

## Appendix

### Information Warfare, Media Manipulation, and Democratic Processes in the Ukrainian Communication Ecosystem

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**Appendix 1.** Thematic Codes and Reference Frequency

Themes / Subthemes	Total References (Academic Corpus)	Total References (Media Corpus)	Aggregated References	Key Examples / Contexts
<b>Information warfare &amp; hybrid aggression</b>	186	132	<b>318</b>	Integration of cyber, psychological and media operations in modern conflicts; framing of war as communicative struggle.
Hybrid strategies & military narratives	78	54	132	“Information front”, “hybrid aggression”, “weaponization of truth”.
Ontological / cognitive security	47	18	65	“Existential threat”, “defense of identity”, “informational sovereignty”.
<b>Algorithmic manipulation &amp; digital control</b>	142	85	<b>227</b>	Use of algorithms, social bots, and data-driven persuasion.
Social media manipulation	68	41	109	Twitter, Telegram, TikTok disinformation flows.
Deepfakes / AI ethics	33	14	47	Synthetic images, AI-generated news, misinformation ethics.

Surveillance capitalism	41	30	71	Commercialization of attention, algorithmic personalization.
<b>Political communication &amp; crisis of trust</b>	97	102	<b>199</b>	Institutional distrust, post-truth, identity polarization.
Decline of institutional authority	44	37	81	“Elections without choice”, media fatigue, elite manipulation.
Post-truth & emotional decision-making	28	43	71	Emotional narratives, public anxiety, fear-based persuasion.
Democratic discourse & participation	25	22	47	New civic media, volunteer journalism, deliberative democracy.
<b>Legal, ethical &amp; European responses</b>	88	49	<b>137</b>	Regulatory frameworks, transparency, democratic deterrence.
EU regulation & accountability	37	18	55	“Digital Services Act”, “fact-checking networks”.
Ethical responsibility of media	29	17	46	Codes of journalism ethics, media integrity during war.
Security policy & legitimacy	22	14	36	Balancing freedom of speech and information protection.
<b>Ukrainian media resilience &amp; national identity</b>	104	165	<b>269</b>	Media as part of national defense and civic resistance.
War and resistance narratives	52	79	131	“Information front”, “truth as weapon”, “heroic journalism”.
Disinformation and Telegram propaganda	30	67	97	Russian channels, botnets, fake verification.
Media literacy	22	19	41	VoxCheck, StopFake, fact-checking education.
European values & integration discourse	20	29	49	“European standards of freedom of speech”, “democratic values”.
<b>Cross-cutting themes</b>	—	—	<b>79</b>	Information ethics, resilience, cognitive security, freedom, trust.

"Truth–Trust–Resilience" triad	39	40	79	Interdependence of knowledge, democracy, and defense.
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**Total coded references across all themes: 1,229**

(Academic corpus = 627; Media corpus = 602)

**Appendix 2.** Frequency of Ukrainian Media Themes; March 2022 – May 2024

Month	War and Resistance	Disinformation and Telegram Propaganda	Reconstruction and Corruption Risks	Media Literacy and Fact-Checking	European Integration and Democratic Values
Mar-22	48	36	15	10	4
May-22	33	25	18	12	6
Jul-22	41	27	14	14	8
Sep-22	35	21	15	18	10
Nov-22	29	20	20	20	11
Jan-23	33	25	18	23	13
Mar-23	39	24	25	25	15
May-23	30	19	30	24	17
Jul-23	28	18	27	26	18
Sep-23	24	17	22	27	19
Nov-23	22	16	20	28	20
Jan-24	20	15	18	29	22
Mar-24	19	12	15	31	23
May-24	18	10	14	32	25

**Appendix 3.** Codebook for Content Analysis (NVivo 14)

No.	Code	Definition	Example (Typical Context)	Cluster
1	Information warfare	Systematic influence on public consciousness through coordinated information operations	"information front", "information attack"	Information warfare
2	Hybrid warfare	Combination of military, informational, and cyber strategies	"hybrid aggression", "combined warfare"	Information warfare

3	Strategic communication	Coordinated dissemination of messages to achieve political goals	“state narrative”, “communication strategy”	Information warfare
4	Cognitive warfare	Influence on perception, beliefs, and identity	“influence on perception”, “mental impact”	Information warfare
5	Ontological security	Protection of identity and meaning structures in society	“existential threat”, “identity defense”	Information warfare
6	Algorithmic manipulation	Use of algorithms to shape information exposure	“algorithm bias”, “content recommendation”	Algorithmic manipulation
7	Social media manipulation	Manipulation via social media platforms	“bot networks”, “coordinated campaigns”	Algorithmic manipulation
8	Telegram propaganda	Dissemination of disinformation via Telegram channels	“Telegram channels spread fakes”	Algorithmic manipulation
9	Deepfakes / AI content	Use of AI-generated or synthetic media for manipulation	“AI-generated content”, “synthetic media”	Algorithmic manipulation
10	Surveillance capitalism	Monetization and exploitation of user data and attention	“data tracking”, “user profiling”	Algorithmic manipulation
11	Trust / distrust	Level of trust in institutions, media, or actors	“loss of trust”, “institutional distrust”	Political communication
12	Post-truth	Dominance of emotions over factual accuracy	“emotional narratives”, “post-truth politics”	Political communication
13	Public sphere	Space of public debate and communication	“public debate”, “media space”	Political communication
14	Polarization	Division of society into opposing groups	“societal division”, “conflict narratives”	Political communication
15	Spiral of silence	Suppression of minority or dissenting opinions	“fear of speaking out”	Political communication
16	EU regulation	European legal frameworks addressing disinformation	“Digital Services Act”, “EU standards”	Legal responses
17	Rule of law	Legal norms regulating information space	“legal framework”, “institutional control”	Legal responses
18	Media ethics	Ethical standards in journalism	“responsible journalism”	Legal responses
19	Democratic deterrence	Strategies to counter disinformation and hybrid threats	“counter-disinformation policies”	Legal responses
20	War & resistance narrative	Narratives related to war and national resistance	“heroes”, “frontline”, “resistance”	Ukrainian media
21	Disinformation / fakes	Spread of false or misleading information	“fake news”, “misinformation”	Ukrainian media