprehensive understanding of the cultural, political, and institutional dimensions of the relationship between AI and journalism.

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