

# Big Data

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# Big Data

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Halyna Synorub

# Ways of Forming Informational Resilience of the Audience Under Wartime Conditions

## Introduction

The invasion by the Russian Federation of Ukraine has opened not only a military front but also an information one, which envisages countering an intensive and negative information-psychological influence on individuals and the society in general. Acquiring the skills of evaluating and interpreting media information, recognising manipulative and propaganda content, preventing oneself from being drowned in the sea of disinformation at a time when Russian aggression has intensified, avoiding the euphoria of sensation-linked addiction in the time of emotional challenges and fakes is the main task for Ukrainians, who have to achieve this in the most complicated circumstances ever. These days, the most refined information weapons are used to seek sensitive topics, shape opposing opinions within the society, find the people who share them, and then force the two camps into a confrontation. All-embracing information campaigns, large-scale projects and pinpoint insertion of fake news are all systemic developments of large complexes of propaganda narratives that are produced on various information platforms and “hook” the audience successfully. That is why it is most important to develop mechanisms of informational resilience that would enable us to stabilise and protect the audience from destructive information influences, and therefore secure victory over the enemy. This determines the relevance of the present research.

Informational resilience during the war has become the focus of attention for many researchers including I. Bachurin, N. Voitovych, V. Zhadko, O. Kuchyk, O. Klymenko, P. Kulias, O. Markiv, Yu. Poltavets, G. Pocheptsov, O. Pelian, O. Taranenko, O. Kharytonenko, O. Kharchuk, S. Shevchuk and others.

Under wartime conditions, the leading component of informational resilience is the psychological element, which is characterised not only by the ability to withstand the difficulties of life, the pressure of unfavourable circumstances while maintaining the capacity to work and the ability to acquire new experience, but also by flexibility, and the ability to analyse and comprehend information.

The problem of informational and psychological resilience is explored in the works by Ukrainian (Ya. Aminieva, T. Andreieva, I. Arshava, E. Nosenko, V. Beliumov, D. Zasiakina, Z. Koval, M. Kostenko, T. Mazur, O. Romanchuk, Kh. Shyshkina and others) and international (B. Bernard, Suzanne Kobasa, Salvador Maddi) scientists.

Under the current wartime conditions, human beings, society and the state are subject to strong informational and psychological influences. The problem of forming and expressing such qualities and abilities in the audience that combine balance, resilience, stability and resistibility, is growing more and more relevant [3]. The topic of informational resilience of the audience calls for thorough research since it is of critical importance in the period of the Russian-Ukrainian war.

The purpose of this study is to identify top priority levers in the informational influence of media environment on the audience in the war period, and to outline the main mechanisms that form resilience to disinformation.

## Presentation of the Core Material

With the beginning of the Russian invasion, considerable changes have taken place in the Ukrainian media environment [2] (Fig. 1).

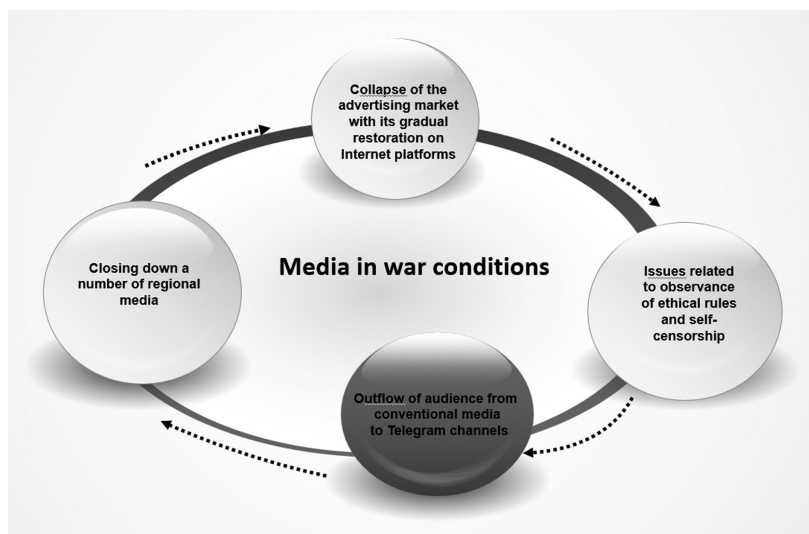


Fig. 1. Changes in the media environment during the war

Such transformations have changed media consumption drastically. In this process, a particular role belongs to the channels through which the audience receives information. According to the survey by the Kyiv International Institute of Sociology conducted on request of the OPORA Civil Network [5], the most popular source of information in 2022 was social media, as 76.6 % of Ukrainians used them to access news. Television ranks second, with 66.7 % of respondents. The third position in this rating belongs to the Internet (other than social media) as reported by 61.2 % of users. Radio is listened to by approximately 28.4 % of Ukrainian citizens, and only 15.7 % of the respondents read printed media (Fig. 2).

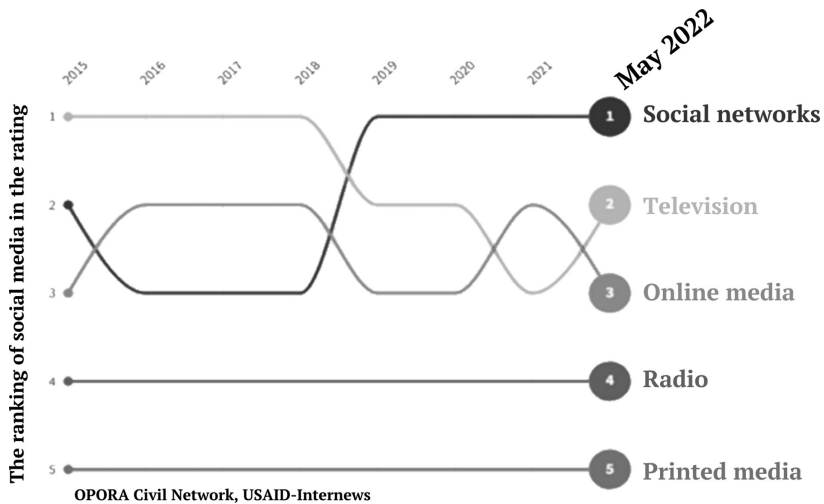


Fig. 2. Changes in media consumption in 2015–2022

Since 76.6 % of the citizens prefer social media as the primary source of information, it is worth exploring which of them enjoy the highest demand. For instance, 66 % of the respondents choose Telegram, 61 % – YouTube, and 58 % – Facebook (Fig. 3).



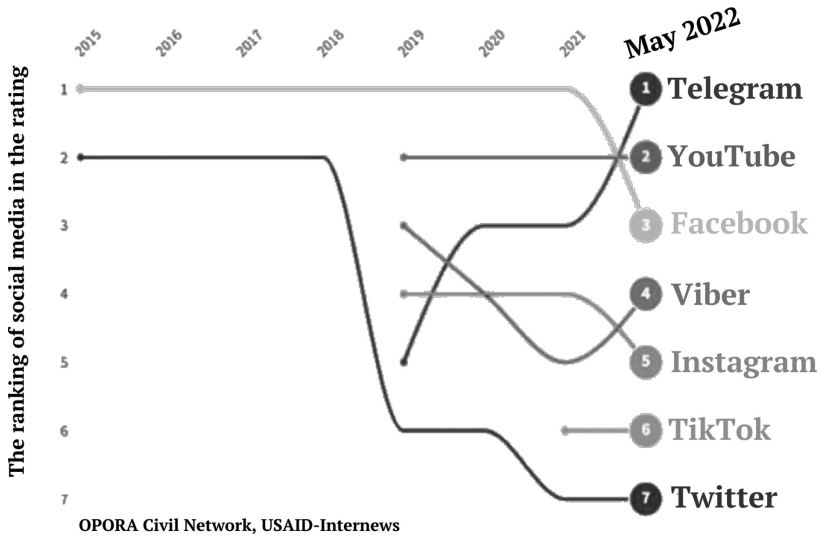


Fig. 3. The rating of most popular social media in Ukraine

It should be emphasised that during the war Telegram is one of the platforms that reports events as they occur in real time. It also frequently becomes an outlet for spreading fake news. This happens because there are numerous anonymous Telegram channels whose owners’ identities are absolutely unknown. The specific feature of this platform is that it does not have a dedicated news feed, but contains a different mechanism instead – internal distribution channels, known as networks, that can be full of manipulative, propagandist, or fake messages. The naturally determined issue of protection against negative media influence, by way of forming informational resilience of both individual citizens and the entire society, has become utterly relevant.

Romanchuk views the notion of “resilience” in wartime conditions as a multifaceted personal quality which is expressed in feeling the values and content (“truth is with us, god is with us, victory is with us”, “We are in our land, and we are fighting for our freedom and our future”), in the energy of light and love (“Warriors of light”, “Angels of the AFU”), in the power drawn from unity of the people and their mutual support (“We are proud to be Ukrainian!”), in making a choice (“Our task and our choice: to hold out, win, and revive!”), in feeling hopeful (“We will win!”), in rational thinking (“The darkness will retreat. The dawn is coming. Hold the line...”), in steadfastness and infallibility (“We know

our mistakes! We're working on them!"), and in the skill to regulate one's emotions. This is a disciplined rhythm of taking care of oneself and recovery, which is considerably influenced by the informational environment [8].

Melnyk provides an explanation of information resilience as development of not only adequate mechanisms to combat explicitly aggressive information influences, but also of mass-level metanarratives based on ethnic-national axiological component [6].

According to Koval, informational resilience consists in applying a complex of methods to wage information warfare and counter similar actions, in taking into account sociological and psychological aspects of online communication, and in monitoring activities of virtual community members [3].

We believe that informational resilience under wartime conditions is a security-related phenomenon which is achieved by elaborating strategies of combating disinformation and manipulative media content both on the level of the mass audience and government control, which will, in its turn, ensure strengthening the information frontline. The complex of informational-psychological influences shapes the sociocultural environment, so the main task of the state consists in ensuring support and providing the system of informational-psychological resilience, as well as securing information security. Under wartime conditions, with the increased level of real threats to people's lives, fear, desperation and uncertainty, the audience faces the task of identifying the information that exerts a negative influence on mass consciousness, national and cultural identity, and therefore facilitates the erosion of national values. It raises the issue of effectively ensuring information security in the context of theoretical and practical foundations of conducting information-psychological operations for achieving political, informational and other advantages over the enemy. The work to improve the ability of both the mass audience and media professionals to counter harmful information influences through upgrading skills of critical consumption of information, and overcoming cognitive prejudices, with account of emotional vulnerability of Ukrainians, should be both systemic and intensive during the Russian-Ukrainian war.

Conducting information-psychological operations by the Russian Federation strives to shape the desired behaviour of the government, various organisations, groups and individuals aimed at splitting the society between regions, between Russian-speaking and Ukrainian-speaking people, between people at the frontline and the people in the safe territories, as well as at dividing the Ukrainian people by their national and political sentiments [10].

In our analysis of the recent events taking place in October and early November 2022, we will distinguish the most relevant topics that have spread across the

Internet media environment and sparked active discussions. For this analysis, we have selected the three most popular information portals according to the rating based on the survey of the OPORA Civil Network (Fig. 3) and the channels which are the largest in terms of involved audience, topics and regularity in updating their content: in Telegram – “Livyi bereg” (audience – 6,821,000), “Telegramna sluzhba novyn” (audience – 1,082,827), “Top News” (audience – 1,067,941), “Ukraine Now” (audience – 903,006), “Realna Ukraina” (audience – 355,302), S. Sternenko’s channel (audience – 305,005), “Zakhid 24/7 ONLINE” (audience – 79,575), on YouTube – “Fabryka novyn” (audience – 2,068,000), 2+2 TV channel (audience – 685,000), 24 Channel (audience – 179,008), on Facebook – TSN (audience – 1,303,705), “Ukrainska pravda” (audience – 638,480). Having analysed the media content, we can distinguish the most relevant topics within the analysed period and their influence on the audience:

1. **Use of nuclear weapons.** Insider information in social media on possible dates of such use, photo and video materials about the movement of nuclear warheads; discussions about dirty bombs. Let us quote some examples. For instance, on a **Telegram channel**, audience reactions were generated by the following messages: “NATO Secretary General Jens Stoltenberg – next week the Alliance is going to hold nuclear deterrence exercises”, “Russia has sent bombers capable of carrying a nuclear charge to the border with Norway”, “Russia is capable of completely destroying the United States and Europe with nuclear missiles in less than 30 minutes and vice versa. A surprising number of people do not know this. Elon Musk” (Telegramna sluzhba novyn); “Scholz calls nuclear strike a red line that must not be crossed, and called to refrain from it”, “The aggressor will continue conventional military operations to hold the previously occupied territories but is unlikely to use tactical nuclear weapons” (Top News); “Inspectors of the International Atomic Energy Agency (IAEA) have completed their in-field verification activities at three locations in Ukraine at the request of the Government of Ukraine. The Agency did not find any indications of undeclared nuclear activities”, “...nobody in Ukraine has created, or is currently creating a dirty bomb. The only thing which is dirty in our region now is the heads of the people in Moscow who have unfortunately seized control of the Russian state and are now terrorizing Ukraine and the whole world”, “Biden questioned whether Russian leader Vladimir Putin was sincere in saying he has no intention of using nuclear weapons in Ukraine” (Livyi bereg). On one **YouTube channel**, videos appeared with titles like “Surovikin will start the nuclear war. Samus: Putin will not even know when the new war starts”, “Russia will turn the south of Ukraine into a nuclear desert!” (Fabryka novyn). On

**Facebook:** “A Russian nuclear strike would “almost certainly” trigger a “physical response” – a NATO official”, “The USA and Europe will not strike back with nuclear weapons: experts announced consequences for Ukraine”, “The USA and NATO will enter the war if Putin uses nuclear weapons: Fukuyama describes the scenario”, “The UK defense minister condemned Macron’s statement about Russia’s use of nuclear weapons”, “Lukashenko made a cynical statement concerning the war in Ukraine and nuclear strikes: Russia owns the most up-to-date kinds of weapons (TSN).” Having analysed the content where the issue of nuclear weapons is kept up to date, we can observe the polarity both in the views expressed by experts and in the coverage of this topic on various media platforms: it ranges from being “last step before they are used” and drastic consequences for Europe and the USA to doubts concerning the probability of their use, mentioned locations from where they can be launched, possible NATO response against Russia in case of a nuclear strike, and varied opinions on the issue expressed by politicians across the globe. We can observe a kind of emotional shattering of the audience: from fear, annoyance, aggression to manifestations of critical thinking (“How can you make such assumptions?”, “We should all watch less of such experts”) and trust in the Armed Forces of Ukraine (“Everything depends on the AFU”).

2. **Belarus.** The topic that is most disturbing to the audience located in the north and west of Ukraine: troop movements, probable invasion dates. On the top-ranking **Telegram channel**, we can find such posts: “Belarus will not place military bases on its territory – so far”, “Some mass media report kamikaze drones spotted in Belarus” (Realna Ukraina), “Putin demands Lukashenko to join the war against Ukraine”, “Meanwhile, Belarus continues its mock action, that is, preparations for a probable invasion from Ukraine” (Zakhid 24/7 ONLINE); “head of Rivne Regional State Administration Vitaliy Koval claimed there is no threat of invasion from Belarus”, “If Belarus rushes here, it will be the end of Lukashenko – Oleksandr Karpiuk, Ukrainian marine”, “The Russian Federation may resume its advance on the western part of the border between Belarus and Ukraine in order to cut the weapons supply lines from the Western partners” (Livyi bereg); “Belarus is preparing for invasion from Poland” – Head of Belarussian KGB I. Tertel”, “Smerch and Tochka-U in Belarus. They are being concentrated not only on the Belarussian borders, but also along the border with Poland”, “There will be no offensive, but new missile launches: Arestovych on the situation in Belarus” (Telegramna sluzhba novyn). **On YouTube channels:** “France threatened Belarus for a possible attack against Ukraine”, “British intelligence services brings surprising news – Belarussians are pushing to Ukraine along with Russians”, “To Lutsk – and Lviv! Zhdanov forecasted

*a repeated invasion from Belarus*” (24 Channel); *“Is Belarus going to attack? Vehicles with suspicious marking have been spotted”, “An attack from Belarus is to Ukraine’s advantage: it will be easier to destroy the enemy”* (Fabryka novyn). **On Facebook:** *“Putin wants to move troops to Belarus to strike against Kyiv and Volyn”, “Belarus accused Ukraine of ‘preparing a strike’ The Ministry of Foreign Affairs supposes it to be a part of Russia’s provocations”* (TSN), *“Belarussian Ministry of Defense claimed the West is preparing to wage war against them and the Russian Federation”* (Ukrainska pravda). Some of the above-mentioned headlines resort to frightening the readers, tend to exaggerate and practice excessive emotional colouring, and there is no confirmation in the text of the news item itself. They inform the audience about troops being trained and prepared in Belarus without giving specific dates of the attack on Ukraine and contain threats as to the plans to strike Poland. What is more, considerable support from Western partners, trust in evident defeat of invaders from Belarus and the successful counteraction of the AFU evoke confidence and optimism in Ukrainians. In comments, one can observe sarcasm, irritation, indignation, threats – and at the same time, support for the Armed Forces of Ukraine and trust in the Ukrainian army.

3. **An increase in terror** can be observed in the information that covers destruction, torture, pillaging etc. **The Telegram channel** of “Ukraine Now” publication posted content concerned with the cruel treatment and murder of the civil population by Russians: *“Russians killed 428 children in Ukraine”, “Wherever the invaders come, they only leave pain, destruction and losses behind. In the village of Vysokopillya in Kherson Region, there used to be 4,000 people before the war, but only 2,000 now”, “Russian warships caused the death of 50,000 dolphins in the Black Sea”*. “Telegramna sluzhba novyn” reports: *“Russia is losing on the battlefield and switches to terrorizing the civil population by destroying critical infrastructure”, “Russian sadists arranged torture chambers in the basements of the station and a shop”, “Torture, pillaging, rape, followed by occupation of the Zaporizhzhia Nuclear Power Station – these actions suggest that we cannot exclude the risk of the use of nuclear weapons”* (President Zelenskyi). **On YouTube channels:** *“Tabakh: Russia has found a killing machine for the war – they were trained and then betrayed by the USA”, “Russia wants a cold and bloody winter in Ukraine”, “There will be more missiles”* (Fabryka novyn); *“Bratchuk: The Kremlin is blocking exports (suspension of the grain deal), “Zelenskyi warned about the catastrophe. Russia has undermined the Kakhovka Hydroelectric Station”* (24 Channel). **On Facebook:** *“Bombing peaceful cities is the act of terror to exert pressure on Europe and Ukraine”* (President Zelenskyi), *The house blown up and the woman kidnapped: in Kherson Region,*

*invaders disposed of the couple who supported Ukraine*” (TSN); “*Stopping the Zaporizhzhia Nuclear Power Station brings a radioactive catastrophe closer*”, “*Invaders ordered Kherson residents to leave the city and cross to the left-bank of the Dnipro River*” (Ukrainska pravda). Comments from the audience reflect pain, trauma, hopelessness, despair, exhaustion, fury. Such media content devastates, leads to absolute helplessness and powerlessness, as well as repeated traumatising of the people who lived or still live in the territories affected by Russian acts of terrorism. The audience express a convincing idea that Russia is a terrorist state that has brought death and destruction to Ukraine. Millions of people live in the state of permanent stress and anxiety, but it should be understood that breaking the Ukrainians’ inner strength is actually the true goal of Russia. That is why the informational resilience of the audience is most vital, because despite the crisis situation in our country, we need to withstand the enemy’s information terrorism (i.e. manipulation of people’s consciousness) that is implemented by placing the people into a controlled information environment.

4. **The energy problem in Ukraine is acute**, but we should consider the fact that the enemy’s main tactical aim is to attract attention to a problem and create a lot of information noise, and the strategic target is to frighten and demoralise people for the sake of securing certain results. This is how this topic is covered in the information environment: on **Telegram channels**: “*The President’s office made public their plan to counter “the energy genocide” on the part of Russia*”, “*Residents of Kyiv Region need to prepare for emergency power cuts for an unknown period of time*”, “*If voluntary reduction of energy consumption is insufficient, power cuts will have to be forced in Ukraine*” (Livyi bereg); “*We ask the Ukrainian refugees not to return home until the spring. Unfortunately, they won’t bear it. If you have an opportunity, stay abroad for the winter*” (ex-Minister I. Vereshchuk), “*Evacuation of the people in case of a critical situation with energy supply is an emergency action that the government may take only after all the others – D. Shmygal*” (Telegramna sluzhba novyn). On **YouTube channels**, one can find video content with such headlines as “*Putin’s plan with strikes against thermal power plants is revealed! Who will be deprived of electricity – Sakharuk from DTEK*” (Fabryka novyn); “*How long will Ukrainians have to stay in the darkness? How can you help in the days of the power crisis?*”, “*Power cuts across the country due to Russian attacks*” (24 Channel). On **Facebook**: “*Ukrainians started to save electricity voluntarily*”, “*Power cuts in Ukraine are divided into two types, stabilization and emergency*” (TSN); “*The capital’s mayor Vitaliy Klychko doesn’t exclude a complete blackout scenario in Kyiv with the absence of electricity, heating, water and communications, and*

*calls for Kyiv residents to create emergency supplies and consider temporarily moving to the country*”, “*After massive Russian strikes against thermal power plants and combined heat power plants started on 10 October, the situation has changed completely. Electricity has become arguably the most sought-for product these days*” (Ukrainska pravda). Fear, panic, anxiety, despair – the emotional state of the audience that can be observed from comments made in the form of text using signs and characters. Such reaction from the readers is easy to understand as the news concerns critical infrastructure that ensures satisfaction of people’s basic needs. However, in their comments people try to solve this problem in a rational way and prepare themselves to the possible difficulties. It leads to expression of critical thinking, creative inventions, and conscious energy-saving tips.

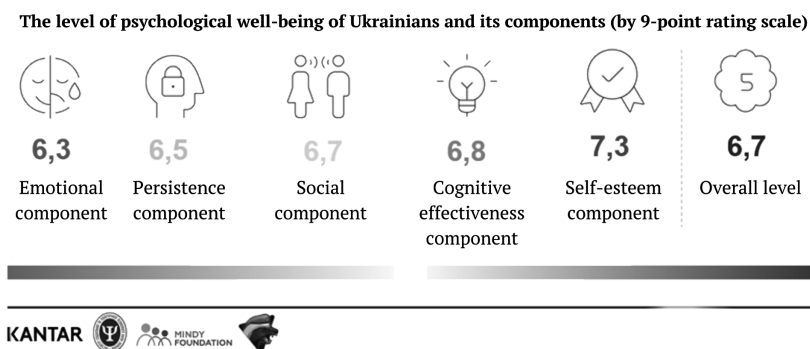
Having analysed media content on information platforms most popular with the audience, we can conclude that content users become subject to emotional swings as they systematically view news with absolutely opposing opinions and forecasts, with positive facts and terrible events posted alongside each other. This results in such emotions as negative attitude and stress, which are stronger and more important for survival. Because of such conditions, the audience may become voluntary boosters of the information preferred by the enemy, as they spread such information in their circles of communication, groups and collectives at work. The enemy attempts to neutralise, in all kinds of ways, the energy of war (“we will withstand / win / defend”) that awoke in the mass conscience, and establish reflexive control – that is, to influence the emotional and cognitive aspects of the audience with various information and manipulative technologies in order to change the Ukrainians’ behaviour strategy in the way that would benefit the aggressor.

It should be noted that the emotional component of informational resilience is the most important one, since stabilisation of one’s psychological situation after encountering negative information is the road to developing internal motivation, inner power which helps the audience to cope with all negative sides of life.

MINDY Foundation for adaptation to peaceful life and Kantar Ukraine, together with the Institute of Social and Political Psychology of the National Academy of Educational Sciences of Ukraine have conducted a survey across all Ukraine to explore psychological state of the people in conditions of the large-scale war. According to the survey results, they have determined the level of psychological well-being of Ukrainians (Fig. 4). In spite of the difficult circumstances of the large-scale war, the subjective evaluation of the psychological well-being of Ukrainians is 6.7 points out of the maximum value possible, 9 points. This is typical for all demographic groups and regions. The largest contribution to the feeling



of psychological well-being consists in self-esteem (the respondents' positive attitude towards themselves). Meanwhile, instrumental elements of well-being, such as ability of emotional self-regulation and overcoming complicated emotional states (emotional component) or the ability to cope with challenges of life (persistence component) are rated at lower levels. This situation suggests that the stage of psychological mobilisation caused by the war is still active in the society, but it may lack resources to maintain this state for longer periods [7].



**Fig. 4.** The level of psychological well-being of Ukrainians under wartime conditions

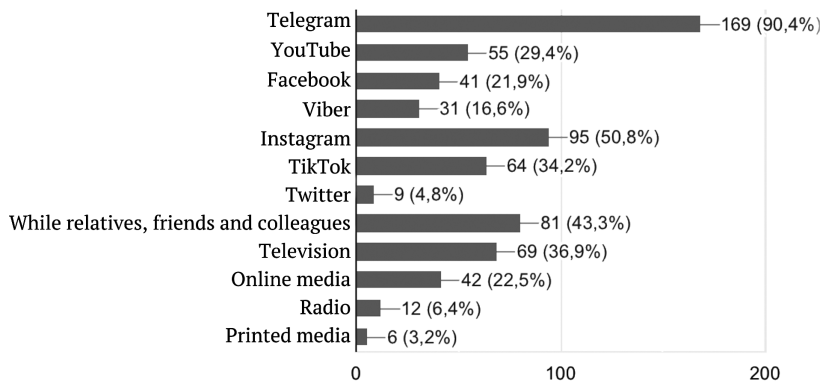
It is a well-known fact that people in stressful situations are especially easy to manipulate during information warfare. When exhausted, it is easiest for human brain to accept all signals that forebode despair and hopelessness, which is extremely dangerous during information-psychological attacks.

For the purpose of exploring the emotional background and responsible media consumption under wartime conditions, a survey (online questionnaire survey) was conducted on the audience of the Ternopil Region aged 17 to 70 in October–November 2022. The survey involved a total of 187 respondents.

When answering the question of what channel they receive information from, the majority of respondents – 90.4 % – choose Telegram. The second most popular source is Instagram (50.8 %), while relatives, friends and colleagues are the news source for 43.3 % of the respondents, television is favoured by 36.6 % of people, and social media preferences spread from TikTok – 34.2 % to YouTube – 29.4 % to Facebook – 21.9 % and Viber – 16.6 %, while radio (6.4 %) and Twitter (4.8 %) appeared at the bottom of the rating. The least percentage of the audience trusts printed media – 3.2 % (Fig. 5).



### What channels do you use to receive information on events in Ukraine?



**Fig. 5.** The channels used by the audience to receive information on events in Ukraine

Hence, social media take the leading positions as the source of news. This is related to their promptness in presentation of news and the declining trust to all conventional national media.

The key advantages of Telegram chosen by 90.4 % of the respondents under wartime conditions is the chronological nature of its feed, easy-to-use interface, active transition of government agencies (including security-related authorities – e.g. air raid alarm notifications) to this medium, availability of multifunctional chatbots, swiftness of communication, actual absence of content moderation etc. Among the disadvantages on which the audience should focus on is the absence of information about channel administrators, except the data which they have provided publicly, and there is also no opportunity to track the methods of promoting content. That is why the audience should use several channels to get accurate information.

To access news, 66.3 % of respondents choose 2–4 sources, while 5–6 sources are chosen by 21.4 %, 7 or more sources by 11.2 % and one source by 3.2 % of respondents (Fig. 6). To protect from information noise, we recommend selecting the most trusted channels and reducing information intake to these. However, a single source with an untarnished reputation will not suffice. It is believed that 5–6 main sources of information about the current situation in the world and in Ukraine is the optimal selection.

### To access news, you use:

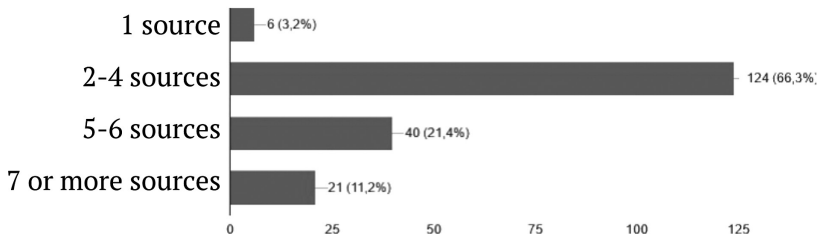


Fig. 6. The number of sources used by the audience to access news

Since a considerable increase in the volume of fake news, disinformation and manipulations can be observed in Ukraine's information environment, it is important that the audience should only trust official sources. On the whole, 58.8 % of the respondents receive information from official sources of specialised government agencies, whereas these sources are used sometimes by 33.2 % of the respondents, while 6.4 % of the respondents do not use them at all. Not all respondents (5.3 %) know which official sources can be trusted or on which platforms these can be found, so it was difficult for them to choose their answers (Fig. 7).

### Do you receive information from official sources of specialized government agencies?

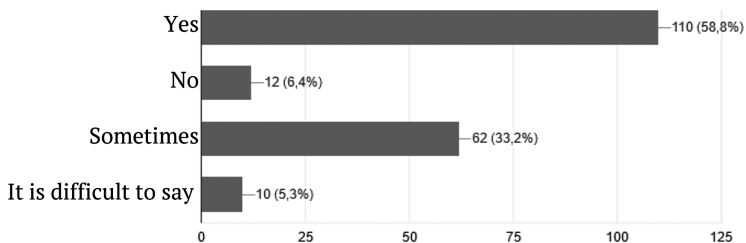


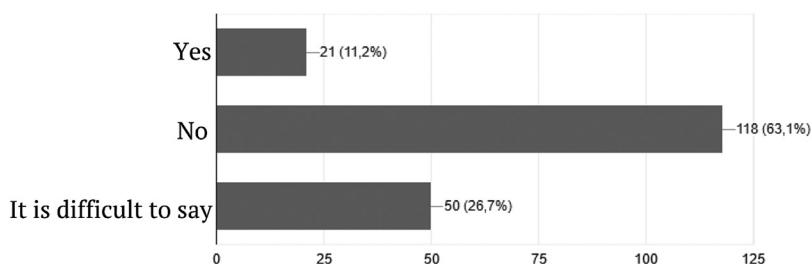
Fig. 7. Does the audience receive information from official sources?

Under wartime conditions, especially in extreme situations, much false information is spread, especially when there is a lack of facts concerning the events

taking place in the society. People seek information and try to receive it from any sources, and hence may encounter fake news and spread it.

When asked “Do you always believe published information?” only 11.2 % of respondents were positive, whereas 63.1 % were negative, while 26.7 % were doubtful as to its faithfulness (Fig. 8). The present-day challenge is to develop media literacy, which is based on a model encouraging the audience to reflect on what they watch, listen and read. The task of media literacy consists in transformation of media consumption into an active and critical process that apparently influences formation of informational resilience.

### Do you always believe published information?

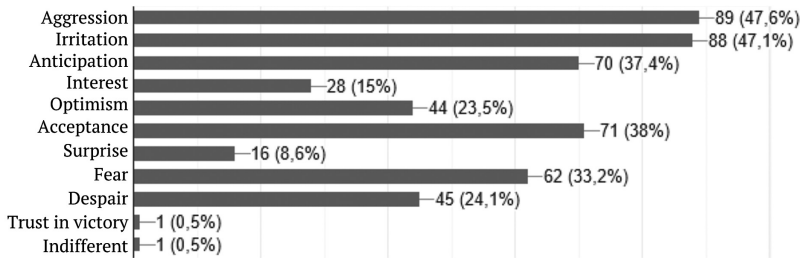


**Fig. 8.** Trust in information

In this most difficult period of Ukraine’s history, the audience experiences changed in mood and behaviour during the events caused by military operations. According to the survey, the majority of respondents experiences negative emotions: 47.6 %, including 47.1 % irritation, 33.2 % fear and 24.1 % despair. Despite the country’s critical situation, a part of the respondents is positive, in particular, optimism and trust in victory are typical for 24 % of the respondents. Among the audience there are people in the state of anticipation (37.4 %) or acceptance of the situation 38 %, people interested in how the events may develop 15 %; those who are surprised 8.6 %, and there was a single (1) respondent who felt indifferent (Fig. 9). Emotionally coloured information affects the recipient’s condition that may change drastically in such directions: satisfaction, dissatisfaction, dual (ambivalent) or uncertain attitude to reality. Meanwhile, a person can be in a very intense condition, agitated condition or in a calm condition.

Aggression Irritation Anticipation Interest Optimism Acceptance Surprise Fear Despair Other

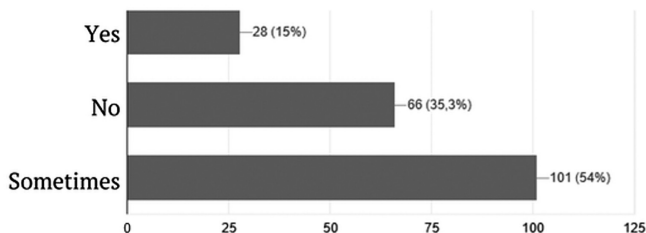
### What emotions are evoked by news of the latest events in Ukraine?



**Fig. 9.** The emotional field of Ukrainians in wartime conditions

The reaction of the audience to media content and responsibility for spreading it is one of the elements of informational resilience. When asked “Does a post cause an immediate desire to react in any way (share it, comment on it in social media etc)?” 54 % of the respondents answered “sometimes”, 35.3 % “never”, whereas 15 % of the respondents admit to promptly reacting to posts (Fig. 10). Hence, a major share of respondents tends to promptly share media content and react to it without applying a critical approach to analyse the information and verify it. This makes identifying information operations more complicated, creates tensions and evokes manifestations of hate and dissatisfaction in social media etc.

### Does a post cause an immediate desire to react in any way (share it, comment on it in social media etc)?



**Fig. 10.** Audience reactions to posts

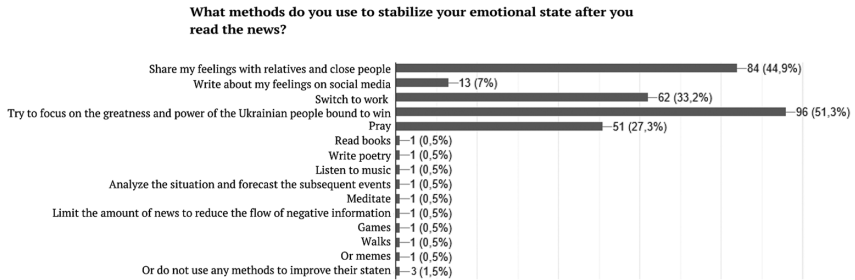
Being informed is important, but it is also responsible not to harm the others. When asked “How do you react to emotionally colored information?” 48.7 % of the respondents demonstrate emotional stability and take a critical approach to analyse information about the current situation in the country. Meanwhile, 38 % of the respondents share it with relatives and close people, whereas 11.2 % want to inform as many people as possible about the current events (Fig. 11). It should be noted that in a typical situation it is manipulative and fake news that tends to “hook” the audience by using emotional levers. In such situations, informational resilience consists in manifestation of emotional intellect and critical thinking.

### How do you react to emotionally colored information?



Fig. 11. Audience reaction to emotionally coloured information

Respondents use a variety of methods to stabilise their emotional state. In particular, they focus on the greatness and power of the Ukrainian people bound to win (51.3 %); share their feelings with relatives and close people (44.9 %); switch to work (33.2 %); pray (27.3 %); write about their feelings on social media (7 %); read books, write poetry, listen to music (1.5 %); analyse the situation and forecast the subsequent events (1 person); meditate or limit the amount of news to reduce the flow of negative information (1 %); switch to games, walks, or memes (1.5 %); or do not use any methods to improve their state (1.5 %) (Fig. 12).



**Fig. 12.** Methods used to stabilise emotional state

None of these methods can be evaluated as “correct” or “incorrect”. For each person, there is a specific method that appears to be most effective for stabilising their emotional state. However, it is worth noting that reading a piece of news evoking many emotions needs to be postponed for some time.

We would like to add that media content exerts an emotional influence on the audience and acts as an external irritant, later becoming an internal irritant when it arises from emotional memory, and it provides sufficient grounds to consider the emergence of internal triggers as a consequence of mass media influence. Later on, negatively coloured information covering urgent issues of the day tends to affect recipients’ psyche by evoking anxiety, fear, panic and aggression (see Ref. [4], p. 36). That is why it is worth focusing attention on the main factors that facilitate stabilisation of one’s psychological state during the war, while considering the emotional component as the leading element of informational resilience. These factors include:

- transformation of emotions. For example, from pain and fear caused by the destruction of the war to pride in the military and the steadfastness of the Ukrainian people;
- focusing on facts. Aid from Western partners facilitates our victory. This will not bring the dead back to life, but the responsibility for the committed crimes is imminent;
- transformation of negative emotions into actions. This category includes volunteering, posts in social media, and prayers.

The rapid rate of spreading news and the belief that it requires prompt reaction, encourages “quick thinking” (reflexive and emotional) as opposed to “slow thinking” (rational and sensible). Under wartime conditions, critical thinking skills are extremely necessary since they prevent people from getting lost in the

environment oversaturated with information, and from falling for manipulative tricks. Critical thinking is the skill of asking questions, substantiating one's opinion, evaluating and interpreting information, viewing events in parallel with present-day realities, and analysing the preconditions and causes of events. This is also the ability to apply rational methods to search, select, systematise and verify text, photo, and video materials, use special online services that can help identify manipulations in content (see Ref. [4], p. 168).

To form a responsible attitude in the audience to media content and improve their resilience to the destabilising effects of fake news, it is necessary to distinguish features of false information and manipulation of facts, which include the following:

- excessive emotionality;
- exaggeration;
- partial concealment of information;
- substitution of notions;
- overrating or underrating;
- incorrect comparison of data;
- presence of quotes without context;
- annoyingly persistent positive-negative background;
- references to the past only;
- references to Wikipedia information only;
- avoidance of discussion concerning difficult topics;
- viewpoint and hidden intentions of the author;
- correct statistical data accompanied by misinterpretation;
- reputation of the news source;
- affiliation of the news source with specific people and their political background.

As noted by Shevchenko, the necessary means of verifying information accuracy are as follows: comparison of information from several sources, distinguishing between facts and value judgements, identifying the primary source (for verbal and non-verbal content), checking content and context as well as statistical data by open official sources, exploring the circumstances of an event, comparing information in various sources by known facts related to this topic, searching for the primary source of quotes and additional information about an event, expert evaluation, checking photos according to such criteria as date, weather, landscape, people, clothes, shadows, as well as scrupulous treatment of every detail pertaining to the topic (see Ref. [11], pp. 150–151).

In order to hold the information frontline, to be informationally resilient and preserve one's resources during emotional instability which is manifested under

wartime conditions, Otar Dovzhenko, an editor, journalist, media coach and media explorer, advises using the following opposition mechanisms [1]:

1. Do not trust unconditionally. One should trust only quality and responsible media. However, we should remember that any piece of news during the war may be inaccurate, or never confirmed.
2. Be careful with interpretations. Those who generate fakes and propaganda materials know that news accompanied by photos, videos or audios are more likely to be trusted. Meanwhile, comments or introductions to such photos, videos or audios often provide a ready-made interpretation therefore programming the recipient to accept the materials in a certain way.
3. Do not trust any retellings. Research conducted by the Detektor Media Public Organization and the Democratic Initiatives Foundation has demonstrated that receiving information by word of mouth is one of the most widespread ways of learning news. For instance, 28 % of the respondents learn news primarily from friends and acquaintances. Important news received from other people needs to be checked in official sources.
4. Do not consume information from hoax news websites. Toxic materials make people sad, amplify their anxiety, make them lose the feeling of reality, and provoke arguments where both sides struggle to convince the opponent.
5. Monitor your reactions. A destabilised, fear-paralysed and confused person is of doubtful value for their homeland.
6. Do not share unverified information, since fakes can go viral and cover the audience of millions.

## Conclusion

The war in Ukraine is the field for information and psychological confrontation where an important role is played by informational resilience of the audience and their responsible media consumption. These days, Ukrainians live within an information bubble which leads them to information overloading characterised by features such as: fatigue, decreasing functions of self-control and ability to consider all facts, and as a result, the choice is made subconsciously rather than consciously; promptness, which reduces the accuracy in processing information; ignoring certain kinds of information while other data is processed; unconscious decision-making resulting from exhaustion of resources; avoidance and inactivity, evasion from solving tasks related to information analysis. Because of the above, the Russian Federation implements information-psychological operations to influence public sentiments and change the vector of actions taken by society. Having analysed the



recent events (October – early November 2022), we have distinguished the most relevant topics actively discussed in the media environment. They are related to the use of nuclear weapons, invasion from Belarus, the increase of terrorist attacks, and the energy problems in Ukraine. Having analysed the media content, one may conclude that the audience is now affected by emotional swings manifested as changes in mood, feeling of constant anxiety and discordant emotions. That is why it is expedient to consider the emotional component as a leading element of informational resilience and outline the main factors for stabilising one's psychological state during the war. Having conducted a survey of the audience in Ternopil Region for identification of their emotional background and responsible media consumption in wartime conditions, we can state that the recipients mostly experience negative emotions (aggression, irritation, despair), but they try to stabilise their emotional state by using various methods, dominated by thoughts of greatness and power of the Ukrainian people bound to win, and by communication with their close people and relatives. Responsible media consumption is evidenced by the fact that most respondents receive information from channels provided by official authorities and use two to four sources to access news. To win the cognitive war, one needs critical thinking skills, which can help to distinguish the signs of false information and manipulation of facts, and master the means required to verify the accuracy of information. With mechanisms for combating disinformation, informational resilience is manifested, which is an important factor for securing victory not only on the information front, but in the actual war as well.

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