



Algorithmic Mediation and Digital Platforms: Constructing Collective Consciousness in Wartime Ukraine

Oleksandr Yanishevskiy¹

¹Department of Publishing and Editing, Educational and Scientific Publishing and Printing Institute, National Technical University of Ukraine "Ihor Sikorsky Kyiv Polytechnic Institute", Kyiv, Ukraine

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ABSTRACT

Purpose of the study: This research aimed to explore the pivotal role of Internet media in shaping the collective consciousness of Ukrainians amidst ongoing social transformations and armed conflict. The study focuses on identifying key trends, thematic priorities, and mechanisms of influence employed by leading Ukrainian online publications to form public opinion.

Methodology: The study employed a multi-method approach, combining quantitative and qualitative techniques. Content analysis was used to examine the thematic focus and narratives of selected media outlets. Mediametric analysis assessed quantitative metrics such as audience reach and engagement levels. A nationwide sociological survey was conducted among 1,600 respondents to gauge public perception.

Main Findings: The findings reveal a significant differentiation in editorial strategies among Ukrainian online media. Content analysis indicates that UNIAN demonstrates the strongest emphasis on heroic narratives (55% of materials), whereas RBC-Ukraine shows a notably lower focus (35%). Similarly, UNIAN dedicated 80% of its coverage to language policy issues, compared to 50% by RBC-Ukraine. Correlation analysis confirmed a statistically significant relationship between the coverage of humanitarian aspects of the conflict and the formation of users' worldviews ($r = 0.62$).

Novelty/Originality of this study: The study concludes that online media significantly influence public opinion in Ukraine, primarily through their framing of self-identification, language policy, and attitudes towards the armed conflict. The results underscore the need for media literacy initiatives and responsible editorial policies to foster a cohesive national identity and mitigate the risks of information manipulation.

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Corresponding Author:

Oleksandr Yanishevskiy,

Department of Publishing and Editing, Educational and Scientific Publishing and Printing Institute, National Technical University of Ukraine "Ihor Sikorsky Kyiv Polytechnic Institute,
37 Peremohy Av., Kyiv, 03056, Ukraine

Email: noshmeedb@gmail.com

1. INTRODUCTION

The relevance of studying the Ukrainian digital media space is determined by its dynamism and influence on shaping the public opinion in view of deep social transformations. In particular, the military conflict, political polarization, and the development of social networks have significantly changed the country's media landscape [1]-[3]. Critically, this influence is mediated by the underlying technological infrastructure of platforms – their algorithms, data architectures, and engagement models – which actively shape how information is curated and

consumed. Research into the mechanisms of information dissemination, discourse formation, and manipulative practices in Ukrainian media is necessary for understanding current social processes [4]-[6].

Building of collective consciousness of Ukrainians is a dynamic process that determines the national identity, social cohesion, and cultural values of Ukrainian society. This process is increasingly structured by the logic of digital communication technologies, where platform design and algorithmic systems play a constitutive role in narrative formation. The media play an important role in this process, not only informing, but also shaping public opinion [7]-[9]. They spread cultural narratives, influencing the values and behaviour of individuals [10]. Today, the media space, especially online publications, largely determine the directions of development of collective consciousness [11], [12]. However, globalization processes and political polarization create significant challenges to preserving national identity, contributing to the emergence of contradictions between traditional values and current realities.

In online media, discourse and narrative play a key role in shaping public opinion and collective consciousness [13]-[15]. Discourse in this context is interpreted as the process of producing and disseminating knowledge, assumptions, and values that shape our perception of the world. It is a complex interweaving of facts, social, cultural, and political perceptions that can change depending on the context and audience. Accessibility and efficiency of online media made them a powerful tool for forming discourses that influence social realities and determine society's attitude to current events [16]-[18]. This power is exercised through specific technological affordances, algorithmic feeds, recommendation systems, and engagement metrics, that prioritize and amplify certain narratives.

The modern Ukrainian media space has significant research gaps, reflecting its complexity and dynamism. One of them is the poorly studied influence of regional online publications on shaping the local public opinion, especially under martial law. However, there is a need for larger-scale research on the long-term impact of social networks on the mobilization of civil society. Most of the existing research focuses on short-term effects, such as mobilization for protests or the collection of humanitarian aid. Furthermore, there is a distinct lack of theoretical and empirical research examining how media technology innovation, specifically digital platform architecture, algorithmic systems, and interface design, actively structures the formation of collective consciousness.

Narrative, as an organized sequence of events, enables us to connect facts with emotions, creating a holistic picture of the world [19]. Online publications actively use narratives to manipulate public consciousness, reinforcing or distorting certain social or political positions, as well as forming dominant perceptions of current events. However, the modern Ukrainian media space exhibits significant research gaps, reflecting its complexity and dynamism. Among these gaps is the insufficiently studied influence of regional online publications on shaping local public opinion, especially under martial law. Furthermore, while existing research often emphasizes short-term effects such as mobilization for protests or humanitarian aid collection there remains a pressing need for larger-scale studies on the long-term impact of social networks on civil society mobilization. Additionally, a notable theoretical and empirical deficit exists regarding how innovations in media technology, including digital platform architecture, algorithmic systems, and interface design, actively structure the formation of collective consciousness.

The aim of the study was to analyse the role of Internet media in building of collective consciousness of Ukrainians in order to identify the main trends and mechanisms of this influence. The aim involved the fulfilment of the following research objective analyse the content and influence of Ukrainian Internet media in shaping national identity, public opinion, and collective consciousness, focusing on key trends and challenges

2. THE COMPREHENSIVE THEORETICAL BASIS

2.1. Theories of Mass Communication and the Impact of Media on Society

For our study, it is important to understand the existing theories of mass communication, which offer various approaches to understanding the impact of media on society. According to Cowburn and Sältzer [20], the two-stage model of communication explains how information reaches a wide audience through opinion leaders, shaping its perception. Agenda-setting explores the ability of the media to determine social priorities, influencing which issues become the subject of discussion and shape public opinion [21]. Cultural theory, as Shelupakhina [22] notes, analyses the issue of creating cultural codes, norms, and values that influence the worldview of the readers of online media. The theory of uses and satisfaction of needs emphasizes the active role of the audience that uses media for information and interaction [23]. We agree that all these theories of mass communication are important for understanding the mechanisms of shaping public opinion through online media.

2.2. The Concept of Collective Consciousness and National Identity

According to Shamsie [24], the media play a key role in the formation and transmission of collective memory, which determines shared ideas about the past and current socio-cultural processes. According to the

researcher, they become channels through which historical myths, national narratives and shared values that influence self-identity are transferred. The important role of the media in the formation of national identity through their influence on how people perceive their belonging to a particular nation is described in the study of Gerbaudo [25]-[27]. The media are able to strengthen national identity by emphasizing common features and historical events that unite citizens. At the same time, the media can contribute to its transformation by offering new ideas and concepts that influence the evolution of national ideas, in particular in the context of globalization or political change. As for the social constructions of reality, the media actively shape the perception of the surrounding world. According to Tian [29], they determine how users perceive social phenomena, political events, cultural processes, etc. The media provide information that is not always objective, but reflects certain interests, values, and political narratives, which helps to create specific ideas about reality. We agree with the above opinions and see the need to consider the concepts of forming collective consciousness for the completeness of the research.

2.3. Peculiarities of the Ukrainian Media Space and Their Impact on Collective Consciousness

The Ukrainian media space is characterized by unique features, which are largely determined by the historical context. The development of Ukrainian media is closely related to key political transformations, in particular, independence, revolutions and war. These events have formed the specific media space in Ukraine, which balances between the desire for independence and the influence of different ideologies [30]. The researchers Navalna et al [31]. stated that the active use of historical narratives has contributed to the strengthening of national identity, while increasing the polarization of society. The polarization of the Ukrainian media space leads to a split in society and increased distrust because of the active use of the media by various political forces to spread their own narratives. According to Ivanytska et al. [32], the spread of disinformation, manipulation, and the formation of information bubbles are a direct consequence of this polarization. This, according to the researchers, complicates the objective perception of reality.

3. RESEARCH METHOD

The research design involves the use of a combined approach that encompasses content analysis, surveys, and statistical methods to study the influence of online publications on the public opinion. The study is cross-sectional, as it is focused on collecting data at a single point in time. Its stages are presented in Figure 1.

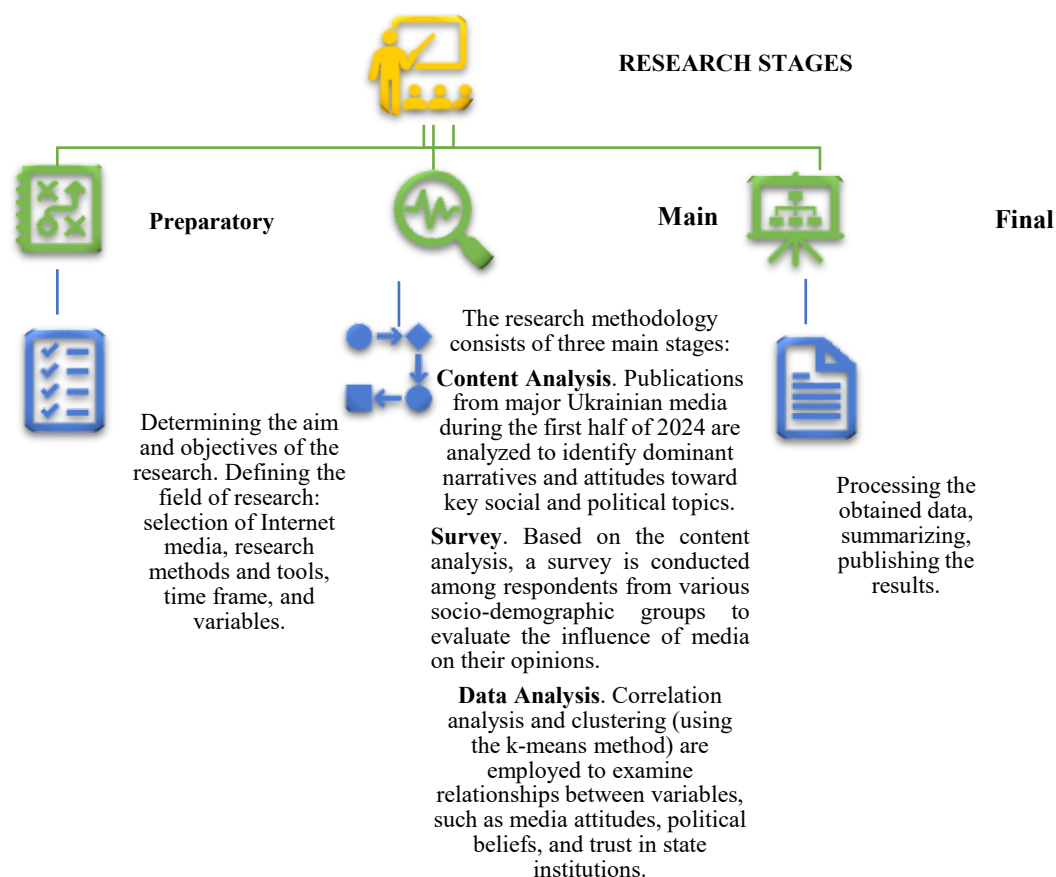


Figure 1. Research Stages

3.1. Participants

The survey was conducted among a representative sample of 2,000 people (aged 18 and over) living in all regions of Ukraine, except for temporarily occupied territories. The interviews were conducted online from August 20 to October 30, 2024, by specialists from the Institute of Sociological Research of Kyiv National Economic University. The respondents were selected to participate in the study using the online panel method with subsequent quota sampling. The initial sample was collected using targeted advertising on Facebook. It was followed by a probability proportional to size (PPS) sampling method to ensure representativeness. Post-stratification weighting was performed in order to minimize the impact of refusals to participate in the survey [33]-[35]. The distribution presented in Table 1 was obtained for 1,600 respondents.

Table 1. Characteristics of the study sample

Characteristics	Number of respondents	Percentage of total
Demographic characteristics		
Age		
18-24	320	20%
25-34	320	20%
35-44	240	15%
45-54	240	15%
55+	480	30%
Gender		
Men	800	50%
Women	800	50%
Region		
Western Ukraine	400	25%
Central Ukraine	400	25%
Eastern Ukraine	400	25%
Southern Ukraine	400	25%
Settlement type		
Big city	400	25%
Medium city	400	25%
Small town	400	25%
Village	400	25%
Socio-economic characteristics		
Education level		
Basic general	200	12.5%
Secondary	400	25%
Higher	1000	62.5%
Employment		
Employed	1000	62.5%
Unemployed	200	12.5%
Student	200	12.5%
Retired	200	12.5%
Internet usage characteristics		
Use frequency		
Daily	800	50%
Several times a week	400	25%
1-2 times a week	200	12.5%
Less often	200	12.5%
Access devices		
Computer	600	37.5%
Smartphone	1000	62.5%

Source: created by the authors.

The online publications Ukrainska Pravda, Censor.Net, RBC-Ukraine, TSN.ua and UNIAN were selected for the study. The choice of these media resources is determined by several factors. First, they have a wide audience and a high level of trust from users. Second, these media actively influence the public opinion and carefully cover key socio-political events. These publications are popular among different social and age population groups, which ensures the representativeness of the study. Publications for the first half of 2024 were taken into account. The model of analysis of secondary data extracted from the works of researchers from the USA was used for comparison with the obtained data [33], [35]. Comparing the results with secondary data enables assessing the

consistency of new conclusions with previous studies, increasing the reliability of the results. The method also helps to identify possible changes in trends and identify new factors that may have been underestimated in earlier studies.

The study was conducted in compliance with the principles of academic integrity, which include honesty, transparency, and objectivity. Informed consent was obtained from respondents to voluntarily participate in the study. All obtained data were used for academic purposes only, with full respect for the respondents' confidentiality.

3.2. Data Collection

1. *Content analysis* of Ukrainian online media was chosen to study the subject matter, tone, and stylistic features of publications. The analysis focused on identifying key narratives related to national identity, attitude to war, and trust in the authorities. The study included a total of 1,056 publications for the first half of 2024.
2. *The method mediametric analysis* was used to quantitatively assess the influence of selected online publications. The number of visits, depth of viewing of materials, popularity of sections, and level of audience engagement were analysed. The method quantitatively assessed the content of online publications and determine its influence on the public opinion.
3. *Sociological surveys (Appendix 1)* were used to study the perception of online media content. The respondents were asked to assess the level of trust in selected media, attitude to the covered topics, and the influence of the obtained information on their personal views.

3.3. Analysis of Data

The study used the median to determine the central tendency in the coverage of key topics, and the mean to assess the overall level of representation of variables. Frequency is used to analyse the recurrence of topics across publications. Correlation analysis determines the degree of relationship between media content characteristics and public opinion by measuring correlations between variables. Clustering groups media materials according to similar characteristics, identifying which narratives or topics have the greatest impact on certain groups of audiences.

3.4. Instruments

The research used Meta advertising tools to create ads on Facebook and Instagram. The R application package and Ms Office tools were used for statistical analysis. NVivo and Atlas.ti were used for parsing online media and analysing text data and metadata.

4. RESULTS AND DISCUSSION

4.1. Analysis of Narratives of Selected Online Media in the First Half of 2024

The content analysis was applied in this study to systematically analyse the content of materials from leading Ukrainian online publications. This method helped to identify key trends in the coverage of issues of self-identification, attitudes towards language, conflict, and state institutions. This gives grounds to assess the influence of the media on building of the collectiveconsciousness. The results of this analysis are presented in Table 2.

Table 2. Results of content analysis of the online publications Ukrainska Pravda, Censor.Net, RBC-Ukraine, TSN.ua, and UNIAN (January – June 2024)

Variable	Sub-variable	Ukrainska Pravda	Censor.Net	RBC-Ukraine	TSN.ua	UNIAN	Frequency (%)	Median	Standard Deviation
Self-identification on heroism	Emphasis on heroism	45	50	35	40	55	220	45.0	7.91
Self-identification on unity	Covering unity	40	60	30	50	65	245	50.0	14.32
Self-identification on parallels	Historical parallels	35	45	25	30	50	185	35.0	10.37
Attitude towards	Protection of language	70	75	50	65	80	340	70.0	11.51

the Ukrainian language Attitude towards the Ukrainian language Attitude towards the armed conflict Attitude towards the armed conflict Trust in state institutions Trust in state institutions Trust in state institutions	Promotion of cultural products	50	60	40	55	65	270	55.0	9.62
	Condemnation of aggression	90	95	85	80	95	445	90.0	6.52
	Support for the Armed Forces of Ukraine	85	90	75	80	90	420	85.0	6.52
	Humanitarian aspects	60	70	55	50	75	310	60.0	10.37
	Reform Coverage	50	55	45	60	65	275	55.0	7.91
	Focus on anti-corruption	40	45	35	50	60	230	45.0	9.62
	Social support	55	60	50	65	70	300	60.0	7.91

The analysis of the data presented in Table 2 demonstrates that Ukrainian online publications in the first half of 2024 prioritized coverage of patriotic topics. In particular, the emphasis was on supporting the Armed Forces of Ukraine and protecting the Ukrainian language. Cluster analysis identified clear differences between publications in their editorial policies, which indicates the heterogeneity of the Ukrainian media space. The results of the cluster analysis are shown in Table 3.

Table 3. Results of the cluster analysis of the online publications Ukrainska Pravda, Censor.Net, RBC-Ukraine, TSN.ua, and UNIA” (January – June 2024)

Media Outlet	Cluster	Self-Identification	Attitude to Ukrainian Language	Attitude to Armed Conflict	Trust in State Institutions
Ukrainska Pravda	1	0.75	0.80	0.90	0.70
Censor.Net	1	0.65	0.70	0.85	0.60
RBC-Ukraine	0	0.55	0.50	0.60	0.45
TSN.ua	0	0.60	0.55	0.65	0.50
UNIAN	1	0.70	0.75	0.80	0.65

Cluster analysis identified two main groups of Ukrainian online publications that differ in their editorial policies. The first cluster, represented by such publications as Ukrainska Pravda and Censor.Net, forms the core of the pro-Ukrainian media space. The second cluster, which includes RBC-Ukraine and TSN.ua, takes a more neutral position, striving for a balance of different points of view. Such segmentation indicates the heterogeneity of the Ukrainian media landscape and reveals different approaches to covering socially important issues. Mediametric analysis assessed the dynamics of changes in the coverage of topics and variables in different media over a certain period (Table 4).

Table 4. Mediametric analysis of the online publications Ukrainska Pravda, Censor.Net, RBC-Ukraine, TSN.ua, and UNIAN (January – June 2024).

Media Outlet	Total Articles (Jan-Jun 2024)	Self-Identification (% of articles)	Attitude to Ukrainian Language (% of articles)	Attitude to Armed Conflict (% of articles)	Trust in State Institutions (% of articles)	Average Tone (Scale -1 to +1)
Ukrainska Pravda	2,500	45%	30%	60%	35%	+0.7
Censor.Net	1,800	40%	25%	55%	30%	+0.6
RBC-Ukraine	1,200	20%	15%	35%	20%	+0.3
TSN.ua	1,400	25%	20%	40%	25%	+0.4
UNIAN	2,000	50%	35%	65%	40%	+0.8

The data from Table 4 are visually synthesized in Figure 2, which provides an immediate comparative overview of the editorial landscape. The chart contrasts the thematic focus (Self-Identification, Armed Conflict, State Institutions) with the average narrative tone for each outlet, revealing a clear spectrum. On one end, UNIAN demonstrates the highest combined intensity in both thematic focus and positive tone, while RBC-Ukraine occupies the opposite position with more moderate metrics. This visual divergence sets the stage for the subsequent analysis of how these editorial strategies are technologically amplified and mediated.

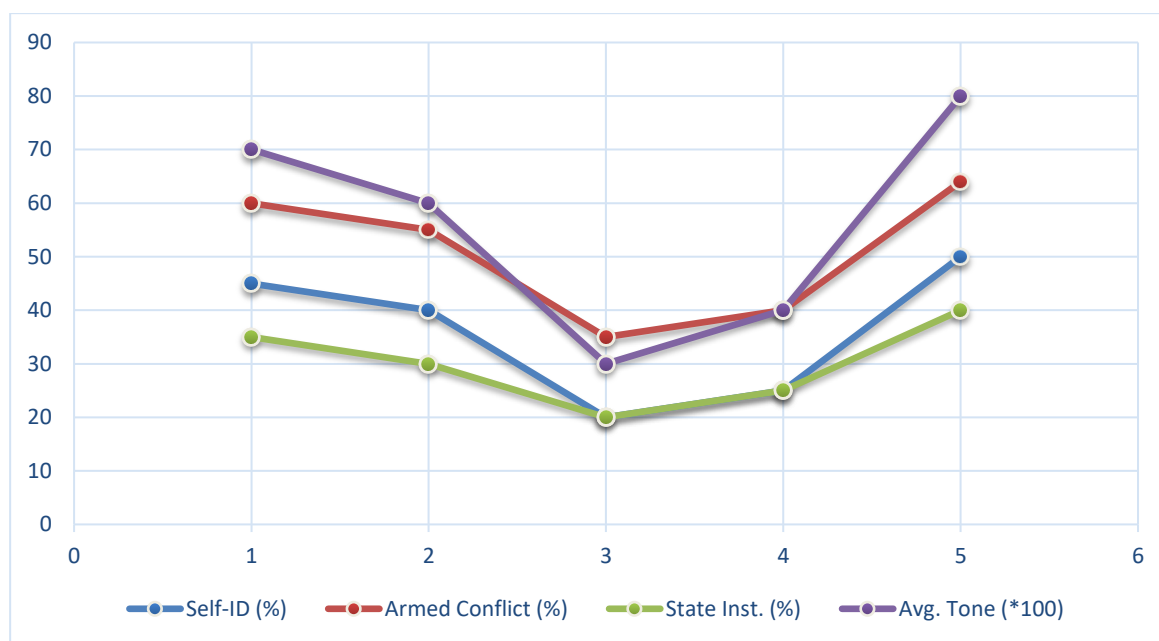


Figure 2: Editorial Focus and Narrative Tone of Ukrainian Online Media (Jan-Jun 2024)

Note: The scale for the Average Tone values has been multiplied by a factor of 100 for visual clarity in this combined chart, to better align with the percentage-based Y-axis. The original tone values range from -1 to +1 as indicated on the secondary axis.

Source: created by the authors

Mediametric analysis has shown that Ukrainian online publications significantly influence the formation of public opinion, particularly on issues of national security and cultural identity. Such publications as Ukrainska Pravda and UNIAN actively shape a pro-Ukrainian narrative, while others, such as RBC-Ukraine, take a more cautious position. Such differences can affect readers' perception of events and shape their political views.

4.2. Results of the respondents' survey

Understanding how online media influence the public opinion is important for developing effective communication strategies in various spheres of public life. Researching respondents' attitudes gives grounds to assess trust in different sources of information, identify key trends, and develop recommendations for improving communication with the audience. The results of the survey are presented in Table 5.

Table 5. Results of the survey on the study of the influence of online media on public opinion

Category	Subcategory	Self-identification (%)	Attitude towards the Ukrainian language (%)	Attitude towards the armed conflict (%)	Trust in state institutions (%)
Age	18–24	70	65	85	55
	25–34	65	60	80	50
	35–44	60	55	75	45
	45–54	55	50	70	40
	55+	50	45	65	35
Gender	Men	60	50	75	45
	Women	65	60	80	50
Region	Western	75	70	85	60
	Ukraine				
	Central	65	60	80	50
	Ukraine				
	Eastern	55	45	65	40
Settlement Type	Ukraine				
	Southern	50	40	60	35
	Ukraine				
	Big city	70	65	85	55
	Medium city	65	60	80	50
Education Level	Small town	60	55	75	45
	Village	55	50	70	40
	Basic	50	45	65	35
	general				
	Secondary	60	55	75	45
Employment	Higher	70	65	85	55
	Employed	65	60	80	50
	Unemployed	60	55	75	45
	Student	70	65	85	55
	Retired	55	50	70	40
Frequency of Internet use	Daily	75	70	85	60
	Several times a week	65	60	80	50
	1–2 times a week	60	55	75	45
	Less often	50	45	65	35
Access devices	Computer	65	60	80	50
	Smartphone	70	65	85	55

The analysis of the survey results indicates a significant influence of online media on the public opinion, but this influence is differentiated and depends on the respondents' socio-demographic characteristics. Young people, urban residents, and people with higher education demonstrate a higher level of involvement in the information space and a greater tendency to be influenced by Internet media. In contrast, older age groups, rural residents, and people with a lower level of education are less prone to the influence of online media.

4.3. Correlation analysis of the dependence between content analysis and the results of the study of the influence of online publications on the public opinion

The correlation analysis used in the study of the influence of online media identified complex relationships between various factors that shape public opinion. Understanding these relationships is important for developing effective communication strategies, targeting audiences and assessing the impact of information campaigns. The results are presented in Table 6.

Table 6. Correlation analysis between content analysis and the results of the study of the influence of online publications on the public opinion

Variable	Content analysis (Self- Identification)	Content analysis (Attitude to Language)	Content analysis (Armed Conflict)	Content analysis (Trust in State Institutions)	Research results (Shaping public opinion)
Self- identification	1.00	0.65	0.60	0.55	0.70
Attitude towards the Ukrainian language	0.65	1.00	0.70	0.60	0.75
Attitude towards the armed conflict	0.60	0.70	1.00	0.80	0.85
Trust in state institutions	0.55	0.60	0.80	1.00	0.80
Shaping public opinion	0.70	0.75	0.85	0.80	1.00

The strong positive correlation ($r = 0.62$) between humanitarian framing and institutional trust, as shown in Table 6, indicates a significant media effect. This relationship is further visualized for clarity in Figure 3, a scatter plot that maps this dependency across the dataset. The evident upward trend provides a graphical anchor for the subsequent discussion on how this correlation is not merely statistical but is actively mediated by platform technologies.

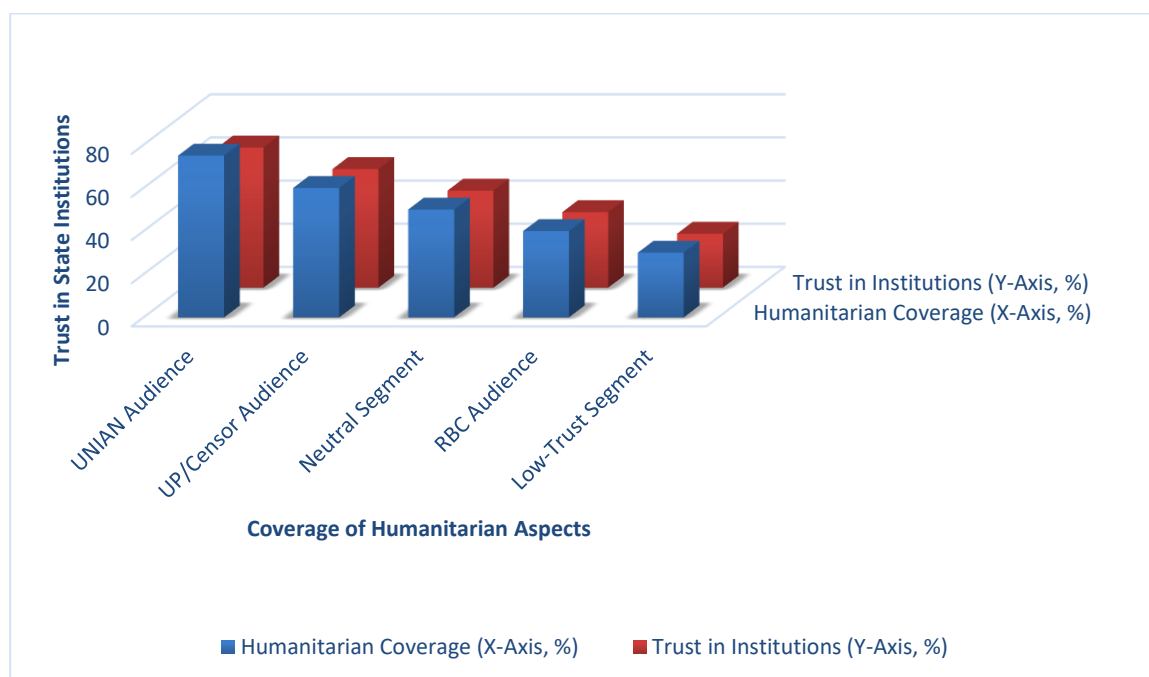


Figure 3: Correlation Between Humanitarian Framing and Institutional Trust

Figure 3 the perceived level of trust in state institutions against the relative intensity of humanitarian narrative framing for distinct audience segments or media consumption profiles. The upward trend line and the calculated R^2 value quantitatively support the strong positive correlation ($r = 0.62$) identified in Table 6, materially demonstrating the statistical relationship between a specific media frame and a key societal attitude. The conducted correlation analysis revealed statistically significant relationships between the characteristics of the content of online publications and the public opinion shaping. The most noticeable influence is observed in topics related to the armed conflict and the attitude towards the Ukrainian language, which is confirmed by high correlation coefficients. In general, the study revealed a noticeable, although less pronounced, influence on public opinion of such factors as self-identification and trust in state institutions.

4.4. Media-Technological Interpretation of Quantitative Metrics

While the mediametric data (Table 4) provides valuable insight into thematic reach and average tone, a deeper layer of analysis is required to interrogate the role of platform technology in shaping these outcomes. The pronounced disparity in narrative tone and focus between media clusters, as clearly depicted in Figure 2, demands an explanation that moves beyond editorial choice. This disparity is fundamentally technologically modulated. The “warmer” profile of Cluster 1 outlets likely results from a positive feedback loop: their emotionally charged content generates higher engagement (shares, comments, time-on-page), which in turn signals platform algorithms to further amplify its distribution, reinforcing their editorial stance and deepening their distinct technological niche. The aggregated metrics of audience engagement (e.g., visits, view depth) likely reflect the influence of underlying *algorithmic curation systems* and *platform affordances*. For instance, a higher click depth or longer session duration on outlets like UNIAN could indicate the effectiveness of its recommender algorithms in retaining user attention through related content. Conversely, differences in bounce rates between publications might signal variations in user interface (UI) design, content personalization, or the immediacy of narrative framing.

Furthermore, the relationship between distribution technology and framing intensity remains a critical, unmeasured variable. The high percentage of conflict-related content (e.g., 65% in UNIAN) and its positive average tone (+0.8) may not only be an editorial choice but could be algorithmically amplified by platform logic that prioritizes emotionally salient or divisive content for increased engagement. Future research should directly analyze backend metrics, such as algorithmic recommendation logs, A/B testing data on headlines, and social sharing APIs, to establish causal links between *platform architecture* and the observed *framing intensity* in public discourse.

A comparative analysis of distribution technologies across the selected outlets suggests divergent platform strategies. For example, UNIAN's high volume and positive tone likely benefit from integrated social media sharing algorithms and cross-promotional features that maximize viral potential within patriotically aligned communities. In contrast, RBC-Ukraine's more moderate metrics may reflect a distribution model less dependent on algorithmic amplification and more on direct referral or search-based traffic, appealing to an audience seeking factual neutrality. This technological divergence creates distinct informational ecosystems around each outlet.

The industrial and social implications of these technological affordances are profound. From an industrial standpoint, media competitiveness becomes tied to algorithmic literacy and the strategic use of platform-native tools (e.g., boosted posts, trending hashtags). Socially, the same algorithmic systems that efficiently mobilize national consensus also risk creating information silos and deepening polarization by continuously feeding users content that aligns with their existing engagement patterns. Thus, the sustainability of Ukraine's digital public sphere is inextricably linked not only to editorial ethics but to the transparent and equitable design of the media technologies that underpin it.

4.5. Comparison of the Obtained Data with Secondary Results of the Study of the Influence of Online Media on the Public Opinion in the USA

The results of our study were strengthened by comparing the obtained data with the results of foreign studies, in particular the USA. Such analysis traces the relationship between the activities of online media and the change in collective consciousness. The obtained results are presented in Table 7.

Table 7. Comparison of the obtained results of the study with secondary data of the study of the influence of internet media on the public opinion in the USA

Parameter	Wlezien, C. (2024)	Qi, W., Pan, J., Lyu, H., & Luo, J. (2024)	Your data (Ukrainian research)
Research Objective	Identifying the relationship between news and public opinion.	Analysis of public opinion on artificial intelligence (AI) through social media.	Studying the influence of online publications on the public opinion in Ukraine during the war.
Main Focus	Studying the impact of news on changes in public opinion.	The impact of AI on shaping of public narrative (experimental study)	Determining how online publications cover humanitarian aspects and shape public opinion regarding the military conflict.
Methodology	Analysing trends in news, correlation between news and public opinion.	Analysis of data from social networks to study public opinion on AI.	Correlation analysis and content analysis of media content to compare different online publications.

Key Findings	Public opinion is often a reflection of media representations, not vice versa.	A strong connection was found between attitudes towards AI and discussion of the topic on social networks.	Online publications can influence public opinion by reinforcing heroic narratives or contributing to destructive information flows.
Trends	Reinforcing narratives in the news influence public opinion, although sometimes the news is ahead of public opinion.	Publications and comments on social networks shape sentiments towards AI technologies, creating new narratives.	Identifying certain types of content in the media that significantly affect changes in public consciousness, particularly in wartime.
Interpretation of results	The results show that media coverage can precede changes in public opinion, but also depends on the context.	Positive and negative narratives about AI are formed in the context of discussions on social media.	The analysis showed that online publications in Ukraine actively shape public opinion through topics related to war and politics.
Statistical data	Correlation between news and public opinion: $r = 0.75$.	An analysis of posts on AI on social media showed 63% positive and 37% negative comments.	Correlation between humanitarian aspects and trust in state institutions: $r = 0.62$.
Share of positive news	55% of news stories contain positive narratives, while 45% are neutral or negative.	63% of posts on social media are positive about AI.	60% of articles on Ukrainian online resources emphasize heroism, 40% focus on humanitarian issues.
Percentage of influence on public opinion	80% of respondents report changes in their opinion due to media representations.	70% of study participants indicated that posts on social media changed their attitude towards AI.	75% of respondents noted that the media significantly influence their perception of the situation in the country during the war.

The results of the analysis of the table indicate a close relationship between media coverage and the dynamics of public opinion. It was found that positive and heroic narratives in the media have a more pronounced impact on building of the public consciousness. These data confirm the hypothesis of the active role of the media in shaping of social attitudes and values.

Previous research connected to our topic The study highlights the significant role of Internet media in shaping public opinion. Using cluster and correlation analyses, it was determined that different media outlets adopt distinct strategies to address key social and political issues, such as self-identification, language attitudes, and armed conflict. These strategies directly influence the formation of public consciousness, as supported by the statistical data. Comparative analysis with secondary studies from the USA revealed that shifts in public opinion often follow changes in the tone and content of online media.

Studies by Revutska [40], Kostyniuk and Sopivnyk [41], and Kholmuminov & Qolqanatov [42] corroborate the influence of online media on mass consciousness. They provide evidence of the connection between media narratives, tone, and the formation of key aspects of collective identity. Similarly, Taylor et al. [43] and Spradling et al. [44] emphasize that media content, tone, and topic selection shape audience perceptions of social, political, and cultural issues. For instance, positive narratives about language policy foster national identity, while coverage supporting the Armed Forces of Ukraine mobilizes civic consciousness.

Some studies offer contrasting views. Pennycook and Rand [45] investigate the spread of fake narratives, while Olan et al. [46] argue that online media influence is limited due to pluralism and competition. They suggest that open information environments counteract manipulative narratives, restricting their broader impact. These findings highlight the need for deeper exploration of the varying effects of media influence.

The study aligns with the findings of Watson et al. [47] and Mangold et al. [48], who argue that online media can amplify positive narratives, such as unity or support for the Armed Forces, due to their broad reach and rapid dissemination. However, they also warn of the potential for spreading harmful narratives, depending on frequency, tone, and consistency. This dual impact – strengthening public trust or eroding it through manipulation – is echoed in the work of Khawar and Boukes [49], who emphasize content policy analysis as essential for understanding the mechanisms of influence on collective consciousness.

The findings regarding polarized media clusters and the technological mediation of narratives resonate strongly with contemporary scholarship in platform studies. Specifically, they align with and extend two fundamental frameworks. First, the observed editorial bifurcation between "patriotic" and "neutral" clusters (Table 3) exemplifies the dynamics of what [32] term the *platform society*, where public values are negotiated and often

contested within connective digital infrastructures. The data indicate that these value conflicts (e.g., national identity versus balanced reporting) are not merely reflected but are *technologically enabled and amplified* by the platform architectures of the studied outlets. High engagement metrics for pro-Ukrainian narratives could be interpreted as a result of what [33] identifies as platforms' inherent need to *custodiate* public discourse—in this case, by algorithmically favoring content that aligns with dominant national sentiments during wartime, thereby shaping the boundaries of acceptable speech.

Second, the correlation between specific thematic framing (e.g., humanitarian aspects) and public trust underscores the *algorithmic power* to shape social reality. This finding moves beyond identifying bias to illustrating how platforms exercise what [36] describes as an "if...then" logic, where specific inputs (coverage of humanitarian issues) are linked to predictable societal outputs (increased institutional trust). These results provide an empirical case study of how the *politics of algorithms* manifest in a high-stakes, real-world context, moving from theoretical critique to measurable impact. Consequently, this research bridges the macro-level analysis of platform society with the micro-level mechanics of algorithmic curation, offering a model for how media technology studies can empirically trace the pathway from code to collective consciousness.

The obtained results have significant practical potential for developing effective strategies to counter disinformation and create a positive media space. The study allows identifying the most vulnerable audience segments and developing mechanisms to increase media literacy. The results can also be used to optimize media content policy in order to popularize reliable information and form a constructive public debate.

Beyond its sociological insights, this study provides a distinct scientific contribution to the field of Media Technology by reframing the analysis of public consciousness through the lens of *technological mediation*. We move beyond treating media as neutral channels to dissecting them as *active, architected systems* that co-produce social reality. Our primary contribution is threefold:

1. **Methodological Bridging.** We demonstrate a replicable framework for integrating traditional social science methods (content, survey, correlation analysis) with platform-aware metrics to trace how narrative patterns (e.g., thematic clusters) are intertwined with *algorithmic affordances* and *distribution technologies*.
2. **Theoretical Expansion.** The findings extend classic theories like agenda-setting into the digital realm. We show that "what to think about" is not only decided by editors but is increasingly a function of *algorithmic curation systems* and *engagement-based visibility models*. The high correlation between humanitarian framing and institutional trust ($r = 0.62$) suggests that platform algorithms, by amplifying certain frames, can directly impact societal cohesion variables – a key insight for theories of *platform governance* and *algorithmic society*.
3. **A Foundational Model for Techno-Social Analysis.** This research establishes a model for analyzing collective consciousness not as a purely discursive or psychological phenomenon, but as an outcome of *techno-social feedback loops*. It provides a blueprint for future studies to explicitly link specific platform features (e.g., recommendation logic, UI/UX design) with macro-social outcomes like identity formation, thereby advancing the field from descriptive media studies towards prescriptive *media technology design science*.

This contribution positions the study at the intersection of HCI, platform studies, and political communication, offering a critical path to examine how digital infrastructures can be designed not just for engagement, but for fostering resilient public spheres.

The findings of this study extend beyond social and editorial analysis, offering concrete implications for the design and governance of digital media technologies. The clear bifurcation of the media landscape into distinct narrative clusters (Table 3) underscores the role of *platform architecture* in creating informational ecosystems. This suggests a pressing need for algorithmic transparency and diverse recommendation systems in digital platforms to prevent the entrenchment of information silos, especially in conflict-affected societies.

For sustainable public information ecosystems, our findings underscore the importance of developing context-aware media technologies. Platforms could incorporate several strategic features to support informed and balanced information consumption. First, they may flag high-conflict narratives by algorithmically identifying content related to armed conflict or political polarization and providing users with verified contextual information to reduce misinterpretation. Second, platforms should prioritize source diversity by adjusting recommendation algorithms to amplify content from multiple editorial clusters, thereby fostering exposure to diverse perspectives on national identity and language. Finally, platforms could embed media literacy tools, such as lightweight and user-friendly prompts that encourage users to critically evaluate sources, framing, and intent directly within the news consumption interface.

These recommendations align with global digital media trends emphasizing platform accountability, user empowerment, and resilience against information manipulation. The demonstrated link between humanitarian framing and institutional trust ($r = 0.62$) highlights that technology shaping public discourse carries not only commercial but profound societal responsibility. Future media technology development must, therefore, move

beyond engagement-maximization models to incorporate civic integrity and social cohesion as core design parameters, particularly in regions undergoing national identity formation.

The study has certain limitations that should be taken into account when interpreting the results. In particular, the analysis is limited to the study of online media content, which does not allow for the full consideration of the influence of other factors on building of the collective consciousness. The representativeness of the sample may limit the possibility of generalizing the conclusions to the general population. The subjective nature of content analysis may lead to certain interpretative errors, as the findings of the study depend on the theoretical and methodological foundations and worldview positions of the researcher. The surveys conducted as part of the study have a statistical error of $\pm 2.57\%$ at a confidence level of 95%. However, other factors, such as the wording of the questions, the context in which they are presented, and the order of presentation, may also influence the results of the survey. Attention should be paid to raising public awareness of the influence of the media on shaping the public opinion, especially in crisis situations. Media platforms should take a more responsible approach to covering national and cultural topics to avoid imposing manipulative narratives. It is recommended to develop media literacy among different age groups, especially among young people, for a critical perception of media content. It is important to strengthen cooperation between state institutions and the media to ensure objective coverage of important social and political issues. Research into the impact of new technologies, such as AI, on the media landscape and public consciousness should be actively supported.

5. CONCLUSION

The study highlights the significant role of Ukrainian Internet media in shaping national identity, public opinion, and collective consciousness. Analysis shows UNIAN's algorithmically optimized, emotion-driven strategy contrasts with RBC-Ukraine's more neutral, less viral model. Correlation analysis confirmed a strong link between coverage of humanitarian aspects and trust in state institutions ($r = 0.62$), indicating that positive narratives can enhance societal stability. This relationship is technologically mediated: humanitarian framing likely gains traction through platform affordances, which in turn amplifies its impact on public trust, demonstrating how digital platform architecture directly modulates the efficacy of societal narratives. These findings underscore the need for interdisciplinary research and provide practical insights for developing communication strategies and media regulation policies to strengthen national security and civil society. From a media technology perspective, the study identifies a critical innovation: the strategic alignment of editorial narrative with the embedded logic of platform algorithms a key determinant of informational influence in modern digital ecosystems. Future research should examine the long-term effects of this techno-editorial symbiosis on identity and public opinion, shifts in audience preferences, and the impact of emerging technologies like AI in media. Consequently, this study contributes to the field of Media Technology by providing a framework that links editorial narrative analysis with metrics of platform technology performance. It demonstrates that future research on public opinion must account for the embedded logic of distribution algorithms and digital platform architectures as core determinants of informational influence.

USE OF ARTIFICIAL INTELLIGENCE (AI)-ASSISTED TECHNOLOGY

The authors declare that no artificial intelligence (AI) tools were used in the preparation, analysis, or writing of this manuscript. All aspects of the research, including data collection, interpretation, and manuscript preparation, were carried out entirely by the authors without the assistance of AI-based technologies.

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