The Mental Health Discourse in Social Media as a Factor of Information Resistance of Ukrainians

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Abstract

In the first year of Russia's full-scale invasion of Ukraine, the war became a powerful newsbreak for updating knowledge about human psychological states. War frames a person's life and is perceived as a macro-event that changes the "life project" irrevocably. The discussion is grounded on the issue of susceptibility of people under vulnerability to harmful influences in physical communication and through the media.

The study is based on a sample of posts on Facebook, Instagram, YouTube, Telegram, VKontakte, and TikTok with the highest audience engagement coverage which were written from February 24, 2022, to February 24, 2023. Study results show that during the first year of the war, the Ukrainian society went through three periods of awareness of psychological states – confusion about the situations of war, searching for solutions and producing knowledge for mutual assistance and understanding the war in the context of common social values. Through communication on social media, the representation of experience, and the unification of "their own" people, collective resistance to situations of vulnerability is formed. According to Niklas Luhmann's concept, personal interaction in society acquires the features of collective intellect. The perception of the situation was framed by Ukrainians according to three levels of framing: personal, that comprehends what he or she directly feels; secondly, the level of relations with others, sharing the experience or offering help to other; contextual as justification for irreversible changes that a person cannot explain with the logic of his or her pre-war experience.

Keywords

Information war, mental health, collective intellect, social media analysis, frame analysis, social media, affective public, Russian-Ukrainian war

1. Introduction

In the first year of Russia's full-scale invasion of Ukraine, the war became a powerful newsbreak for updating knowledge about human psychological states. Since the first days of the full-scale invasion, Ukrainians have been making frantic attempts to find practices that stabilize their psyche in the face of

war and the flourishing of psychological problems. Currently, Ukrainian society shows its unity [1] and self-organization as key trends in Ukrainian communication. The self-organized society resists the impact of the war events through the mediation of social media - people themselves try to communicate about mental health and help each other [1].

Activity in social media has the character of a new individualism in the sense that Stig Hjarvard defines it, as studying the problems of the mediatisation of culture and society [2]. Researchers define the daily need for communication through social media as digital well-being [3]. Compared with pre-war times, in the face of the challenges of war, individual activity on social media goes beyond entertainment communication, becomes conscious and, on the one hand, reflects a personal reaction to stress, and, on the other hand, through publication on social media for others, constitutes the society's resistance to the challenges of external threats.

The World Health Organization defines the concept of "mental health" as one of the integral components of human well-being, which «enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community» [4]. The state of mental health of Ukrainians is an object of research by psychologists and sociologists during the war [5]. The study of the mental health discourse in social media during the war provides an understanding of the processes of dissemination and exchange of knowledge in society.

We consider the discourse of mental health in social media contributes to the production of collective knowledge necessary to increase society's resilience in the face of war.

The key question of this study is how social media reflects changes in the attitudes of Ukrainians towards taking care of their mental health. In particular, we will focus on the following specific aspects:
1. What are the most common messages about personal mental health?
2. Who are the key communicators of the mental health discourse, and what are the intentions of the posts and the motives for their dissemination?
3. What are the peculiarities of the discussion - tone, gender specificity, the geography of posts, and conversational specifics?
4. How does the war frame the discourse on mental health?

The study of the discourse of psychological states in social media allows us to see how people experience war, reflected in communication practice. The outlined range of issues requires interdisciplinary approaches to research, involving the tools of linguistic analysis, critical discourse analysis, political science, social anthropology, and psychology.

2. Literature Overview

During the full-scale invasion of Ukraine by the Russian Federation, information attacks have intensified and are observed in various forms, including PSYOP [6]. Before the war, thematic issues in social media were studied mainly in connection with the applied tasks of information, commercial, and political campaigns. The influence of Russian propaganda, which is a successor to Soviet propaganda in the Ukrainian media space, has been defined by researchers as an information war for decades. Ukrainian media researcher Serhii Kvit describes the stages of development of Ukrainian media under pressure from the Russian Federation [7]. Heorhii Pocheptsov examines the threats posed using manipulative technologies of psychological influence by politically biased stakeholders [8].

Wars as historical events are the subject of event analysis used in political science research, but researchers usually focus on past events [9; 10; 11]. In the wartime discourse, researchers recognize traces of what preceded the event and can predict what might contribute to the design of the future [12]. In this case, we deal with an ongoing event, which means that we can consider it not only in the dimensions before and after the event but also "in the moment", through the analysis of media reports about the event in online and social media. This approach to analysis of the discourse of public events was tested in the case study of local content [13].

The study of discourse in social media is based on the methods of critical discourse analysis of classical theories [14; 15; 16], in particular, on van Dijk's concept of coherence as a fundamental feature of our modern culture [17].

Personal interaction in society acquires the features of collective consciousness, according to Luhmann's definition [18]. The influence of social media media theorists is determined by their ability

to provide conditions for the formation of collective intelligence [19]. Research on the use of social media during disasters shows that social media communication can influence changes in habitual patterns of collective behavior [20]. It continues by studies on collective behavior during public actions and social movements [21; 22] and collective reactions to conflicts, where emotions are a marker of the stability of communities [23; 24].

Media researchers emphasize that communication on social media is not a literal reflection of reality. Messages are disseminated in media following media logic [25] or using planted stories and in social networks following social media logic.[26]. Conducting research in the context of such a specific framework requires using mixed data analysis methods [27]. For this case study, we apply the enabling method of Message Analysis [28; 29], which also allows us to integrate specific tools into the interpretation of communication practices, in particular, in this paper, we refer to Erwin Goffman's concept of framing human experience з three levels of eventfulness [30], and group psychology, in particular, the concept of a person's worldview understanding of his or her place in society according to Ken Wilber's integral theory [31; 32].

3. Methodology

To conduct the study, a sample of public posts was formed, which were published by personal profiles on Facebook, Instagram, YouTube, Telegram, VKontakte, and TikTok written from February 24, 2022, to February 24, 2023. They were collected by the YouScan commercial monitoring system. Only posts (not comments or reposts) with the geolocations "Ukraine" and "Not determined" were considered.

The total sample of 2.8 million posts was randomized, and coding was started until we had obtained 1200 relevant posts, i.e., those containing meaningful statements about psychological problems. Approximately every second message from the original set was relevant, thus, 0.12% of messages were analyzed, and thus the sampling error does not exceed 3%.

Manual coding was conducted with the involvement of 4 coders. Disagreements between coders were resolved through a discussion in a joint online chat. The following categories were identified:

- type of post (description of own condition, description of a visit to a specialist, description of a situation of vulnerability, mental health advice, general considerations).
- the main symptoms/diagnoses of the author of the post or his/her relatives mentioned in the post.
- the main symptoms/diagnoses that people generally write about.
- personal judgments about mental health.

In addition, for most of the posts, the system automatically identified the demographic characteristics of social media users, such as gender and region of residence.

Based on the quantitative analysis of the data, discourse analysis was conducted to identify topics and frames and to describe patterns of communication on the topic. We applied the message analysis and frame analysis.

4. Description of communication about mental health in the discourse of war

In the first year of Russia's full-scale invasion of Ukraine, the mainstream media mostly formed an effective picture of the war, which gives only a superficial idea of human life in such conditions. The balance of completeness in the coverage of the war in Ukraine is created through direct discussion by social media users.

The war became an important reason for updating knowledge on psychological problems in the media discourse. Reports about psychological conditions were written by ordinary consumers, support group organizers, activists, individual experts, and those who spoke on behalf of organizations providing psychological services (mostly NGOs cooperating with individual experts or companies). The discussion included numerous thanks to psychologists who, by conducting exercise sessions, helped improve mental health. There are also stories from experts about people who have attended such sessions.

War frames a person's life and is perceived as a macro-event that changes the "life project" irrevocably. The problem is that in a state of vulnerability, a person becomes more susceptible to harmful influences both in the field of physical communication and through the media. In a situation of stress, there is a threat of psychological instability in society, both as a result of the impact of life circumstances and through the media. According to social media users, "After this war, Ukrainians will not be afraid of anything," meaning that the routinization of military circumstances has become noticeable over the years, which is also a threat to the development of society. When communicating on social media, users defined their psychological state as such that has changed as a result of the war: "The war is engraved on our faces," people wrote on social media, I'm not even talking about +15 for one trip to Bakhmut or Soledar".
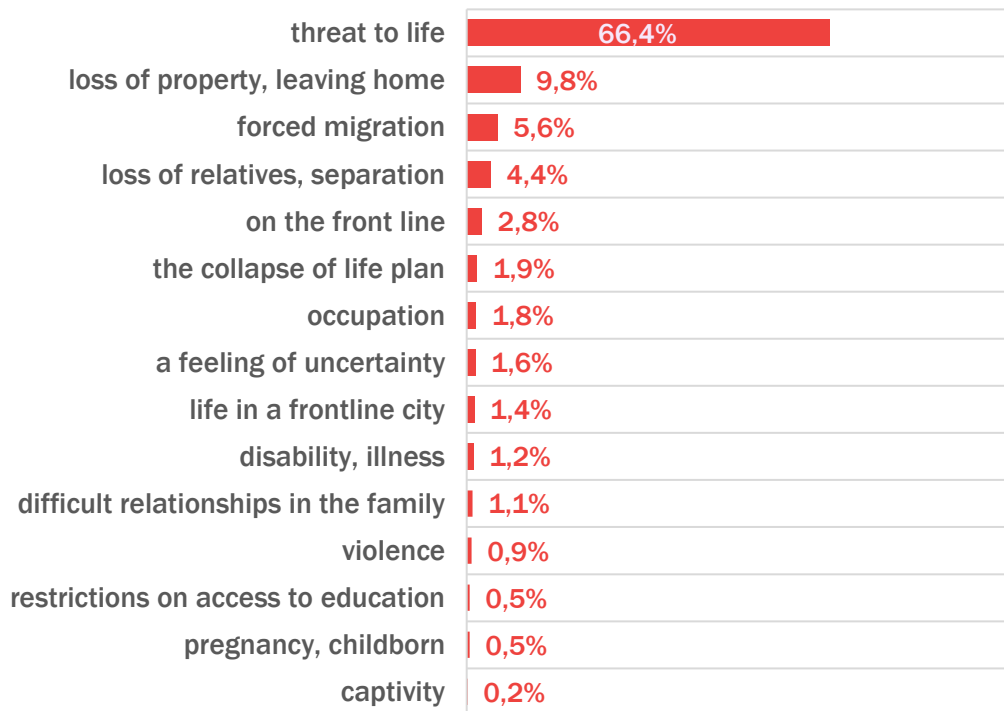
**Figure 1**: Situations of vulnerability chart

Based on the analysis of the posts, we identified situations of vulnerability in which people found themselves in a situation of war and which became reasons for communicative action on social media (Fig. 1):

- Threat to life – describing in detail the circumstances in which the decision should be made: shelling, living in a bomb shelter, blackouts, and loss of communication (mobile, internet).
- Loss of property, leaving home – real problems caused psychological ones for authors or others - friends, relatives.
- Forced migration – moving abroad and related experiences (such as "survivor syndrome").
- The loss of relatives, separation – death, separation of families, sadness, and despair because of this.
- On the frontline – reports of physical fatigue and poor living conditions, civilians' hypotheses that the militaries are very tired and need sympathy and help.
- The collapse of life plans – stories about losing a job and the need to find one.
- Occupation – mostly mentions of sending aid to people in the occupied cities and support for those who were under occupation or left it.
- A feeling of uncertainty – mostly complaints about not knowing what to do next, frustration due to the inability to plan.

- Life in a frontline city – a situation under fire, where people often talk about the dulling of the sense of security and the routinization of war.
- Disability, illness during war – recounting experiences of displacement or the impossibility of displacement for people with disabilities or serious illness.
- Difficult relationships in the family – facts and advice on divorce due to war.
- Violence – comments on news stories that reveal crimes in the occupied cities.
- Restrictions of access to education – statements of the facts and complaints about online fatigue and lack of connection, which increases frustration about the future.
- Pregnancy, childbirth – they share typical pregnancy problems, and rejoice at the birth of a child, but note that it is difficult and hard.
- Captivity – complex situations of the impact of captivity on physical and mental health.

As we can see, situations of vulnerability arise as a result of war.

5. Gender distribution of attention to the topic and sentiment

Statistics show that these are women who are mostly talking about psychological health, also because they traditionally take care of children and elderly relatives. However, posts with advice from men receive more reactions than those from women (Fig. 2).
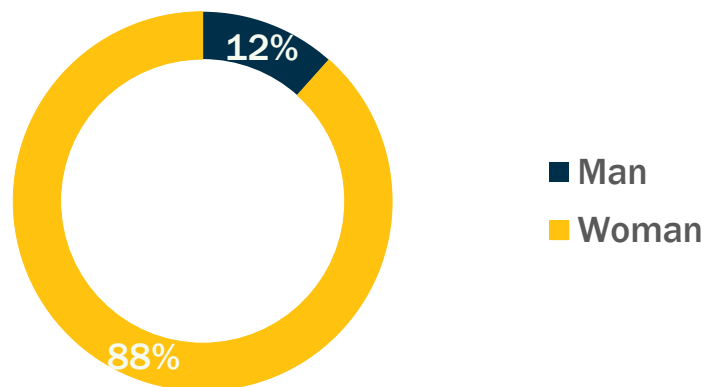

Figure 2: The ratio of comments from men and women

Women represent a greater diversity in descriptions of their psychological state. Men also share opinions about their state, but they are often criticized due to social stereotypes. Especially when it comes to men who have moved abroad. Soldiers ("our guys") receive more empathetic comments expressing gratitude and respect. People are interested in posts about the situation of female soldiers at the frontline, but they are more likely to treat them as exceptions. Men are more likely to advise relieving stress with alcohol and share their experiences: "I drink once a week, steadily, and I like a lot, but not strong", "I like alcohol very much. Without alcohol, it's not a holiday or a day off for me, and now it's also a stress reliever...". Women pick up this: "Alcohol and my liver protect my psyche." However, most of the advice about alcohol is condemned. They joke, "Winter is coming. First depression, then drinking, and then hibernation." A comment catches up with them, "No, cats, children, responsibility)) You can't get drunk)".

6. Regional distribution of attention to the topic of mental health

Kyiv and the region account for almost half of the posts on the topic: sadness, fatigue, the collapse of life plans, discussions with friends and family about their own conditions, expressions of sympathy ("hugs"), and the difficulty of coming back to life in the face of war (Fig. 3).
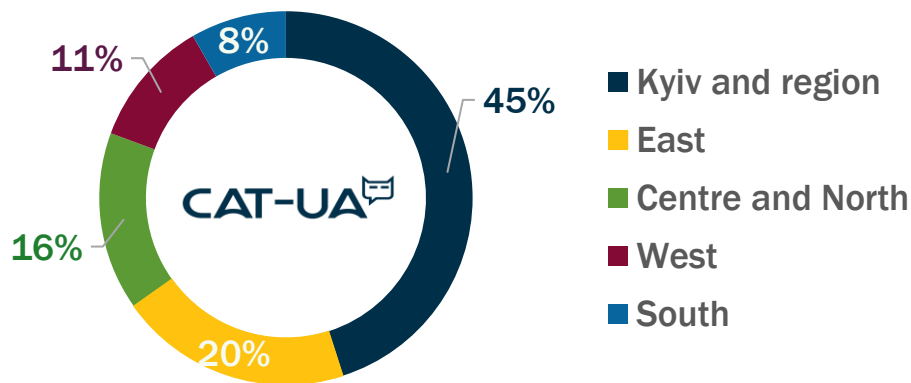
Figure 3: The intensiveness of discussions about mental health

For eastern regions, it is typical to express reflections on changes in the psyche, more metaphors, euphemisms (e.g., "I am like that cat"), calls for media hygiene (not to make people panic), suggestions for art therapy, meditation, etc. In the central and northern parts of Ukraine, there are questions and advice on how to overcome stress, suggestions ranging from food to fitness, services for children who have moved to the hubs, etc. Posts from the west of Ukraine contain more information about services, treatment, advice, and events to bring people together. The South accounts for experiences of the war and gratitude to Oleksii Arestovych. At that time, he was an advisor to the Office of the President of Ukraine and addressed people in the style of a psychotherapist (quiet, soothing voice, expectations, etc.). PTSD is also mentioned more than in other regions. As we can see, there are regions that are more informed and less informed about psychological support. We can assume that the situation of people in the more informed regions is better than in those where there is not enough information about supportive measures.

It should be noted that the lack of information and unawareness of aid on the periphery of the country can threaten to marginalize people in the eastern and southern regions of Ukraine, which increases the chances of both propaganda by the aggressor and dissemination of esoteric, unverified knowledge.

7. Key topics in the discourse of psychological problems

Based on the material we have processed, we have identified the following leading topics in the discussion:

"General considerations": reflection on what is happening and how to behave. In March 2022, there were more calls for help for vulnerable groups, and April discussions were assessing what was normal and what was not. In the summer, people shared the realization that "finally everyone understood what was going on," so in the autumn, we saw more structured advice in the discourse, even psychological jokes ("You must be depressed if you haven't killed a single orc..." etc.). There was also comic anti-advice: "Briefly about how to earn a NEUROSIS: keep everything inside, accumulate everything in your body, do not live what you feel." Some Ukrainians actively sought scientifically validated information about mental health conditions and possible explanations, as well as therapy options that could help. Others were engaged in drug self-medication, turning to various hobbies, prayers, physical activity, and other practices.

"Mental health advice". In March, the contributors (psychologists and people who position themselves on social media as experts on psychological problems) were very quick to orient themselves, formulating a powerful proposal for psychological and psychotherapeutic assistance. We saw activity not only from users based in Ukraine but even from Israel. Since April, the interaction of those in need of psychological help has been noticeable. In the summer, we noticed a lot of organizational discussions about recruitment to support groups, and in the autumn, people shared practices that help improve their psychological state – from exercise to fairy tale therapy. It is worth noting that the experts proved to be

quite adept at using effective social media marketing solutions to promote their advice. In particular, in TikTok, they often recorded messages and demonstrated practices, having a large number of followers. The war opened a window of opportunity for experts to promote their services on social media.

"Description of your condition". These are mostly posts from ordinary people complaining about their condition. In February, the call to "be here and now" is spread as a credo or motto, which means focusing on understanding your needs and doing what you can. In April, people shared problems related to displacement. In summer, there was more reflection on the circumstances and one's place in them. In the autumn, the discussion of the experience of living through the war took on signs of new knowledge: people use analogies, jokes, and quotes of experts from books or social media. Participants of the discussion begin to recall their hobbies and share the therapeutic effect of this.

"Description of the situation of vulnerability": posts where the situation is defined as one that affects the change in mental state. In the first months of the full-scale invasion, worries about loved ones, not about themselves, were common. In the summer, people began to notice their personal bodily needs, and there were statements about building a new life, especially from those abroad. In the autumn, people say that animals have a good effect on improving their psychological state in a situation of vulnerability. In addition, in September, people tried to "reach out" to others (Russians) by describing situations and telling them about the horrors of war.

"Description of the experience of visiting a specialist". People shared their experience of the effectiveness or ineffectiveness of psychological and psychotherapeutic assistance. There was a noticeable dynamic from uncertainty at the beginning of the full-scale invasion to understanding what provides a support resource: "art restores", or "experts recommend."

8. Dynamics of mental health self-assessments

In the discussion, we can see that the state of Ukrainians is extremely dependent on the overall situation at the front line. Pessimism peaked during the first stage of the war, in a situation of extreme uncertainty and significant social change, in the autumn – during a lack of electricity due to the destruction of the power grid, sad holidays, and the difficult winter. In the summer and early autumn of 2022, during the counteroffensive to liberate Kherson in October 2022 and the preparations for it, Ukrainians were massively "repairing" their mental health. The dynamic of psychological states was influenced not only by immediate threats but also by news, as noted by many users who were concerned not only about their condition but also about the fate of their compatriots and the entire country. In general, we can distinguish three emotional periods in the experience of war in the first year of the full-scale invasion (Fig. 4).
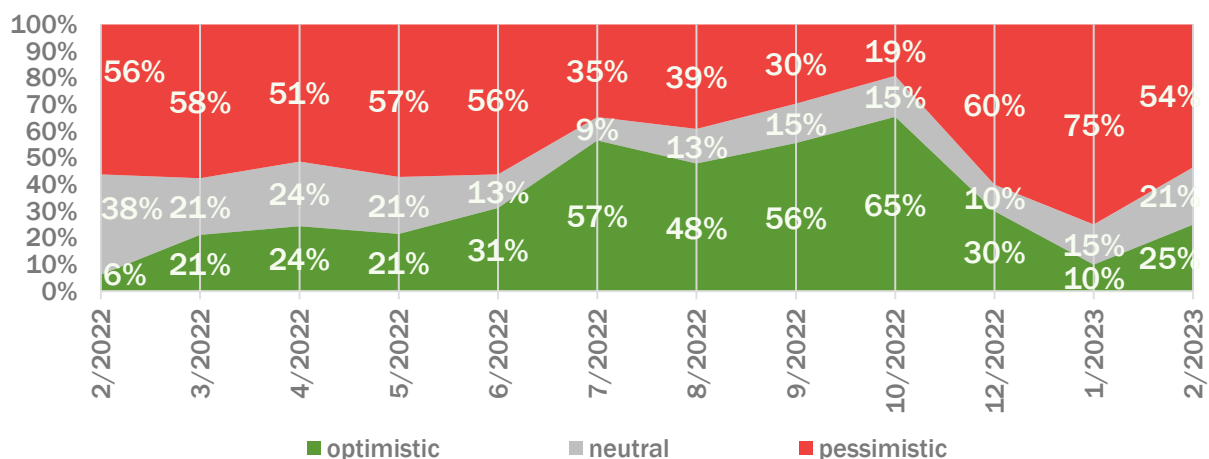
Figure 4: The dynamics of psychological states

Period 1. From the beginning of the full-scale invasion in February to May 2022, there was a high level of pessimism. People tried to find answers to the question of what to do, to realize "if it is normal what I feel," and offered help. They wrote about difficulties the refugees had in surviving the

displacement, reacted to the bombing, the need to live in shelters, and the situation in the occupied and then liberated areas. The April events in Bucha were described as "continuous pain and hatred of Russians." During this period, optimism gradually increased due to the dissemination of information about psychological support. Mobilizing posts from both experts and activists became symptomatic. For example, there was a call "not to quarrel within the country" (March 15, 2022). There were calls for those who felt guilty of "being not there" (not in Ukraine, not on the front line, etc.) to repeat, "I am working! This is my line of defense of the Motherland!". A supportive message was also spread that "Ukrainians make reality more incredible than fiction".

Period 2. From June 2022, when the most painful topics passed, such as the situation with the "Azovstal" factory, where people had been forced to surrender to the Russians, and later events in deoccupied Izium, where mass graves with signs of torture were found after the de-occupation, there was a gradual increase in positive sentiment, reaching its peak in early November 2022 (this is due to the successful liberation of Kharkiv region and Kherson). In the autumn, the image of the "cuckoo" became popular as a metaphor for a state when a person feels abnormal but can control it. Such posts have a good interaction with users.

It was at that time when information about services from the state and volunteers was already being established. Popular personalities, such as TV presenter Serhii Prytula, offered scenarios for participation in the defense. People share what they are doing – looking for a job in a new place, explaining their choice (why I am here, for example, for the sake of my child), uniting to help, and calling on foreign Ukrainians to support those who stayed behind.

Period 3. From mid-November 2022 to February 2023, there was an emotional decline. The fall in moods was caused by the consequences of the occupation, the shock of discovering the occupiers' atrocities in the newly liberated cities, the terrorist attacks on civilian objects and energy infrastructure by the Russian Federation, and the expectation of the New Year with a motive of collapse of life plans due to the war. On New Year's Eve, people shared toasts and wishes, expressing unrealistic hopes and acceptance of the situation (but not reconciliation): "It's the New Year, there is a Christmas tree, but very little strength for hope." New Year's results: "In three days, 2022 is coming to an end... We have learned to enjoy things that were previously unnoticeable to us: warmth and light in the house, high-speed internet, open shops or cafes". This collective mood contributed to the fact that optimism was slowly starting to grow at the beginning of the new year, although February was still full of memories of the war anniversary.

The opportunity to receive psychological help is encouraging: people express gratitude and advise others to seek help. When people write about their condition, they are mostly pessimistic. Optimistic messages are based on offers of psychological help and positive experiences from visiting specialists (physical exercises, breathing practices, sound therapy, art therapy, and even goat therapy). Neutral posts are those where people describe their condition and make a diagnosis themselves, or where organizers report on support events. Pessimism is associated with the desire to control the quality of service provision on the part of consumers – criticism of treatment prescriptions and refusal to practice in favor of medications. They also signal when psychologists disseminate inaccurate information, inflate, for example, by talking about collective PTSD.

In general, the discussion shows that the general mood of social media users was characterized by internal mobilization and a willingness to help others. An important communication action was the intensification and rallying of experts and activists who offered psychological support and were trusted by consumers who shared their contacts. The key emotion can be defined as not so much fear for yourself as for those who depend on you: a child, an elderly person, a sick person, or a person with a disability.

9. Framing the representation of psychological states during the war

Ukrainians framed the perception of the situation according to three levels of eventfulness: the first, when a person comprehends himself or herself in the war and shares what he or she directly feels; the second, the level of relations with others, sharing his or her experience as an example, offering help and even solutions; the third level, through awareness of the context as a justification for irreversible changes that a person cannot explain with the logic of his or her pre-war experience.

In the relationship of "I" with the world, the leading theme is "War affects physical and mental health". The second theme reveals the need to understand what is happening around us, and the third theme is "Life during the war is scary, difficult, and hard," where people mostly describe situations of vulnerability. The rest of the topics demonstrate the ability of society to generate solutions to the challenges of the changed context. This ability is demonstrated by users through the relationship between "I" and myself, one's knowledge and skills, and "I" and "others," even those whom you do not know personally, i.e., collective "others" – those who share the same experience and have the same needs. Offers of services, giving advice to others, searching for solutions, attempts to help others, and having knowledge of human psychology, are manifested as a reaction to signals of change in the state from others. Personal frames show the authors' reflection on their state in the format of descriptions, and complaints as a reaction to stress or a request for help. Such messages can be regarded as signals to the "universe" where someone can help. The response comes both in the form of "likes" (different types of emojis) and in the form of advice from other people.

The difference between these three types of frames is shown schematically in Table 1, which outlines the type of frame, the communication patterns associated with it, and the intentions of the authors of social media posts.

Table 1
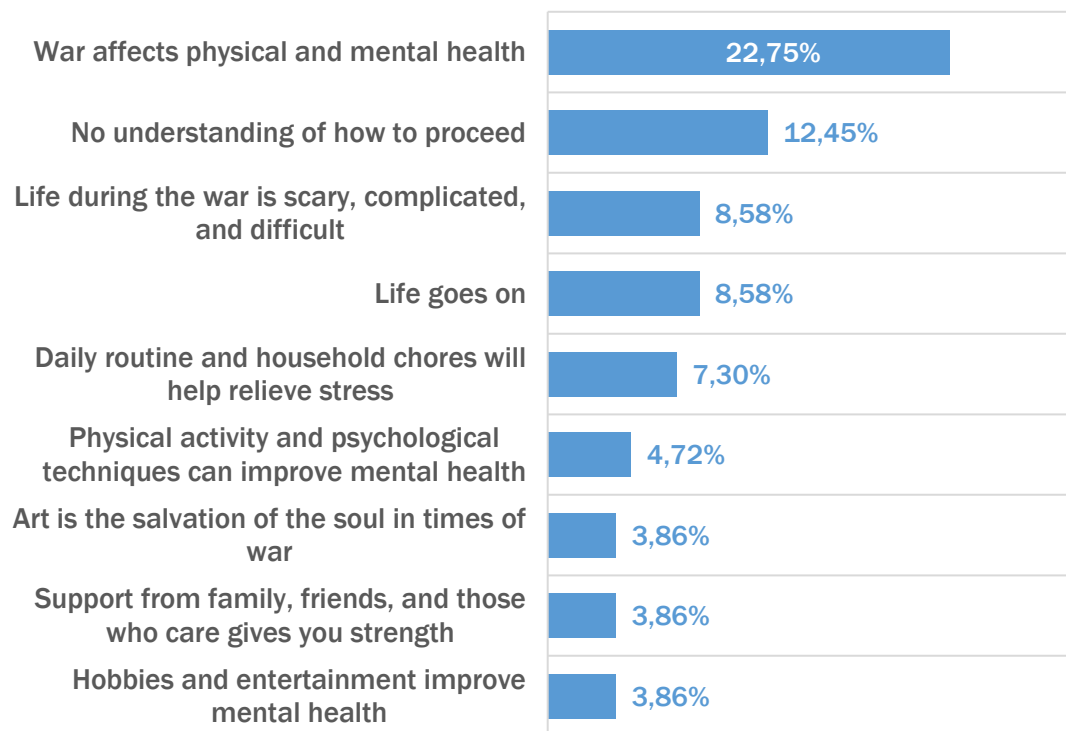Types of frames in the discourse of human psychological states during the war

Frames	Communication patterns	Intentions.
General (context) I=WAR	Assessment of the context, self-organization, including into help groups	The need to accept the change of context as irreversible due to the danger to life – displacement, captivity, occupation
Interpersonal I = OTHER PEOPLE	Offering services, advising others, finding solutions	Trying to help others, by having knowledge of human psychology and as a reaction to signals of change in the state from others
Personal. I=I	A description of your condition and health complaints	A signal of a change in state as a reaction to stress or a request for help

The formatting of information through personal frames ensures understanding between people and further informs them about the psychological states caused by the war. Interpersonal frames format the mobilization capacities of society and facilitate the establishment of contacts and the dissemination of interaction scenarios. General frames provide a vision of the situation in terms of goal setting and the desire to win over the circumstances of war. Let us consider the types in more detail.

9.1. General frames of representation of psychological states in the discourse of war

The key in representation of psychological states is a frame of understanding war as an enemy-initiated "event that destroys life irrevocably". It is most evident in the topics "No understanding of what to do next," "Life during the war is scary, difficult, and hard," and "Life goes on" (with more positive emotions). The war appears as a new shocking context that gives rise to challenges for regulating one's psychological state: "Such wild pain that there are no words. And with every liberated city, there is a new shock." In addition to this, there is the frame of "victory over a destructive condition,

which is equal to victory in the war." This general framing determines the interaction in social networks as open communication of like-minded people. Within this framework, the discussion develops and can be characterized by a typical slogan: "Live here and now". A typical story: "Morning coffee in Podil (district in Kyiv city). Thinking about the future. What do you think? Your life: A. Paused. B. Slowed down a bit. C. Frozen before the jump. D. I'm keeping up and moving forward. I hug everyone. Take care of yourselves. Thanks to the Armed Forces for another morning" (Fig. 5).

Category	Percentage
War affects physical and mental health	22,75%
No understanding of how to proceed	12,45%
Life during the war is scary, complicated, and difficult	8,58%
Life goes on	8,58%
Daily routine and household chores will help relieve stress	7,30%
Physical activity and psychological techniques can improve mental health	4,72%
Art is the salvation of the soul in times of war	3,86%
Support from family, friends, and those who care gives you strength	3,86%
Hobbies and entertainment improve mental health	3,86%

Figure 5: The representation of psychological states

In the posts, the authors explain that a panic attack occurs when a person is not ready to accept something new. They offer psychological help, and a proper diet, describe self-help scenarios, and call for unification to help other people who have panic attacks.

Social media users share their experiences of using various practices not only to improve their psychological state but also to understand the context, write poetry, quote their favourite books and movies, look for analogies in history, literary stories, etc. For example, they state, quoting the neuroendocrinology researcher, Robert Morris Sapolsky, "No one in the whole world has experienced similar to ours. No one can act as our expert. No one knows what to do." People refer to the experience of World War II and quote the psychologist, Viktor Frankl, "Those who survived were those who focused on their own affairs, without waiting for what else might happen." They quote scripture, in particular New Testament Psalm 94:19, "When I was overwhelmed with anxiety, you comforted me and calmed me," backing this up with personal experience when turning to God was helpful. In discussing their own condition, it is noticeable that people not only recognize changes in the psyche but also try to behave "correctly" in a war situation to preserve their mental resources. The lack of understanding of how to proceed manifests itself in the first months and reappears in the New Year. Typical posts in this frame are the following: "How do you know? If I knew when, it would be easier for me".

Despite the fact that people are acutely and painfully experiencing the fears of war, humorous posts are quite common. They are inspired by video content with jokes, for example: "Laughter relieves stress! Everything will be Ukraine!" The caption says: "When 'cuckoo' survived 2022" (in the video, a woman dances on a street of one of the cities attacked by Russian troops). There are many jokes on this topic: "Grandma survived the famine, World War II, coronavirus, and her grandson died of depression."

There are also posts by influencers who have overcome depression and advise: "You need to live in such a way that others are depressed, not you". Sometimes they make fun of the weak, holding on to their sense of heroism and patriotism.

Reactions to some posts from the World Health Organization with explanatory information on the prevention and recognition of mental disorders are positive. Interaction with the posts shows that there is trust in institutions as sources of reliable information. Meanwhile, the analysis shows the absence of any systemic state policy or supporting institutional policies in the field of mental health.

When discussing their mental states, people refer to the knowledge gained before the war, in particular, knowledge of psychology, as well as Ukrainian history, culture, religion, and, most notably, media literacy. Social media users are not the last to point out the negative impact of news: "The 'hurray news' makes you sick, and the more you read it, the more you realize that you don't feel the real situation," "I have been abroad for a month now. I'm no longer jolted by the sounds of the airplane, but I'm still a prisoner of war in my soul because every day starts with reading the news and checking the siren chat." In this context, it is worth emphasizing the role of school education, higher education, and civic education as a basis for shaping values and building resistance to stress. The authors demonstrate the knowledge that helps them survive, recognize friends and enemies, verify information, assess the situation, and make informed decisions, including switching to activities that distract from the context of war – reading, drawing, teaching others, etc.

By the way, turning to artistic practices to overcome stress is a revelation for Ukrainians: "When the war started, my dad also started painting by numbers. It turns out very well and really calms the nerves." Another tip where art helps: "When you have a choice between listening to sirens or turning on the Oscars at 3 a.m., it's healthier for your psyche to watch your favorite actors."

The discourse of discussing psychological states during the war is performative, which gives space for both more effective dissemination of useful information and manipulations by the authors of the posts. For example, posts of support ("We are exhausted, but not broken") or sympathy ("soldiers on the front are very tired") are combined with an offer to donate. Visual content plays a significant role in the discussion: people share meditative or provocative images, which attract attention and encourage to read long texts. The videos are presented in popular online formats such as "before-now," "dance," and "portrait angle." The discussion involves artists and writers who have resisted the situation by working through traumatic experiences in their work. In addition, for creative people, it becomes a chance to earn extra money or a reason to collect donations for the needs of the army or vulnerable groups in society.

9.2. Interpersonal frames of representation of psychological states in the discourse of war

The key frame of this level is "active resistance," which is manifested in people's attempts to share their experiences as an ideal example of how to solve a psychological problem. Negative emotions in the posts are related to the inability/unwillingness to act, while positive emotions are related to the availability of knowledge about effective practices to support oneself and others. It is often emphasized that physical activity helps better than pills and even more so than alcohol. Usually, such posts have a style of either giving advice or describing/demonstrating an example of a particular psychological support practice. For example: "Loneliness, burnout, stress, desire to give up... Where to look for support? I found it (shows himself in the gym)" (Fig. 6).

Ukrainians demonstrate effective communication skills in psychological groups that were organized before the war. The quarantine experience of online communication shows: it takes on the character of public counselling, where the communicator posts as a "patient" expecting to find a communicator who is a psychologist or has knowledge. For example, there is a description of a panic attack in Tik-Tok as a new experience: "I didn't know what was happening to me." Comments with words of support and sympathy immediately appear. There is also talk of genetic predisposition to panic attacks. Some people ask for advice: "Hello! Please advise me something for stress, panic, fatigue, an effective sedative. I've been taking phenazepam – it's very effective." A post in the group: "Friends, I highly recommend this psychosomatic group." The individual one: "Look, I think that in case of divorces and marriages, you don't really consider the factor of psychological stress and trauma from the war. Therefore, I would still

favour working with a psychologist/consultant before the paperwork." Meanwhile, users are quite critical of the recommendations of specialists and are too prone to self-medication. Maxims such as "Self-love is the key to success" are popular. There is demand for general advice: "Be with those who make you smile. Laugh while you exhale." There is also an explanation of why it is necessary to help oneself first in order to help others.
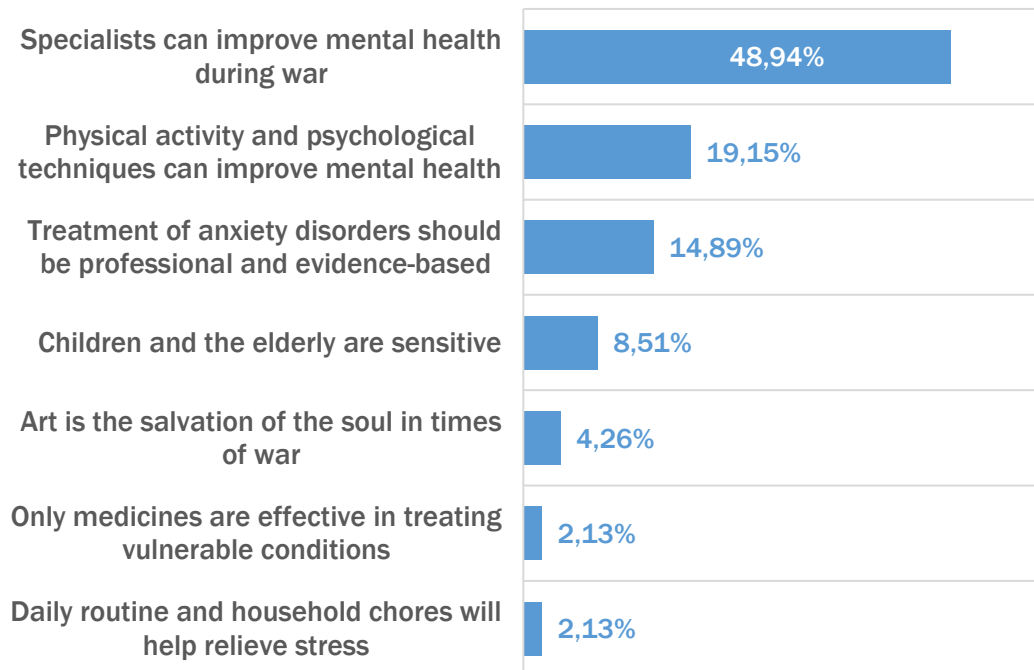
Figure 6: Evaluation of the experience of visiting a specialist

Fighting anxiety is a common message to draw attention to specialist ads. It is also mentioned in the recommendations: "When anxiety rises, stress hormones (adrenaline and cortisol) are released. How to switch to something else? Use other hormones – hormones of happiness".

They offer services for those who are in a state of apathy, and the posts identify those who may need advice in connection with their professional activities. For example, psychologists advise teachers to focus on identifying resource states and finding them through grounding. They share words of support and recommendations with friends. The authors of the posts try to mobilize themselves and their friends: "Everyone wants someone to help, to feel sorry for them... Don't be a loser, don't engage in self-deception!" There are also scary stories with gradation of symptoms, saying that while apathy is still present, one must act because depression and death are the next steps.

They call for respect for the other person's condition: "Be present with the other person's pain and do not try to do something about it as soon as possible." They also write about refugees who quarrel with their hosts, noting that such behaviour may indicate PTSD. They call drawing a therapeutic practice for children with PTSD.

They often reflect on the consequences of aggression, such as "shit" on social media, etc. They observe: "I think that many people's condemnation is due to accumulated internal fear and anger. It is impossible to remove the cause itself, so there are other people to blame." Activists and experts recommend that aggression should not be allowed to run rampant: they spread explanatory posts, calls not to quarrel, etc.

In general, the idea of going to a psychologist is widespread, while negative experiences are described much less frequently. Sometimes people also talk about the improvement of their mental state after master classes by non-psychologists: drawing, photoshoots. The videos by O.Arestovych are also successful, as are those of other psychics and clairvoyants, although there is also criticism. Proposals of psychological support from NGOs and individual psychologists to disseminate knowledge about psychological assistance also helped to arise resistance for stress and crisis in society. Thanks to social

media, the work of a psychologist becomes transparent, recognizable, and therefore understandable. Public posts in which people signal their condition and responses from psychologists directly in the feed contribute to the spread and imitation of psychological assistance scenarios (the cultivation effect). Gratitude or positive feedback from users forms a general positive attitude of ordinary citizens towards the activities of psychologists.

The discussion shows that Ukrainians have already formed a culture of communication on social media, which is developing and improving during the war. And this applies not only to technology skills, but also to the development of online communication skills, where there is, on the one hand, a risk of incomplete information due to limited channels and, on the other hand, the presence of white noise that can interfere with the exchange of useful information. Ukrainians demonstrate not only the need for reliable information, but also share recommendations for informing and communicating with people in need of care (children, elderly): "Do not hide the truth, assure them that you will do everything to protect them, discuss how much, where and what news to watch, hug more often." However, there are examples when the social media marketing manipulates feelings when disseminating information about collecting money for the army, appealing to the pain of civilians (everyone is tired, their eyes hurt).

9.3. Personal frames of representation of psychological states in the discourse of war

The key to this level is the frame of "fixing the change"; it is connected to the frame of "active resistance" of the interpersonal level (the sentence "I do in such cases...") and is linked by the general frame of "war that forever changes (destroys) life" (fixing changes in behaviour – nutritional, physical, psychological, social, etc.). Almost all the terms have two modes of use: as a direct indication of a state and as a figure of speech. On a personal level, the authors of the posts shared the symptoms of changes in their own or their friends' psychological state, describing the signs and sometimes pointing to the causes. Stress, depression, apathy, fear, aggression, pain, panic attacks, anxiety, insomnia, bad habits, fatigue, rejection of reality, emotional instability, eating disorders, nervous breakdown, PTSD, neurosis – this is the spectrum of psychological states (according to the word usage or the meaning given to these words by the authors of the posts) (Fig. 7).
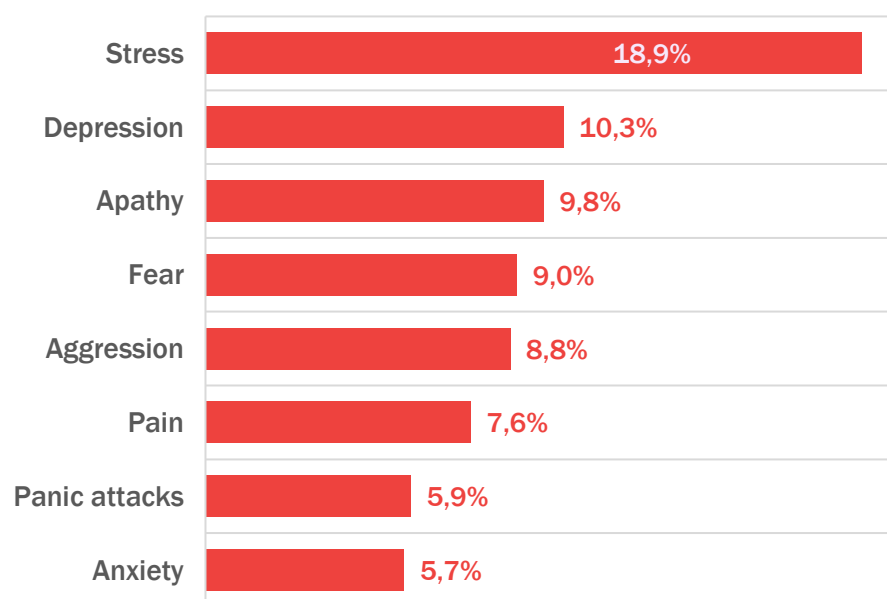
Figure 7: Self-evaluation of symptoms of the author of the post or his acquaintances

Stress is the most understandable word, so its use in describing any unusual psychological state is the most common. The word "depression" is in second place, but it is more of a definition of a state of

demotivation or apathy than a disease. Anger is spoken of as a defense reaction. Pain is both an expression of direct pain (headache, backache) and a metaphor for mental experience due to losses as well as the destruction and violence seen. "Anxiety" is mostly written about by users who are familiar with psychology and psychologists themselves. The concepts of "panic attacks" and "PTSD" show themselves to be "promoted" by the media. The most used term in the topic is depression. Its use mostly does not correspond to the meaning of a medical diagnosis, but rather means apathy with loss of motivation, frustration due to collapse of life plans, etc. Typical complaints, sometimes expressed very expressively, are the following: "Another day of hell. The body has accumulated stress," "Because of prolonged stress, sometimes I can't remember a word at all".

People demonstrate a desire to share their condition, not so much to get advice or help, but as an opportunity to express themselves to feel not alone: "Night falls, the city falls asleep, and internal anxiety wakes up. I take magnesium B6". When people share their conditions, it looks like they are communicating with an unknown person who is likely to be going through a "common experience of war with you".

An important trend is to discuss the change in norms, comparing how people used to behave with how they do now: "I can't sleep," "I drink alcohol," "I'm not as tired as I used to be," "I can't eat," "my mood is constantly changing," etc. The discussion of rejection of reality is related to shock of what one sees and collapse of life plans. Alcohol is mentioned as a traditional way of relieving stress, but it is condemned. People signal a lowering of the threshold of sensitivity: "I was so tired that I slept through the alarm, they didn't hit the house, and it's great".

People describe the emergence of new nutritional needs as micro-events triggered by stress due to the war: "Maybe it's the nerves, I want fried pies with cabbage... I'll go fry them... I won't sleep anyway." The answer: "I'm already eating tea and gingerbread to get rid of stress." There are jokes: "How I envy people who don't eat stress." Some people share that they haven't eaten for two days, while others, on the contrary, write about overeating because of stress. "I was hysterical because of soup," a Ukrainian refugee writes," It took me three days to get to Poland. When Polish volunteers spoke to me gently and gave me broth and covered me with a blanket, I cried like a waterfall from unexpected tenderness."

In addition to stating the fact that it is difficult to fall asleep, they also mention an unwillingness to sleep: "If you fall asleep, you dream of war". As a wish, there are calls to "let insomnia go away". They also describe the experience of living with insomnia, tell how they paint and read at this time.

People share states of denial and separation from reality: "Today is one of those days I don't have". "I don't go to the centres on purpose because I can't cry and hate so much". Refugees also write about the "unpacked suitcase syndrome". Mostly, experts note in their posts that stress and severe shocks lead to a defence mechanism of the psyche that protects a person from insanity, and then the world around them may seem unreal.

The word "neurosis" is mostly mentioned in the context of specific experiences, for example, "I do not do enough" - they write about neurotic guilt - "people in the basements are suffering and tens of thousands are dead, and I am sitting at home quietly at my computer", "Doctors call this feeling the "Survivor's Guilt" syndrome. Wherever you go, the anxiety about the country and people goes with you." Nervous breakdowns are mentioned in two cases: as a statement of fact ("Children are afraid to come out of basements, they have nervous breakdowns") or as a desire to warn.

Since the beginning of summer, there have been fewer descriptions of states, and posts about personal practices that help overcome stress: "I took the dishes out of the dishwasher in the morning and washed them with my hands, was relieving stress," "What I did. I just screwed everything. On dreams, on hopes, on life positions, on meanings. I just started living every day as a small life." It is recommended not to let aggression run rampant: they spread explanatory posts, calls not to quarrel, etc.

The study identified specific features of the discourse of psychological states during the war. People do not always use the terms for their states correctly, but this does not interfere with understanding. People like to explore their personalities, they sincerely share their feelings, forming a healthy culture of exchange of opinions with respect for the individual through the comprehension of traumatic experiences. Meanwhile, social media posts are often a creative reinterpretation of war experience. Users do not talk so much about their condition as they represent it according to their perceptions of it, often using incorrect terms and spreading harmful advice. These perceptions are shaped by both personal experience and stereotypes that exist in society.

10. Conclusions

The study of Ukrainians' attitudes toward taking care of their mental health confirms the hypothesis that Ukrainian social media users are capable of self-organization in information resistance to the aggressor and demonstrates people's desire to restore themselves and rebuild the country that has become a war zone.

Throughout the year, the seemingly uncontrollable discourse of social media was organically structured through frames of shared experience. The discourse was framed on three levels: general, interpersonal, and personal. The experience of war developed in the general frame "war is an event that changed life irrevocably," which was combined with frames of other levels – interpersonal "active resistance" and personal "recording change." The discussion developed intensively and acquired signs of collective intelligence capable of self-learning through dissemination and production of means of countering threats born of the context.

As we expected, the situation of Ukrainians is extremely dependent on the overall situation at the front line. Moreover, when journalists talk about psychological conditions, they do not always refer to expert opinions and disseminate unverified information in this regard, and this does not contribute to increasing societal resistance to confrontation in situations of vulnerability.

The role of social media as a platform that balances the influence of mainstream media and ensures the freedom of thought and access for information cannot be overestimated. However, despite the rather optimistic results of using social media to increase resistance to military aggression, the analysis also reveals challenges related to the specifics of media use. Personalization and high-quality storytelling tools that helped to make the communication of psychological assistance resonate can help to popularize other topics, such as evidence-based medicine and diagnostic accuracy. However, some professionals abuse this, sometimes due to ignorance of media effects and sometimes out of a desire for personal gain or recognition.

During the first year of the war, the Ukrainian society went through three periods of awareness of psychological states, from confusion about the situations of vulnerability that a person can influence to finding solutions to overcome problems and regulate their personal state, and then to establishing interpersonal communication for mutual assistance and understanding the war in the context of common social values. Through communication on social networks, the representation of experience and the unification of "their own" people, collective resistance to situations of vulnerability is formed. The presence of social media globalizes this process and increases its effectiveness.

11. Acknowledgements

12. References

[1] A. Zakharchenko, The clash of strategic narratives in the Russo-Ukrainian war, Institute of Ukrainian Studies, in: Forum for Ukrainian Studies, 2022. URL: https://ukrainian-studies.ca/2022/09/18/the-clash-of-strategic-narratives-in-the-russo-ukrainian-war/.

[2] S. Hjarvard, The Mediatization of Culture and Society, Routledge, 2013.

[3] M. M. P. Vanden Abeele, M. H. Nguyen, Digital well-being in an age of mobile connectivity: An introduction to the Special Issue, Mobile Media & Communication, 10(2) (2022) 174-189. doi: https://doi.org/10.1177/20501579221080899.

[4] World Health Organization. Mental health: Strengthening Our Response. World Health Organization, 2022. URL: https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response.)

[5] World Health Organization. Scaling-up mental health and psychosocial services in war-affected regions: best practices from Ukraine, 2022. URL: https://www.who.int/news-room/feature-stories/detail/scaling-up-mental-health-and-psychosocial-services-in-war-affected-regions--best-practices-from-ukraine.

[6] R. Koselleck, Futures Past: On the Semantics of Historical Time, Mass., The MIT Press, Cambridge, 1985. URL: https://hdl.handle.net/2027/heb.04876.

[7] R. E. Wagner-Pacifici, What is an event?,The University of Chicago Press, Chicago, 2017.

[8] J. B. Thompson, The Media and Modernity: A Social Theory of the Media, Polity Press, Cambridge, 1995.

[9] O. Zinenko, The specificity of interaction of journalists with the public in coverage of public events on social topics, Visnyk of the Lviv University. Series Journalism 48 (2020). doi: http://dx.doi.org/10.30970/vjo.2020.48.10546. [in Ukrainian]

[10] T. A. van Dijk, Discourse, power and access, in: C. R. Caldas-Coulthard, M. Coulthard (Eds.), Texts and Practices: Readings in Critical Discourse Analysis, Routledg, London, 1996, pp. 84–104.

[11] N. Fairclough, New language, new labour, Routledge, London, 2000.

[12] R. Wodak (Ed.), Critical Discourse Analysis: Four Volumes, Sage, 2013.

[13] J. van Dijck, The culture of connectivity: A critical history of social media, OUP, Oxfor, 2013.

[14] U. Arold, Peculiarities of Russian information operations, Estonian Journal of Military Studies. Cultural, peace and conflict studies series (2016) 13-42.

[15] S. Kvit, Mass communication [Masovi komunikatsii], Kyiv Mohyla Academy, Kyiv, 2018. [in Ukrainian]

[16] G. Pocheptsov, Modern informational wars [Suchasni informatsiini viiny], Format, Kyiv, 2015. [in Ukrainian]

[17] J. Yonamine, A Nuanced Study of Political Conflict Using the Global Dataset of Events. Location And Tone (GDELT) Dataset, PhD thesis, Pennsylvania State University, 2013.

[18] N. Luhman, The Reality of the Mass Media Niklas Luhmann, Stanford University Press, Stanford, California,1996.

[19] D. Schoder, P. Gloor, P. T. Metaxas, Social Media and Collective Intelligence: Ongoing and Future Research Streams, 2013. doi:https://doi.org/10.1007/s13218-012-0223-2.

[20] K. Eismann, O. Posegga, K. Fischbach, Collective behaviour, Social Media, and disasters: a Systematic literature Review, in: ECIS 2016 Proceedings, 2016. URL: https://web.archive.org/web/20200318053827id_/https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1090&context=ecis2016_rp.

[21] H. Blumer, Social Problems as Collective Behavior, Social Problems 18 (3) (1971) 298–306.

[22] J. J. Pizarro, L. N. Zumeta, P. Bouchat, A. Włodarczyk, B. Rimé, N. Basabe et al., Emotional processes, collective behavior, and social movements: A meta-analytic review of collective effervescence outcomes during collective gatherings and demonstrations, Frontiers in Psychology 13 (2022).

[23] E. Durkheim, Les formes élémentaires de la vie religieuse [The elementary forms of the religious life]. Paris, France: E Alcan, 1912. [in French]

[24] D. Garcia, B. Rimé, Collective emotions and social resilience in the digital traces after a terrorist attack, Psychological science 30(4) (2019) 617-628.

[25] D. L. Altheide, R. P. Snow, Media Logic, SAGE Publications, 1979.

[26] V. Dijck, T. Poell, Understanding Social Media Logic, Media and Communication 1(1) (2013) 2–14. doi: https://doi.org/10.12924/mac2013.01010002.

[27] N. Thurman, Mixed-Methods Communication Research: Combining Qualitative and Quantitative Approaches in the Study of Online Journalism. SAGE Publications Ltd, 2018. doi: https://doi.org/10.4135/9781526428431.

[28] A. Zakharchenko, PR-Message Analysis as a New Method for the Quantitative and Qualitative Communication Campaign Study, Information & Media 93 (2022) 42–61.

[29] CAT-UA. Communication analysis team. Research. URL: https://cat-ua.org/en/category/our-research/.

[30] E. Goffman, Frame analysis: An essay on the organization of experience, Harvard University Press, 1974.

[31] K. Wilber, Integral psychology, Shambhala, Boston, MA, 2000.

[32] K. Wilber, K. Part III: The cultural creatives and the integral culture, 2001, http://wilber.shambhala.com/html/interviews/interview1220_3.cfm/xid,1655268/yid,13272823.