The Role of Online Media in Shaping Public Opinion about the Prospects for Peace and Military Conflict

Oleg Marukhovskyi¹, Olga Marukhovska-Kartunova², Svitlana Kolybabiuk³, Liudmyla Pavlova⁴ & Olena Karchevska⁵

Abstract

The aim of the article is to find out the connection between online media and the manifestations of the components of public opinion about the military conflict and the prospects for peace. The study uses methods such as content analysis, scaling, and correlation analysis. In the study, the hypothesis of the connection between online media content and societal changes in public opinion in Ukraine during the war was confirmed. It was determined that society's confidence in victory was significantly related to changes in online media's information field. The attitude towards the Armed Forces of Ukraine correlates only with the perception of news about military operations. The disposition towards the Ukrainian governing bodies is not contingent upon the interpretation of digital media content. The desire to continue the fight correlates with the war awareness level and reporting on domestic politics in digital media. The idea of future peace in public opinion is closely related to the idea of justice and victory broadcast in online media.

Keywords: online media, public opinion, martial law, confidence in victory, prospects for peace.

Introduction

Contemporary society is a highly dynamic framework wherein social processes are influenced by myriad subjective and objective factors. In this context, it is worth mentioning public opinion, which influences the activity of citizens and

¹The author is a Candidate of Political Sciences, Associate Professor of the Department of International Relations and Journalism of the University of Economics and Law «KROK», Ukraine. He can be reached at makiuchimen100@gmail.com

²The author is a Candidate of Philosophical Science, Associate Professor, Head of the Social Sciences Section of the Department of Foreign Languages and General Education Disciplines of the University of Economics and Law «KROK», Ukraine. She can be reached at omaruhovska.@gmail.com

³The author is a Candidate of Historical sciences, Associate Professor of the Department of Law and Humanities, Separate Structural Subdivision of the Higher Education Institution Open International University of Human Development "Ukraine" Ivano-Frankivsk branch, Ukraine. She can be reached at lanakolybabiuk@ukr.net

⁴The author is a Candidate of Political Sciences, Head of the Department of Political and Cultural Studies, Faculty of Law, Volodymyr Dahl East Ukrainian National University, Ukraine. She can be reached at paylovaludmila4321@gmail.com

⁵The author is a Candidate of Political Sciences, Associate Professor of the Department of Political and Cultural Studies, Faculty of Law, Volodymyr Dahl East Ukrainian National University, Ukraine. She can be reached at karchevskayahelen@gmail.com

the actions of the authorities (Howe & Krosnick, 2022), as well as determines the passage of social crises, in particular, in the field of healthcare (Wang et al., 2022), the instability of state security in the face of military threats (Mueller, 2021). The emergence and dynamics of this phenomenon depend on socio-cultural factors as well as society's technological development (Tiratelli, 2023). The influence of digital media is especially relevant in this regard, as it is closely integrated into all spheres of social relations (Hepp, 2022). In contemporary society, digital media substantially influences human well-being, occupational pursuits, ecological interactions, economic systems, and the holistic development of an individual's character (Rohlinger & Sobieraj, 2020). However, despite the unconditional relevance of the issue, the role of online media in social processes has not been sufficiently revealed (Hampton, 2023). The significance of digital media in social processes necessitates a thorough examination of biological, psychological, social, and technical frameworks to gain insight into their interdependence and harmonization (Baecker, 2023) and their influence on shaping public opinion (Svitla, 2023). Amidst the plethora of scholarly literature about multifarious facets of the Russian-Ukrainian war, we find only a few attempts to study the influence of the media on shaping public opinion (Selvarajah & Fiorito, 2023; Pavlik, 2022). Because of the above, there are gaps in the scientific understanding of the most relevant mechanisms for society's functioning in wartime.

The study aims to find out the relationship between online media and the manifestations of the components of public opinion about the military conflict and its prospects.

Research Objectives

- to identify the elements, factors, and mechanisms of public opinion formation.
- to analyze the dynamics of public opinion in Ukraine during the military conflict of 2022-2023;
- establish a connection between the content and perception of information in online media and changes in public opinion about the prospects for peace and military conflict.

Methods and Materials

The following stages of the study were carried out:

Research planning stage. The chronological boundaries of the stage are 1-30 March 2022. The war's onset exacerbated the issue of the background of information in social processes, so it was decided that the current scientific research should be carried out. The research procedure included the analysis of theoretical

sources, clarification of the methodology and research methods, research resources (time, human, material), sampling, and determining the compliance of the planned research with moral and ethical standards. The study is based on the hypothesis of the relationship between online media content and changes in public opinion in Ukrainian society during the war.

The stage of collecting the empirical material involved implementing planned procedures using available methodological, material, human, and time resources. In doing so, well-grounded research tools were used. This stage spanned from April 2022 to December 2023.

The analytical stage was aimed at identifying quantitative trends in the work of online media and changes in public opinion with their subsequent description. Given the study specifics, this stage occurred concurrently with collecting empirical material.

The concluding stage entailed the data analysis using genetic and structural methodologies. It took place from December 2023 to January 2024.

Tools

Content analysis was used to collect data on the subject of research. The reliability and validity of the tool were confirmed by scientific studies (Zhang & Wildemuth, 2005). This method involves the analysis of Internet media content, which aims to identify predominant patterns in the realm of information within Ukrainian society. At the same time, the quantitative aspect of the keywords' usage frequency and emotionally coloured messages in publications was recorded. Using deductive-inductive analysis of the media messages, the following reporting types were established: information messages about the course of hostilities; information reports on the internal political war aspects (authorities' decisions and activities); reporting on the foreign policy war aspects (interaction with other countries); messages on neutral topics that are not directly related to the war (art, sports, crime); "positive" expert analytics on the topic of war; "negative" expert analysis on the topic of war. The scaling method was used to identify the peculiarities of public opinion, which provided for interviewees' assessment of current social issues during martial law. The subjects were asked to evaluate the following aspects on a tenpoint scale: confidence in victory, attitude towards the Ukrainian authorities, attitude towards the Armed Forces of Ukraine, and readiness to continue the military struggle for a long time. So, the numerical value of 10 was a representation of optimal acceptance, while the numeric value of 1 was assigned to denote minimal approval.

The sample was comprised of Ukrainian citizens who utilized social networking platforms such as Facebook, Instagram, TikTok. The sample size exhibited instability due to the study's duration of 21 months, so the number of interviewees ranged from 221 to 254. The study involved participants aged 18–60 years from different regions of Ukraine. At the same time, we tried to achieve uniformity in participants' territorial distribution. We can see that the sample corresponded to the requirement for the representativeness of conducting psychological research.

Data collection was carried out by contacting the interviewees via social networks. According to the study's framework, respondents were supposed to take a survey at the end of each month about their attitude to key aspects of the Russian-Ukrainian war. Also, participants agreed that at least every 2-3 days, they would disseminate information from online news sites that resonates with their mood and current situation.

The data analysis involved calculating the percentage trends in the frequency of certain information messages on the pages of network users, indicators of average values of public opinion manifestations, and Pearson correlation coefficients to clarify the links between the content of online media and public opinion elements in the context of Russian military aggression. The SPSS program was utilized.

The compliance of the study with ethical requirements was ensured as a result of detailed information from participants about the course of scientific research and ways of using the obtained data.

Literature Review

Public opinion broadly reflects the beliefs, ideological constructs, and citizens' emotions regarding various aspects of social life that arise in a democratic society (Freeland, 2015). Public opinion develops through the interaction of individuals in society, which involves exchanging information, views, and points of view (Mallinson & Hatemi, 2018). According to Perrin and McFarland (2011), the principal features of this social phenomenon are collectivism, dynamism, and reactivity. The key factors of shaping public sentiment are as follows: information, media, social interaction, education and life experience of members of society, the social and political context of interaction, emotions, and values of participants in interaction (Ausat, 2023). As noted by Wei et al. (2022), authoritative public figures known to the general public significantly influence public opinion. The experimental confirmation of the influence exerted by both the majority and expert

opinion on forming a collective stance towards certain phenomena was shown (Moussaïd et al., 2013). The researchers concluded that trusting relationships in the community are more important in achieving a common attitude to a situation (consensus) than group pressure (Cheng & Yu, 2019). Lu et al. (2019) scientific study affirms the findings regarding the negligible impact of social pressure caused by increased public scrutiny on shaping public opinion.

Changes in group opinions and experiences are determined by the difference in people's attitudes and evaluations and the structure of network interaction (Dong et al., 2022). In social media platforms, the impact of collective pressure on shaping a cohesive perspective regarding certain social events is more pronounced (Ferraioli & Ventre, 2019). The opinions of social media users are significantly influenced by informal communication channels, namely rapidly disseminated online hearsay within social media (Lan et al., 2020). Social media platforms have emerged as a valuable instrument for fostering civil society and unifying citizens around prevalent state and societal issues (Rudyk, 2020). Collective views on the situation on the Internet are developed through discussions and active information exchange (Ausat, 2023). The above situation encourages the use of social media as a tool for studying public opinion dynamics (Dong & Lian, 2021).

The considerable impact of media on the shaping and dissemination of public sentiment warrants separate consideration (Li & Zhu, 2020). The general scheme of media's influence on public opinion determines the intensive communication exchange of society members, which leads to a central shift or the formation of an extreme attitude to the situation (McKeown & Sheehy, 2006). Regarding the subject of the current article, it should be noted that specific indicators of public opinion in online media are likes, shares, and comments illustrating agreement or disagreement with public attitudes towards certain events (Ross et al., 2021). On the other hand, the dynamic involvement of digital media renders it much more difficult to establish the benchmarks for verifying the veracity or falsity of public opinion (Lock, 2023), as well as stimulates its radicalization and polarization (Pansanella et al., 2023). The algorithmic influence of online media establishes the so-called "digital truth" regime, which restricts human autonomy and freedom of action, thus shaping manipulative public opinion (Rouvroy & Berns, 2018). The impact of negative emotions on shaping public opinion in digital media is especially pronounced, which characterizes the so-called post-truth era (Li, 2023).

Despite the significant number of scholarly publications, the role of online media in shaping public opinion during the war remains insufficiently addressed. One potential rationale for this phenomenon is its commonplace nature and inherent emotional resonance, which interferes with a systematic study of the problem.

Results

The generalized results of the content analysis of the subject's activity in the online media are presented in Table 1. Legend: IM (information messages) – information messages about the course of military operations; DP (domestic policy) – information about internal political processes, namely decisions and actions of central and regional authorities; FP (foreign policy) – information about the foreign policy aspects of the war (interaction with other countries); NT (neutral topics) – messages on neutral topics that are not directly war-related (art, sports, crime); PA is positive expert analytics on the topic of war, offering encouraging narratives and forecasts about the course of hostilities ("victory analytics"); NA is negative expert analytics on the topic of war, emphasizing the shortcomings and miscalculations of the Ukrainian state, which suggests gloomy and disheartening forecasts.

Table 1

Perception dynamics of online media by the interviewees in the conditions of war

Research Distribution of online media messages in social networks

Research	Distribution of online media messages in social networks					
month	under study, %					
	IM	DP	FP	NT	PA	NA
April 2022	30.93	10.35	15.45	3.16	38.66	1.45
May 2022	38.76	5.34	13.89	4.23	27.92	9.86
June 2022	35.65	7.34	17.64	5.14	22.31	11.92
July 2022	30.54	8.44	18.84	8.42	30.09	3.67
August 2022	28.59	13.89	19.54	6.56	23.19	8.23
September	41.67	1.05	16.45	2.89	35.89	2.05
2022						
October 2022	22.98	5.98	19.52	2.75	37.07	11.7
November	34.52	11.11	18.65	3.65	20.02	12.05
2022						
December	19.23	18.21	17.98	4.92	21.98	17.68
2022						
January 2023	30.56	19.21	18.67	4.71	14.76	12.09
February 2023	28.86	15.03	16.9	6.04	14.97	18.2
March 2023	32.72	13.56	15.91	7.93	15.76	14.12
April 2023	32.02	14.64	12.62	9.32	16.62	14.78
May 2023	31.31	15.62	16.56	9.48	17.47	9.56
June 2023	39.23	9.34	20.29	3.78	6.12	21.24
July 2023	29.45	9.67	20.61	12.43	14.32	13.52
August 2023	25.56	12.43	18.45	13.39	16.29	13.88

September 2023	23.54	16.87	19.06	16.67	13.03	10.83
October 2023	24.23	18.34	18.46	17.56	14.09	7.32
November 2023	19.42	21.67	15.9	19.46	18.91	4.64
December 2023	18.98	23.92	14.78	18.39	18.15	5.78

April 2022 is characterized by the predominance of the studied categories of IM and PA in the posts (about 30% and 40% of the material, respectively). At the level of 10-15% is the representation of posts about Ukraine's foreign and domestic policy. The minimum number of posts is observed for the NT and NA sectors.

May 2022 witnessed an increase in posts from news sites highlighting military operations. At the same time, the share of positive analytics posts decreases by about 10% and the volume of "defeat analytics" increases by 8%. The relevance of the DP information category is decreasing. The FP and NT categories remain unchanged.

June 2022 witnessed no significant changes in the studied group's perception of online media content. At the same time, the trend of decreasing the relevance of positive analytics and increasing the frequency of negative expert reporting continues.

July 2022 saw a further decline in the significance of information about the course of hostilities. An essential feature of this period is an increase in the relevance of the PA segment and a decrease in the frequency of NA. Other parameters under study remain without significant changes, but the relevance of covering neutral topics in social networks is gradually increasing.

Further, in August 2022, the number of posts about domestic politics on social networks increased. Also, the share of positive analytics is slightly decreasing, and the percentage of "negative" expert posts is increasing. In September 2022, an increase in the relevance of IM and PA sections was observed, accompanied by a decrease in the importance of DP, FP, NT, and NA. This trend is associated with the successes of the Armed Forces of Ukraine in the Kharkiv operation, which were widely covered in the media.

In October 2022, there was a decrease in the relevance of posts about military operations (by about 20%). At the same time, the share of "realistic" analytics, predominantly related to shelling energy infrastructure and its consequences for Ukraine, is growing. In social networks, there was a slight increase in the percentage of messages about domestic policy.

In November 2022, the IM indicators were growing, mainly due to the positive perception of the successful operation to liberate Kherson. There was an increase in the information relevance devoted to the DP section and a significant decrease in the importance of "positive analytics" in social networks. The "negative analytics" content predominantly concerned the topic of shelling energy infrastructure and power outages.

In December 2022, there was a significant decrease in reporting about the course of hostilities on the social networks of the interviewees and an increase in information about the authorities' actions (usually with a negative emotional background of experts' activities). The situation is due to the lack of significant changes at the front and the continuation of shelling the energy infrastructure.

January 2023 saw increased public attention to events at the front, primarily due to the intensification of offensive operations near Bakhmut. Nevertheless, interest in experts' posts, both positive and negative, is decreasing. Other perception parameters of online media do not change significantly.

In February 2023, the perception of the researchers' information from the digital media did not change significantly. In March – April – May 2023, there will also be stability in society's attention to online media products. In particular, about a third of the information field of social networks displays reporting about the course of hostilities. Besides, a slight but steady increase in public attention to neutral topics in online media was noteworthy.

In June 2023 were recorded significant shifts in the information field. The main topics are the Ukrainian counteroffensive and the rebellion of Y. Prigozhin, which activate the positive expectations of Ukrainian society. Public attention to events at the front is intensifying again, and it is associated with attention to online content dynamics. At the same time, the share of posts in the NA category, the topic of which is the lack of obvious progress in the counteroffensive, is growing significantly.

July-August-September-October 2023 witnessed reduced attention to highlight events at the front (10%) and negative analytics (8%). Interest in neutral topics from online media and domestic policy events is rising again. It is noteworthy that in October, there was a decrease in attention to the NA section.

During November – December 2023, there was almost equal distribution of online media content in all categories in the studied sample (at the level of 18-19%). Attention to the posts of "realistic analytics" experts is decreasing. Overall, the lowest rates of attention were paid to the course of hostilities during the 21 months of the study. The dominant topics of the information space are the mobilization and successes of the Russian army at the front.

Table 2
Perception dynamics of online media by the interviewees in the conditions of war
Research Indicators of public opinion's arithmetic mean constituent
month element

monun	element					
	Confidence	Attitude	Attitude	Readiness		
	in victory	towards the	towards the	to fight		
		Armed Forces	Ukrainian			
		of Ukraine	authorities			
April 2022	9.01	9.98	8.98	9.56		
May 2022	8.98	9.87	8.93	9.46		
June 2022	8.56	9.79	8.67	9.01		
July 2022	8.62	9.60	8.32	9.23		
August 2022	8.68	9.34	8.19	9.09		
September 2022	9.89	9.96	8.93	9.45		
October 2022	9.45	9.45	8.56	9.56		
November 2022	9.67	9.91	9.23	9.59		
December 2022	9.32	9.83	8.23	9.32		
January 2023	9.01	9.84	8.43	9.28		
February 2023	8.68	9.65	8.78	9.04		
March 2023	8.56	9.67	8.56	8.95		
April 2023	8.67	9.56	8.65	8.93		
May 2023	8.77	9.55	8.34	8.92		
June 2023	9.33	9.32	8.88	9.23		
July 2023	8.45	9.29	8.43	9.01		
August 2023	8.22	9.33	8.01	8.45		
September 2023	8.01	9.29	7.84	8.52		
October 2023	7.98	9.23	7.45	8.43		
November 2023	7.56	9.01	7.22	8.23		
December 2023	7.68	9.11	6.93	8.12		

Let us examine the dynamics of the constituent elements comprising the public sentiment of Ukrainian society under martial law (Table 2). The aspect of "confidence in victory" is fairly relevant in society. Its lowest value was detected in November 2023, and its highest in September 2022. There is a gradual decline in this constituent element of public opinion during the study period.

The constituent element, "attitude towards the Armed Forces of Ukraine", is characterized by consistently high indicators throughout 21 months. The coefficients of the arithmetic mean do not fall below 9. The lowest values are recorded in November 2023, and the highest in April 2022 and September 2022.

For the constituent element "attitude to the Ukrainian authorities", a gradual decrease in indicators during the study period was revealed. Only in November 2022 will there be a rapid increase in average values. The lowest values of the element are recorded in December 2023, and the highest in November 2022.

The relevance of the "readiness to fight" constituent element also decreases during the study period. However, in June-July 2023, an increase in this element of public opinion was detected. The lowest values of the element are recorded in December 2023, and the highest in November 2022.

Table 3

Perception dynamics of online media by the interviewees in the conditions of war

Prevalence of Indicators of public opinion's arithmetic mean constituent

Prevalence of	indicators of public opinion's arithmetic mean constituent					
online media	element					
content	Confidence in	Attitude	Attitude	Readiness		
	victory	towards the	towards the	to fight		
		Armed Ukrainia				
		Forces of	authorities			
		Ukraine				
Information	0,245**	0,213**	0,002	0,129*		
messages						
about						
military						
operations						
Domestic	0,097	0,054	0,032	-0,128*		
policy						
messages						
Foreign	0,139*	0,091	0,075	0,023		
policy						
messages						

Neutral	0,023	0,091	0,002	0,006
messages				
Positive war	0,192**	0,096	0,054	0,013
analytics				
Negative war	- 0,128*	0,011	0,043	0,006
analytics				

Pearson's correlation analysis was used to determine the links between the constituent elements of public opinion and online media content. The most significant correlation coefficients with online media content are characteristic of the "confidence in victory" constituent element, namely with the frequency of reports perception on military operations, information on foreign policy, positive war analytics, and negative war analytics. Attitudes towards the Armed Forces of Ukraine have a significant direct correlation with the perception of information about military operations. The attitude towards the Ukrainian authorities has no significant link with the perception of materials from online media. Readiness to continue the fight has direct correlation coefficients with the frequency of reporting on military operations and inverse correlation coefficients with the frequency of reporting on domestic policy.

Discussion

In public opinion, there were no significant shifts in the positive attitude towards the Armed Forces of Ukraine under martial law. At the same time, there is a gradual decline of faith in victory, a deterioration in perspectives towards the Ukrainian authorities, and readiness to persist with the fight. Notably, the most pronounced is the deterioration of attitudes towards the Ukrainian authorities. It was found that society's confidence in victory is most significantly related to changes in the information field of online media. The attitude towards the Armed Forces of Ukraine correlates only with the news perception about military operations. Perceptions of the Ukrainian government are not shaped by the content presented in digital media. The readiness to continue the struggle is related to awareness of the war and domestic politics. The absence of linkages between the constituent elements of public sentiment and various facets of online media operations can be attributed to the presence of covert parameters that govern these procedures. In this light, a comprehensive examination of information exchange is relevant (Mallinson & Hatemi, 2018).

We found no discernible impact of authoritative figures (experts) on shaping public opinion during martial law, which would contradict other researchers' findings (Wei et al., 2022). We explain this trend by the depreciation of the expert-analyst's figure in modern Ukrainian society due to the consistently

inaccurate predictions regarding the progression of events. Moreover, our investigation was carried out on a substantial sample size, in contrast to smaller cohorts utilized by other scientific inquiries (Moussaïd et al., 2013), which could also affect the result. Overall, scholars observe that the impact of media in the Russian-Ukrainian conflict exhibits certain specifics compared to those observed in other armed conflicts (Selvarajah & Fiorito, 2023). Given the above, the importance of objective, truthful digital media information about social and military events is growing (Pavlik, 2022).

We confirm the positive experience of using social media to ascertain public opinion dynamics (Dong & Lian, 2021). Probing the social networks' impact on society will enable us to develop ways of reducing the manipulative influence of the Internet on public opinion (Rouvroy & Berns, 2018). It is expedient to study the dynamics of comments and opinion indicators of approval in network users (Ross et al., 2021).

The limitations of the study are related to the use of correlation analysis, which allows us to conclude the relationship between the parameters but will not contribute to determining its direction.

Conclusions

In the study, the hypothesis of the connection between online media content and societal changes in public opinion in Ukraine during the war was confirmed. It was determined that society's confidence in victory was significantly related to changes in online media's information field. The attitude towards the Armed Forces of Ukraine correlates only with the news perception about military operations. The disposition towards the Ukrainian authorities is not contingent upon the perception of digital media content. The willingness to continue the fight correlates with the awareness about the war and domestic politics via digital media. The idea of future peace in public opinion is closely related to the concept of justice and victory broadcast in online media. Prospects for conducting further research on the research problem lie in utilizing regression analysis to elucidate the fundamental impact of online media on shaping public opinion in Ukrainian society amidst times of war. The prospects for peace in the public opinion of Ukraine in war conditions need further clarification.

As part of the analysis of the obtained results, it is advisable to carry out the following measures:

- strengthen the work on identifying disinformation about the Armed Forces of Ukraine;
- establish more effective communication with society regarding the actions of the authorities during the war;

- to optimize the system work at various levels of the state's functioning in the formation of information literacy of the population in the context of detecting fakes;
- to maintain and develop public trust in information from official sources;
- highlight the problematic aspects of presenting information from unofficial mass media, for example, anonymous telegram channels;
- to organize systematic work on the formation of critical thinking of the population.

References

- Ausat, A. M. A. (2023). The role of social media in shaping public opinion and its influence on economic decisions. *Technology and Society Perspectives* (*TACIT*), 1(1), 35-44. https://doi.org/10.61100/tacit.v1i1.37
- Baecker, D. (2023). A sociological theory of media and digitalization. In *Symposium "Digitalization and Society: Do social transformations call for new theoretical paradigms?*". Hanse-Wissenschaftskollewg, Delmenhorst, May 25–26, 2023. https://doi.org/10.13140/RG.2.2.32262.45129
- Cheng, C., & Yu, C. (2019). Opinion dynamics with bounded confidence and group pressure. *Physica A: Statistical Mechanics and its Applications*, 532, 121900. https://doi.org/10.1016/j.physa.2019.121900
- Dong, Q., Sheng, Q., Martínez, L., & Zhang, Z. (2022). An adaptive group decision making framework: Individual and local world opinion based opinion dynamics. *Information Fusion*, 78, 218–231. https://doi.org/10.1016/j.inffus.2021.09.013
- Dong, X., & Lian, Y. (2021). A review of social media-based public opinion analyses: Challenges and recommendations. *Technology in Society*, 67, 101724. https://doi.org/10.1016/j.techsoc.2021.101724
- Ferraioli, D., & Ventre, C. (2019). Social pressure in opinion dynamics. *Theoretical Computer Science*, 795, 345–361. https://doi.org/10.1016/j.tcs.2019.07.017
- Freeland, E.P. (2015). Public opinion: Social attitudes. *International Encyclopedia* of the Social & Behavioral Sciences (Second Edition), 19, 562–568. https://doi.org/10.1016/B978-0-08-097086-8.32119-5
- Hampton, K.-N. (2023). Disciplinary brakes on the sociology of digital media: the incongruity of communication and the sociological imagination. *Information, Communication* & Society, 26(5), 881-890, https://doi.org/10.1080/1369118X.2023.2166365
- Hepp, A. (2022). Agency, social relations, and order: Media sociology's shift into the digital. *Communications*, 47(3), 2022, 470-493. https://doi.org/10.1515/commun-2020-0079
- Howe, L. C, & Krosnick, J. A. (2022). The psychology of public opinion. In: D. Osborne, & C. G. Sibley (Eds.), *The Cambridge Handbook of Political Psychology* (pp. 104-117). Cambridge: Cambridge University Press. https://doi.org/10.1017/9781108779104.008
- Lan, Y., Lian, Z., Zeng, R., Zhu, D., Xia, Y., Liu, M., & Zhang, P. (2020). A statistical model of the impact of online rumors on the information quantity of online public opinion, *Physica A: Statistical Mechanics and Its Applications*, 541, 123623. https://doi.org/10.1016/j.physa.2019.123623

- Li, T., & Zhu, H. (2020). Effect of the media on the opinion dynamics in online social networks. *Physica A: Statistical Mechanics and Its Applications*, 551, 124117. https://doi.org/10.1016/j.physa.2019.124117
- Li, W. (2023). The influence of social media sentiment on online public opinion in the post-truth era. *Journal of Education, Humanities and Social Sciences*, 8, 1015-1020. https://doi.org/10.54097/ehss.v8i.4395
- Lock, M. (2023). Rethinking public opinion in the digital era: Towards a post-representational theory. *Deleuze and Guattari Studies*, 17(3), 350-375. https://doi.org/10.3366/dlgs.2023.0522
- Lu, P., Zhang, Y., & Xiang, Y. (2019). Collective actions from on line to offline. *Physica A: Statistical Mechanics and Its Applications*, 533, 120889. https://doi.org/10.1016/j.physa.2019.04.125
- Mallinson, D. J., & Hatemi, P. K. (2018). The effects of information and social conformity on opinion change. *PLOS ONE*, 13(5), e0196600. https://doi.org/10.1371/journal.pone.0196600
- McKeown, G., & Sheehy, N. (2006). Mass media and polarisation processes in the bounded confidence model of opinion dynamics. *Journal of Artificial Societies and Social Simulation*, 9(1), 33-63. http://jasss.soc.surrey.ac.uk/9/1/11.html
- Moussaïd, M., Kämmer, J. E., Analytis, P. P., & Neth, H. (2013). Social influence and the collective dynamics of opinion formation. *PLOS ONE*, 8(11), e78433. https://doi.org/10.1371/journal.pone.0078433
- Mueller, J. (2021). *Public Opinion on War and Terror: Manipulated or Manipulating?* Washington DC: Cato Institute. https://doi.org/10.36009/WP.20210810
- Pansanella, V., Sîrbu, A., Kertesz, J., & Rossetti, G. (2023). Mass media impact on opinion evolution in biased digital environments: A bounded confidence model. *Scientific Reports*, 13, 14600. https://doi.org/10.1038/s41598-023-39725-y
- Pavlik, J. (2022). The Russian war in Ukraine and the implications for the news media. *Athens Journal of Mass Media and Communications*, 8, 1-17. https://doi.org/10.30958/ajmmc.X-Y-Z
- Perrin, A.J. & McFarland, K. (2011). Social theory and public opinion. *Annual Review of Sociology*, 37, 87–107. https://doi.org/10.1146/annurev.soc.012809.102659
- Rohlinger, D. A., & Sobieraj, S. (2020). *The Oxford Handbook of Digital Media Sociology*. Oxford: Oxford Academic. https://doi.org/10.1093/oxfordhb/9780197510636.001.0001

- Ross, A. R. N., Chadwick, A., & Vaccari, C. (2021). *Digital Media and the Proliferation of Public Opinion Cues Online: Biases and Vulnerabilities in the New Attention Economy*. Loughborough: Routledge. https://doi.org/10.4324/9780429284571
- Rouvroy, A. & Berns, T. (2018). Algorithmic governmentality and perspectives of emancipation: the disparate as a condition of individuation through relationship? In F. Bruno, B. Cardoso, M. Kanashiro, L. Guilhon, & L. Melgaço (Eds.), *Tecnopolíticas Da Vigilância: Perspectivas Da Margem* (pp. 107–39). São Paulo: Boitempo Editorial. Retrieved from https://medialabufrj.net/wp-content/uploads/2020/10/Tecnopoliticas-davigilancia_miolo_download.pdf
- Rudyk, M. (2020). The influence of social media on the formation of public opinion. Visnyk of the Lviv University. Series Journalism, 48, 198–206. http://dx.doi.org/10.30970/vjo.2020.48.10560
- Selvarajah, S., & Fiorito, L. (2023). Media, public opinion, and the ICC in the Russia–Ukraine war. *Journalism and Media*, 4(3), 760-789. https://doi.org/10.3390/journalmedia4030048
- Svitla, V. (2023). Public opinion and political consequences of digitalization: Specifics and vectors of interaction. *National Technical University of Ukraine Journal. Political Science. Sociology. Law*, 2(58), 92–98. https://doi.org/10.20535/2308-5053.2023.2(58).285610
- Tiratelli, M. (2023). The centre ground hypothesis and the shape of public opinion. *The Political Quarterly*, 94(1), 45–56. https://doi.org/10.1111/1467-923X.13231
- Wang, Y., Wu, R., Zeng, J., & Xue, P. (2022). Research on the public opinion guidance mechanism of major public health incidents. *Frontiers in Psychology*, 29(13), 872464. https://doi.org/10.3389/fpsyg.2022.872464.
- Wei, J., Yuguang, J., Yaozeng, Z., Hengmin, Z., & Weidong, H. (2022). The Public opinion evolution under group interaction in different information features. Complexity, Special Issue. Data-driven Modeling and Dynamic Analysis of Complex Networks: Applications to Social Networks, 2022, 1016692 https://doi.org/10.1155/2022/1016692
- Zhang, Y., & Wildemuth, B. M. (2005). Qualitative analysis of content by. *Human Brain Mapping*, 30 (7), 2197-2206. https://philpapers.org/rec/ZHAQAO