The Department of Cognitive Science and Artificial Intelligence, Tilburg School of Humanities and Digital Sciences

The Laboratory of Mass Communication and Media Education Institute for Social and Political Psychology at the National Academy of Educational Sciences of Ukraine



# Cyber Socialization in the Conditions of Increased Uncertainty:

Materials of the VIth Inter-Institutional Seminar



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The collection of scientific works is devoted to the issues of cyber socialization of the individual and the problems that arise in the process of socialization in the conditions of the information society. Both positive and negative consequences of the socialization of the individual in the technogenic world are considered. This collection is the result of the work of scientists, teachers, psychologists, specialists in technical and cognitive sciences, students, which analyzes cyber challenges, issues related to cyber socialization and ways to solve them.

The collection is addressed to psychologists, social pedagogues, media psychologists and media pedagogues, journalists, scientists of technical and cognitive specialties, students and teachers of courses in various fields related to the specified topic.

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#### CYBERBULLYING AS A VARIETY OF PSYCHOLOGICAL YOUTH VIOLENCE IN VIRTUAL SPACE

It is difficult to imagine the modern world without digitalization. More and more processes take place in the Internet space: work, study, communication, etc. However, unfortunately, there is also the transfer of negative aspects of personal interaction between people into virtuality. Due to digital limitations, it is difficult to cause physical injuries to a person, but it is precisely in such conditions that psychological violence, for which there are no borders, becomes more widespread. Psychological violence has many varieties, but among them it is worth highlighting cyberbullying, which has become the most widespread on the Internet.

Cyberbullying is a certain behavioural pattern of an individual regarding purposeful manifestations of violence in virtual space. Important to understand, bullying is an aggressive behaviour that tends to be repeated and has a purposeful nature, based on an imbalance of physical strength, mental abilities or social status in the group, etc. Obtaining and maintaining any form of dominance is an internal, hidden goal of any bullying (Myronyuk, Zaporozhets, 2018).

Many international and all-Ukrainian organizations have statistically studied the issue of cyberbullying. A study conducted by the United Nations Children's Fund (UNICEF) in 2018 indicates that among Ukrainian teenagers aged 10-17, one in five admits to being a victim of Internet bullying. In 2019, the national children's hotline of the "La Strada-Ukraine" recorded 322 calls about cyberbullying, which is a third of the number of calls from people related to the Internet (Docudays UA, 2020). However, it is worth noting that most of the works that described this problem focused on the school educational environment, considered cyberbullying in the plane of school bullying and focused attention on the problems of teenagers.

In our study, the phenomenon of cyberbullying is studied among young people. However, "youth" is a rather abstract concept that includes several age groups. In order to make the work more thorough, we focused on the study of young people, because they are the direct and permanent users of the Internet space and have appropriate age-related socio-psychological features that directly affect their interaction in the network.

Young people show high social activity both in real and virtual space and interact with a large number of people regarding educational and professional activities, communicate with friends and meet new people. Achieving physical maturity in adolescence is not consistent with psychological development, which creates the right conditions for a young people to become a victim of cyberbullying.

The main mental neoplasm of the youth period is self-determination, which is manifested in the construction of a life plan and ways of its implementation, which to some extent is identical with the search for one's identity. It is important for young people to assert themselves and find their position in a certain social group. At the same time, they are quite vulnerable, have certain personal complexes and cautions.

Young people are active users of the Internet and, being immersed in the virtual world, have a high chance of being exposed to danger from other people.

It is in the virtual space that many young people reveal their identity and may encounter manifestations of violence.

Cyberbullying is aggressive behaviour towards a selected person or group of persons for the purpose of obtaining a certain benefit. Cyberbullying differs from bullying in the use of digital technologies and the infliction of only psychological damage due to the limitations of virtual space. Depending on the goals and methods, there are many types of cyberbullying: flaming, harassment, slander, fraud, alienation, cyberstalking, cybergrooming, cybermobbing, anonymous threats, trolling.

For the empirical study of this problem, a questionnaire was developed in order to determine the frequency of exposure of young people to the influence of cyberbullying and its types. Fifty-seven people took part in the survey on a voluntary basis, including 30 females and 27 males aged 17 to 21, which gives an opportunity for a gender analysis of the given issue.

The survey showed that from their own experience of virtual communication, only 1 person has never experienced the types of cyberbullying mentioned in the proposed statements. That is, it can be claimed that almost all respondents faced cyberbullying, or at least one of its types.

Among the most common types of cyberbullying is cybergrooming (49%), which is the establishment of trusting relationships to obtain candid photos or videos and further blackmail. Trolling (39%) is also manifested to a large extent, which manifests itself in the form of humiliating, offensive messages and comments, the purpose of which is to provoke conflicts. Trolling is a way of dominating others in virtual space by humiliating them. Respondents were also

affected by impersonation (33%) and fraud (32%), which are ways in which outsiders obtain personal benefits at the expense of others. Alienation (30%) as a form of social isolation is also widespread on the Internet.

A comparison of the obtained results of male and female respondents showed that there is no statistically significant difference between their answers (t =0.25; p $\ge$ 0.1). However, it is important to mention the presence of differences in the percentage comparison by types of cyberbullying. Thus, surveyed male persons note such cyber influences as impersonation (39%), fraud (35%) and anonymous threats (19%), female persons suffer more from cybergrooming (67%), trolling (45%) and harassment (17%).

Therefore, digitalization is an integral part of modern life. Virtual space not only helps self-expression and realization, but also poses many dangers during communicative processes. One of the most common threats is cyberbullying, which is a type of psychological violence in virtual space. Young people who interact unevenly with virtuality are most vulnerable to bullying. Girls and boys are equally affected by cyberbullying, but the types of cyberbullying they experience are different.

To prevent and oppose cyberbullying, we developed the card game "Stop Troll!". The game consists of cards that describe different types of cyberbullying and how to respond to them and includes characters such as bullies and users. The goal of the game is to teach young people to recognize the manifestations of various types of cyberbullying and to withstand them in the virtual space.

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# CYBER RISKS AND CYBER SECURITY OF UKRAINIAN YOUTH

The development of technologies and the active cyber socialization of children in the last ten years have led to the actualization of the topic of cyber risks and cyber security of the young generation on the Internet.

For a modern person, it has become normal to be connected 24 hours a day. We use various messengers or e-mail to keep in touch with other people, social media to share information, Google to search for information, mobile games to pass the time. The Internet and various mobile applications have now become as integral a part of human life as clothes or food. It is already difficult for people to imagine their life without a smartphone.

Taking advantage of all the advantages that a smartphone or tablet with Internet access brings to our lives, people often forget that there is also a dark side. Namely cyber risk.

Cyber risk - can be considered primarily as a threat related to the Internet activity of users, both with its technological and psychological aspects, as well as with the storage of personal data. If I consider cyber risk from the point of view of information security, then it is the losses that the Internet user may suffer due to the violation of confidentiality, integrity or availability of information resources and personal data.

There are many different types of cyber risks:

SPAM, imposing unnecessary information

Forgery – creation and distribution of false information.

*Trolling* – social provocation or bullying in online communication. *Shock trolling* is the publication of a mass of personalized and aggressive posts with the intention of provoking anger, frustration or humiliation in the victim of trolling.

Slamming, inciting users to violence, aggression, intolerant attitude towards others in social networks.

Cyberbullying, harassment using digital technologies.

*Cyberboycott*, where the victim is unfriended/blocked on social media and ignored in every possible way.

Dangerous cyber challenges that encourage self-harm

Communication with strangers with undesirable consequences, for example, dangerous meetings with them in reality

Cyberstalking, using the Internet to stalk or harass a person

*Rettirg*, when a cybercriminal gains access to someone else's account and conducts correspondence on behalf of the account user.

Theft of personal data, account hacking to obtain confidential user information

*Cyber fraud*, crimes committed on the Internet with the purpose of receiving money (for example, selling non-existent services, forcing purchases, extorting money).

*Catfishing*, deceiving users during personal communication by using fake accounts or fake personalities (identities).

Cheating, a deception associated with blocking entry points in massively multiplayer online games

Distribution of personal information (photos, videos, recordings) without consent

Spreading *memes or viral videos* about a person to mock/abuse them. Posts on the network are made from photoshop, collaged or failed photos with the purpose of mocking/abusing a certain person.

Sexting, sending personal photos or messages of intimate content using smartphones, email, social media, etc.

Receiving messages on social networks with *unwanted images that accompany sexual behavior* (for example, a photo of genitalia)

*Cybergrooming* is the creation of a trusting relationship with a minor in a virtual environment in order to obtain intimate photos, in order to later demand money or for the purpose of coercing a sexual relationship.

This is not a complete list of what any person can encounter on the Internet. Not every adult knows how to deal with this or that cyber risk, despite all his life experience. Coping with cyber risks is much more difficult for children. Often this happens due to inexperience, emotional immaturity, inability to ask for help, lack of trust in family relationships, fears. In individual, complex cases, encountering cyber risks can lead a child to commit suicide.

The Laboratory of Psychology of Mass Communication and Media Education of the Institute of Social and Political Psychology of the National Academy of Pedagogical Sciences of Ukraine regularly monitors situations related to youth cyber risks. Two All-Ukrainian polls have already been conducted in 2018 (Naydonova, 2018) and 2020 (Naydonova, 2021).

Respondents were offered questions with 3 answer options: "yes", "no", "it is difficult for me to answer". The most primitive response scale was used in the survey to facilitate the procedure and children's understanding of the questions. The tables below show the results of children who answered "yes".

The 2018 survey included 1,439 respondents, 768 female and 671 males, between the ages of 13 and 16.

According to the results of these studies, in 2018, Ukrainian schoolchildren encountered the following cyber risks most often (almost 60%), children face cyber risks like SPAM, when they are forced with unnecessary information, the least (almost 6%) children encounter such a risk as incitement to self-harm (See Table 1.)

Table 1. Cyber risks 2018

Title	%
imposing unnecessary information	59,7
interference with your device, virus infection	57,0
spreading false information about you	21,4
theft of your personal data or use of your accounts by others on your behalf	19,9
cyber fraud - selling non-existent services, forcing purchases, extorting money	15,6
intimidation, threats to harm you	14,4
cyberbullying - bullying, insults, humiliation, psychological terror against you	14,0
communication with strangers with undesirable consequences, for example, dangerous meetings with them in reality	7,1
incitement to violence, aggression, inciting intolerance towards others	6,1
incitement to self-harm	5,8

But at the same time 14,3% of children think that the Internet is an absolutely safe place for them and 26,8% assure that they personally have not encountered any dangers while using the Internet.

The 2020 survey included 1,681 respondents, 918 female and 763 males, between the ages of 12 and 17.

In the 2020 survey, we can observe a different picture.

The frequency of encounters with some cyber risks that scored low in 2018 has now almost doubled, while the most common cyber risks in 2018 have slightly "lost" their positions (See Table 2).

Title	%
imposing unnecessary information	42.0
interference with your device, virus infection	30.5
cyberbullying - bullying, insults, humiliation, psychological terror against you	23.0
spreading false information about you	17.6
intimidation, threats to harm you	16.7
cyber fraud - selling non-existent services, forcing purchases, extorting money	16.4

theft of your personal data or use of your accounts by others on your behalf	13.3
incitement to violence, aggression, inciting intolerance towards others	11.1
communication with strangers with undesirable consequences, for example, dangerous meetings with them in reality	8.9
incitement to self-harm	8.9

Also in 2020, children were asked additional questions about certain types of cyber threats (See Table 3).

Table 3. Additional questions for identifying children's cyber risks

Title	%
Have you become a target for TROLLING on social networks (for the amusement of other people)	33.1
Have we become a victim of SHOCKTROL – a mass of offensive posts with the intention of provoking your anger, frustration or humiliation	22.7
Have you gotten into fights on social networks (FLEMING), when in the heat of an argument you said things that you would not have said in a calm conversation?	32.4
Have you experienced STALKING – intimidation, threats of violence, covert tracking and stalking	22.2
Have you ever had to do something you didn't want to do because of online threats and blackmail?	55.4
Have you ever been in a RATING situation – when someone without your permission took control of your devices, accessed files, spied on or controlled the device?	35.3
Have you encountered CATFISHING on social networks – deceiving people in relationships by creating false identities (for example, accounts of non-existent people)?	37.0
Have you been in a situation of SLAMING — inciting observers to cyberbullying, where the observers were not the initiators of the fights?	23.9
Have you encountered the fact that your personal information (photos, videos, recordings) was distributed in social networks without your consent?	26.1
Have you ever shared your non-public photos/videos (that you wouldn't want to see on a school billboard) with other people (for example, on dating sites or special apps)?	28.6
Have you ever been asked (requested) to send photos/videos of a personal/intimate nature by people in the network whom you only met online?	31.1
Have you experienced SEXTING – text messages or comments addressed to you that were sexual in nature?	50.2
Have you come across unwanted images on the Internet that accompany sexual behavior?	50.4
Have you encountered CYBERGROOMING - when strangers on the network tried to attract you and invite you to meet offline?	39.4

But at the same time 7.75% of children think that the Internet is an absolutely safe place for them and 6.08% assure that they personally have not encountered any dangers while using the Internet.

We can state that the level of children's encounters with various types of cyber risks is actually very high. Although children may not perceive what they encounter online as cyber risks. They may not understand the dangers and the consequences.

Just as adults explain to children the dangers of an open fire or the thin ice on a river in winter, they should also explain that they should not send photos of a private or intimate nature, even to people they consider close friends. Because when such a photo is sent, the child loses control over it. This photo may become the subject of blackmail or retaliation, it may become public by being sent to other people

In connection with this, I consider it necessary to introduce such a subject as cyber security into the school curriculum. To prepare children to face cyber risks in adulthood.

Cybersecurity in a general sense can be defined as the protection of the vital interests of a person when using cyberspace.

It is worth noting that technical aspects of cyber security are often considered in scientific literature. But there are quite a few approaches that would describe the psychological component.

For example, an adult tells a child: "You can't follow dubious links on the Internet, because online games and applications may contain "viruses" or phishing, so you should only use verified official resources to download the necessary files." You can often hear "I know" in response. However, such knowledge is theoretical, it is not backed by any specific experience or visual history, which is why you can still find "TROJANS" or other virus programs operating in tablets or computers.

Cyber security needs to be explained to children with concrete examples. It is necessary to create action plans with the children in case they encounter a cyber risk (clearly explain the sequence of actions). Children need to be told who they can turn to for help. Sometimes it happens that children do not want or are ashamed to ask their parents for help, so it can be any adult whom the child trusts (brother, sister, grandfather, grandmother, aunt, uncle, school teacher, psychologist, etc.). Also, children need to be told about cyber police and laws related to cybercrimes and their punishment.

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# SOME THOUGHTS ON CYBERSPACE, SOCIAL NETWORKS, AND MENTAL HEALTH

The worldwide spread of new technologies laid the foundation for a new branch of psychology – cyberpsychology, which aims to understand the psychological processes associated with all aspects and features of human behavior in cyberspace (Attrill-Smith, 2019). New science explores Internet personality and behavior; social media and psychological functioning of an individual; video games; telepsychology; virtual reality, artificial intelligence, etc. (Ancis, 2020). Among the many challenges cyberpsychology face is the impact of social networks on mental health and psychological well-being of an individual.

The complex and dynamic interaction of the individuals in the digital world requires thorough analysis and deep understanding. Numerous social contacts and virtual groups, exchange of opinions, self-expression on the Internet where it is possible to present any ideal self-image have created a unique space that has become a "home" for billions of inhabitants of the planet Earth. There is a popular saying "Only love makes a house a home", however, hoping to find warmth and comfort in the digital world, the users often encounter not love but demons there, demons such as stress, depression, anxiety, low self-esteem, aggression, that is, everything they have tried to avoid in the real world. An ambiguous impact of social networks on the users has led to discussions among scientists. While some researchers consider the positive effects of social networks on an individual's psychological well-being, others emphasize the dangers of cyberspace.

Recent research suggests that the long-term use of social networking sites such as Facebook may be associated with symptoms of depression, anxiety, and stress. Pantic et al. established a relationship between constant presence on social networks and an increase in the level of depression (2012). According to Twenge and colleagues, time spent on screen activity correlates with increased severity of symptoms of depression and risk of suicide, although the positive correlation between social media use and mental disorders is significant only for girls (2017). Boers and colleagues stress that the excessive use of social networks and TV by adolescents can increase symptoms of depression (2019). Brooks found that the frequent use of social networks "led to lower performance on the task, as well as higher levels of technostress and lower happiness" (2015, p. 26). Although it seems that social networks can satisfy a person's need for social connections, research conducted by Kross and colleagues suggests that Facebook can undermine young people's sense of well-being (2013). Lin et al. agree upon the idea that the widespread use of social media increases depression, especially among young people (2016).

The researchers emphasize the influence of social networks on the spread of a negative body image, especially among women (Danylova, 2020). The emphasis on an unattainable beauty ideal over the past few decades has been accompanied by an increase in body dissatisfaction among both women and men (Tiggemann, 2004), which entails dysfunctional eating behavior, distress, and depression (Paxton, 2006).

Many people today are depressed due to the conflicts with others, layoffs, or serious illness; and excessive use of social media is a common factor that exacerbates this negative state. Regular users of social media are most often exposed to the bad news, as far as news related to wars, natural disasters, terrorist acts, political crises, and deaths are always top news. This negatively affects mental health and leads to the development of increased anxiety and symptoms of depression. Lyall and colleagues found that the use of Facebook around bedtime increased the likelihood of developing major depressive disorder by 6% and decreased subjective happiness by 9% (2018). Aldao notes that such a situation locks us into a vicious circle of negativity: "the more time we spend scrolling, the more we find those dangers, the more we get sucked into them, the more anxious we get" (Nittle, 2021).

The other voices are also heard within the cyberspace discourse. Jelenchick and colleagues stressed that they did not find sufficient evidence that supported a relationship between social networking site and depression: "counseling patients or parents regarding the risk of "Facebook Depression" may be premature" (2013, p. 130). Another study shows that the use of social media under the condition of positive interactions, social support, and social connection reduces depression and anxiety, increases self-esteem and life satisfaction, while negative interactions and social comparisons are associated with higher levels of depression and anxiety (Seabrook, 2016). Cole and et al. found that the use of Twitter in the context of social support could reduce depression (2019).

The digital world is a relatively recent phenomenon, therefore, the potential relationship between its use and mental health and psychological well-being has not yet been adequately explored. Most of the research has been published over the last decades; and until now, the scientific community has not been able to fully interpret the obtained results and come to final conclusions. As Timpano and Beard rightly point out, the future research should be focused on types and motivations for use of social networks; identify potential mechanisms linking the social media use and mental health symptoms; reveal an impact of social networks on declines in face-to-face social interactions; understand the link

of social networks with maladaptive coping strategies and health behaviors (2020). The relationship between social networks and psychological functioning is not straightforward and depends on many factors, such as the way it is used, communication patterns, emotional state, comorbidities, self-awareness, values, motivation, attitudes, and preferences. Anyway, we cannot avoid cyberspace, in which a significant part of our lives takes place. Our health and well-being depend on our ability to interact effectively within this challenging space.

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# ONLINE MODULES OF PSYCHOLOGICAL HEALTH PROMOTION IN TIMES OF THE RUSSIAN-UKRAINIAN WAR

The modern war on the territory of Ukraine is a challenge to the social stability of the whole world. Human losses, mass war migration, economic insecurity, environmental threats, and loss of faith in the peaceful resolution of conflicts generate various controversial processes. However, the slogan "health preservation is the preservation of a nation" would be appropriate in rear resistance to a full-scale military invasion of the Russian Federation on the territory of Ukraine. Millions of Ukrainians are currently faced with an extraordinary challenge to self-preservation both because of objective threats to their physical integrity and derivative emotional states. But preserving life and health is the primary task of further nation-building and a free, peaceful future in the long-term perspective.

Psychological well-being is one of the priorities in health preservation overall. Due to the governmental plan of restoration of Ukraine presented in July 2022 on the recovery.gov.ua site, there is an outlined national mental health program to support the needs of people affected by war. Remarkably, the efforts are oriented toward integrating psychological interventions into health care and education systems and strengthening the role of digital health (e.g., telehealth, patient's online cabinet). This aim seems to be realistic both because of the opportunity to stay online for most of the war victims and because of the successful work of the Ministry of Digital Transformation of Ukraine in making a lot of social services accessible online.

Digitized health promotion is one of the top agendas globally. There is increasing literature and numerous ongoing initiatives exploring how innovative technology and digital interventions can contribute to health and well-being. But there are also some peculiarities and limitations. In our previous research, we found out that there are at least four predictors for successful online support of psychological well-being in Ukrainian citizens (Dvornyk, 2021):

- 1. High level of online behavior activity in seeking support.
- 2. Higher than average ability to receive electronic support.
- 3. High level of identification with the electronic support community.

4.Precise sociodemographic characteristics of users: women in their 20s, with secondary/special secondary education, satisfied with their financial security, and living alone.

Since the beginning of the Russian full-scale military aggression, we were observing activities in the Ukrainian Internet segment due to the model of psychological well-being support by electronic means in the transitive social conditions, which was also presented in our previous publications (Tytarenko & Dvornyk, 2021). Originally there were outlined such modules as:

1.Finding solutions to maintain positive personal relationships and contribute to the well-being of others.

2.Psychoeducation to maintain a person's sense of competence and ability to engage in meaningful activity.

3. Monitoring of changes to maintain personal goals.

4.Inner peace achieving and self-expression to maintain self-respect and optimism.

But we've discovered new aims during wartime and renamed the modules.

Firstly, it is observed the *Involvement* module. It contains a movement, an intention directed towards potential recipients of psychological support and health promotion. As it is known from crisis counseling, in a state of shock or trauma, a person returns to the basics, reacts primitively, loses higher behavioral attainments, and therefore cannot use more mature methods, cannot ask for help directly and targeted. Thus, online tools can simplify the procedure of applying for assistance.

On the platforms of Facebook, Instagram, Twitter social networks, Viber, Telegram, and WhatsApp messengers, on the governmental and mass media web pages, there is an active distribution of announcements about the readiness of individual specialists or organizations to provide psychological assistance to the population affected by military actions. Predominantly this takes the form of text ads with links to more information. In other cases, users request psychological support on search sites (such as Google), and optimized recommendations play a crucial role.

The second module of psychological health support and promotion is *Psychoeducation*. This module is aimed at instructing how to act in a crisis, ensuring that victims understand their problem, creating motivation to achieve change, and teaching beneficial self-preservation practices, methods of managing anxiety, fear, anger, guilt, etc.

Such concentrated information can be found on the websites of government and charity organizations, in infographics and posts by experts in social networks and messengers, and specialized bots. There are also thematic psychoeducational webinars and video lectures by foreign and domestic psychologists in Zoom, Google-Meet, or other online rooms. Even more popular becomes the influencers phenomenon in YouTube videos and Instagram streams: bloggers, showbusiness celebrities, and social activists follow the empowerment approach in traditional health promotion, outlining the audience's ability to change the environment and trying to increase health literacy (Hubley, Copeman, & Woodall, 2021). Unfortunately, the quality of such education is usually doubtful and stochastic, so there is

an urgent need to use scientifically based psychoeducation interventions to follow the planned mental health program for Ukraine's war victims.

The third module we've called *Finding solutions*. It allows the users to share concerns, ask for emotional support or possible solutions in the referent chat community, and become a resource for the community themselves. It is presented primarily by personal pages' platforms, closed social network groups, and messengers. For example, there is a group chat "SvitloChat: psychological help to Ukrainians during the war" on Telegram messenger, which gathers over 29 000 participants and works as a hub to connect clients and psychologists. Also, there is an engaging app initiative called "Obiymy" (Hugs) where you can create your network of loved ones who are far away but with whom you can exchange various bodily attention online - touch, hug, kiss, pinch, etc. This module covers the users' need for informational and emotional support and can be used as a way to promote psychological health knowledge due to the "word of mouth" phenomenon.

At last, the fourth module is *Assistance*. It provides long-term socio-psychological support through regular individual or group meetings on Skype, Zoom, Google Meet, Facebook Messenger, or other platforms. Such support is provided mainly by professional associations and the personal initiative of specialists.

The most effective assistance should be recognized as that one based on the previously existed connections. Such connections, to some extent, compensate for the feelings of alienation after traumatic events and the impossibility of physical contact.

We deliberately do not use the 'psychotherapy' word here because classical therapy, where you can slowly unpack old experiences, and gain new ways of interacting with the world, is almost impossible for war victims. The war continues, and the psyche tends to react acutely. On the other hand, this traumatic situation can serve as a stimulus for quality changes, even if it is painful; that's why it requires support.

Due to our practical experience, there are also some observations on the clarity of online assistance to promote psychological health.

In particular, the gadget and the qualitative connection should be available to provide the proper video/ audio. In other cases, the instability of the Internet connection should be compensated by the ability to make a call to a cell phone or continue interaction in a chat. To prevent the negative consequences of disconnection, the specialist needs to have contact with the client's trusted person in case of an emergency.

Also, it is crucial to follow the confidentiality rule to provide a feeling of safety to a client. The clients also need to arrange their space to reduce interruptions by other persons; thus, it will help establish a trusting contact with a specialist.

The presented online modules of psychological health promotion in wartime can be used as a frame to incorporate into a national mental health program in Ukraine, also considering the best European practices. Additional research is needed, including the empirical verification of the effectiveness of such modules in various samples.

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# USER-CENTERED SECURITY IN MACHINE LEARNING

Services that collect, and process (sensitive) personal data through algorithms have become as ubiquitous as the Internet itself. Their increasingly centralized character, having now also permeated academia, raises societal and academic concern regarding its alignment with public interest. While related academic work may—by and large—address societally relevant problems, the resulting tools are often not provided to be used by the public, and, more importantly, nor are its methods designed from a typical user's point of view. This has become particularly true for the field of Machine Learning (ML), where despite efforts to 'democratize' its state-of-the-art techniques (requiring enterprise-scale compute), there exists a simultaneous trend toward monetizing access to such models. This is problematic from a security and privacy point of view, as it impedes inspection of the models, addressing dual-use issues, and control over data usage.

Towards addressing these concerns, this talk discusses the development of a framework for user-centered security in ML, and demonstrates how it can improve the accessibility of related research. Accordingly, it focuses on two security domains within ML (more specifically, Natural Language Processing) with great public interest. First, that of author profiling, which can be employed to compromise online privacy through invasive inferences. Without detailed insight into, and access to, these models their predictions, there is no reasonable heuristic by which Internet users might defend themselves from such inferences. Secondly, that of cyberbullying detection, which assumes a centralized approach; i.e., content moderation across social platforms. As access to appropriate data is restricted, and the nature of the task rapidly evolves (both through lexical variation, and cultural shifts), the effectiveness of its classifiers is greatly diminished and thereby often misrepresented.

Under the proposed framework, we investigated the use of adversarial attacks on language; i.e., changing a given input (generating adversarial samples) such that a given model does not function as intended. These attacks form a common thread between our user-centered security problems; they are highly relevant for privacy-preserving obfuscation methods against author profiling, and adversarial samples might also prove useful to assess the influence of lexical variation and augmentation on cyberbullying detection.

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# THE ROLE OF MEDIA DISCOURSE IN COVERAGE OF MILITARY CONFLICTS

In the most general terms, discourse can be considered as a system of signs and images representing certain ways of marking, interpretation and representation, which produce the generation of meaning. At the same time, discourse is power, the power of a symbolic order, because discourse exercises control over people's minds, forms a certain system of meanings, meanings, ideas, values, preferences, mythologized images, and stereotypes in public consciousness. Its main agents are representatives of the «symbolic elite» - writers, teachers, journalists, orators, propagandists, as well as political ideologues, cultural figures, show business, advertising creators, popular TV presenters, bloggers.

As we have already seen, today the media are the main providers of information, thanks to which the audience is aware of what is happening, and also forms its opinion about current events. In the conditions of a conflict, especially a military one, the influence of mass media on the audience is particularly clear. They can act both as a propagandist of the official point of view and as an oppositional actor in the political process.

Such an initial attitude contributes to the fact that the mass media act as both an opportunity and a threat for the parties involved in a military conflict: the opportunity is manifested in the favorable coverage of events for one of the parties, the threat is in the generation of negative information for the other party.

The problem of analysis of mass media discourse on war is closely related to the institutions of propaganda, ideology, information warfare and manipulation of public consciousness. They are actualized in the discourse, being «the basis of social practices... and influencing them» (Дейк, 2000: 249). Therefore, when analyzing media discourse, only structural analysis is not enough, since discourse is not only a textual structure, but also a complex communicative phenomenon that includes the social context (perceptions of mass communication participants and their characteristics) and various strategies (underlying media news production).

As the French philosopher M. Foucault wrote, «discourse is not just something that conveys a struggle or a system of domination, it is the thing through which this struggle takes place, discourse is power that needs to be seized» (Шевченко, 2021). Therefore, in addition to the concepts of propaganda and ideology, the media's discourse on war is also associated with power.

Power is a complex concept that encompasses social, political and economic features and can be understood from different perspectives. Understanding power can be useful from the perspective of hegemony, that is, a system of domination based not on violence or economic control, but on political, cultural, and institutional influence. Hegemony establishes institutional control over ideas and, as a result, influences social practices, so it is a path to power that encompasses the public. Cultural dominance, dominant ideas, events or things, are introduced into society through discourse. Therefore, there is power over language, power that gives legitimacy to language. This is what can be called power over the discourse.

However, it is necessary to distinguish between the exercise of power through discourse and the power of discourse. Researcher Jean Blommart states that «the mass media have the power to create profound ideological messages out of trivial, sociologically insignificant events or phenomena. The passage of a message through mass media transforms it into a message of great importance» (Павленко, 2015). In this way, mass media exercise a certain power – the power to formulate and transmit messages to the public. The researcher claims that the power of discourse represents a secondary power, an authorized power that serves the interests of the higher power.

The researcher Pierre Bourdieu points out that the linguistic exchange, that is, the communication between the addressee and the addressee, is similar to the economic exchange established between the producer, who has a certain power, and the consumer. Thus, utterances not only need to be understood, «they are also signs of wealth to be valued and signs of authority to be obeyed» (Бурдье, 2001).

The term «ideology» is closely related to power and is crucial to this concept, as it embodies power, legitimizes it through cognitive processes. Ideology is a set of beliefs, a conceptualization of ideas that, even if they are considered neutral in themselves, through the representation of social reality in the media carry out manipulation. From this point of view, ideology is considered as an idea, discourse or practice in the service of the struggle for obtaining or maintaining power.

However, the whole concept of ideology is more complex. In a narrow sense, ideology can be considered as a representation of ideas or tools of the struggle for power. However, a more abstract concept of ideology, formulated by Bourdieu, Foucault, claims that ideology is not focused on one specific object and does not belong to one specific actor – it penetrates through all societies or communities and leads to a normalized model of thought and behavior. Ideology, being a symbolic representation of organized ways of thinking, shapes public opinion and thereby implants the meaning it is supposed to represent. Values circulate and become common ways of thinking. Most of these processes are hidden, not revealed to the public, and therefore effective. People tend to take what they read for granted, and that is how they

are controlled. According to van Dijk, people control themselves with the help of ideologies that they have in their heads (Дейк, 2000: 164).

Cognitive processes are involved in the production and interpretation of discourse, so knowledge is an important link between discourse and society. In other words, «social interaction, social situations, and social structures can influence through people's interpretation of this social environment» (Дейк, 2000: 143). Memory (short-term and long-term), mental models (our personal experience, which has a standard hierarchical structure of a spatio-temporal setting, participants, actions/events, goals, semantic models that take into account personal interpretation of discourse, contextual models that represent the communicative situation ) and social cognition (general and abstract knowledge of the world, attitudes, ideologies), all of this consists of cognitive structures that help produce and understand discourse ((Дейк, 2000: 195).

While knowledge is universal and common to all, attitudes and ideologies are shared only by certain groups. Ideology is a system of beliefs shared by groups in order to promote their interests and conduct social and political practices (Дейк, 2000: 166). Ideology is the «definition» of a group in terms of their identity, actions, goals, norms and values, resources, interests; in addition to this, ideology is usually addressed in relations with other social groups (Molinier, Gutermann, 2004). According to van Dijk, discourse plays a key role in the exercise of power. He understands power in terms of controlling the actions of certain groups and controlling their personal and collective feelings (attitudes, knowledge, ideology). Since control is often manipulative, it is not always easy for the public to expose ideologies.

This manipulative function of the mass media discourse, which was discussed earlier, is becoming more and more noticeable today. The media actually control culture, passing it through itself as a «filter», isolating certain elements from the general mass, giving special weight to some, devaluing others. What does not get into mass communication channels, in today's world, has practically no effect on the development of society. Often, the appearance of any topic in the press is determined by the interests of the ruling elites, who benefit from a certain orientation of public opinion and consciousness. A person, therefore, cannot avoid the influence of the media.

In the process of covering military events, the mass media form discursive versions of reality, with the help of which a program is set that orients the readership. Discursive versions of reality produce stereotypes and prejudices.

It is worth noting that war is a socio-political phenomenon that represents the extreme form of solving socio-political, economic, ideological, as well as national, religious, territorial and other contradictions between states, peoples, nations, classes and social groups by means of military violence. According to the norms of international humanitarian law, a war is considered as such if there is an official declaration of war.

Today, countries rarely declare war on each other, but as we can see, wars do not disappear. In such conditions, the Geneva Conventions of 1949 introduced the concept of «armed conflict», in particular, an interstate armed conflict means a situation of «declared war or any other armed conflict arising between two or more Contracting Parties, even if one of them does not recognize the state of war». According to this article, international armed conflicts arise between states when one or more parties use their military resources against another party regardless of the reasons or strength of the confrontation.

However, everyone knows that today there is a hybrid version of war, for which the norms of international humanitarian law do not apply. It is important that the media play one of the main roles in the hybrid war – they can create internal social contradictions through propaganda with the transition to information warfare.

Also, the signs of a hybrid war are: 1) creation of economic problems with the transition to an economic war, and most importantly – opposition to the ties of the victim country with neighboring countries; 2) support for separatism and terrorism; 3) promoting the creation of irregular armed formations (insurgents, partisans, etc.) and their equipment. All these signs are inherent in the actions of the Russian Federation against Ukraine. The mass media serve as the best indicator of the moods and perceptions of the international community.

Language is widely used as a tool to exercise power, ideology, establish discrimination and build inequality. In fact, language can be considered as a secret weapon, because the hidden meanings and consequences that can be deliberately embedded in texts are not always obvious to the public (Шевченко, 2021). Mechanisms of mind control and manipulation applied through discourse contribute to the reproduction and reinforcement of power and control. Therefore, the role of language in these processes should not be underestimated. Even more important is the role of language and discourse in armed conflict. The attitude of the readership to the parties involved in the conflict, and to the conflict itself, often depends on the first assessments and opinions, on those versions of the events that were the first to get into the mass media.

Language means have unlimited possibilities in creating and spreading ethnic prejudices, in building different versions of reality, as well as in orienting public consciousness. Researcher I. V. Zhukov notes that communication according to the «media – recipient» scheme has an asymmetric nature: there is a temporal and local disconnection of communication participants, which weakens the discursive protection of the mass audience and opens up the possibility of manipulating the consciousness of the collective recipient. The version of military reality that is actualized in the mass media is taken for granted due to insufficient personal military experience of the audience and the status of the source of information.

Also, the military discourse of the media is characterized by the selection of language means for the special nomination of the parties to the conflict, their actions, polarization of the version of reality along the lines of collective – WE-THEM – and individual – I-YOU, WE, THEM – polarization. Linguistic features of military media discourse are:

• in the special functioning of the lexical-semantic field (LSP) «war» (does not depend on the composition of WE-GROUP and THEM-GROUP);

• in the use of lexical restrictions and euphemisms, which perform the functions of minimizing the responsibility of the speaker, hiding the relationship to information, protection against erroneous interpretations, etc.;

• in the predominance of lexical stylistic means (ideologically evaluative epithets, metonymy, metaphor);

• in the peculiarities of temporal deixis (indication of the preceding aggressive actions of THEM-GROUP and – as a result – in response to the reaction of WE-GROUP) and discourse deixis (reference to an unclear source of information, double references characterizing the degree of data interpretation);

• in the structure and methods of argumentation and counter argumentation of discursive versions of the conflict.

Viewers are used to reading conventional language without thinking about the laws of its construction, about what is hidden behind external rules, ideological and technical restrictions. Since for the lion's share of the population, printed newspapers and their online versions are the main sources of information, studying the discourse of war in online publications allows us to learn how the mass media can influence public opinion and shape views on important political events.

The attitude of social groups towards military actions often depends on how these events are presented by the media. Here we can even talk about the programming of thinking, since a ready-made thought (interpretation of reality) placed in any ideological template is presented to the readership. Limiting yourself to the description of only the manipulative influence of media discourse is incorrect, because it is carried out along with informational, psychological and ideological influence. However, the manipulative component plays a significant role in orienting public opinion and is of undeniable interest for describing the linguistic structure of the media's discourse on war.

The discourse on war should only be considered at an interdisciplinary level. We get this opportunity thanks to the critical analysis of the discourse, which embodied and expanded the research credo about the sociality and psychology of human language, formulated in the middle of the 20th century.

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# SPECIFICS OF COPING WITH STRESS THROUGH MOBILE MENTAL HEALTH PROGRAMS IN THE PANDEMIC CONTEXT

One of the many negative consequences of the COVID-19 pandemic is the "second epidemic" - epidemic of negative psychological effects. Current psychological studies demonstrate a significant increase in stress level during the COVID-19 outbreak and the implementation of quarantine measures (Liu al. et., 2020; Rodríguez-Rey al. et., 2020).

The relevance of the topic of research is determined, on the one hand, by the current heightened level of psychological stress related to the pandemic and more specifically its consequences of self-isolation, financial instability and health concerns, and, on the other, by the increasing degree of informatization of society.

The current situation of the pandemic, the devastating impact of which on mental health is a proven fact, also makes the development of technology for accessible psychological care crucial. One of the many negative consequences of the COVID-19 pandemic is the massive manifestation of negative psychological effects, among which the increase in psychological stress - a functional state of mental tension and disorganized behavior that develops as a result of the real impact of social, psychological, environmental and occupational factors (Gloster al. et., 2020).

Technologization of psychological support plays an integral role in reducing the negative effects of the pandemic. Mobile therapeutic applications are a promising strategy for addressing the mental health consequences of the pandemic because of their potential scalability, reach and effectiveness, especially at a time when face-to-face counseling may be unavailable due to social distancing and safety regulations (Balcombe, 2020).

In spite of all the advantages, mobile therapy apps have a very modest evidence base and very little research on their effectiveness, despite a rapid increase in the number of such apps and their users (Marshall al. et., 2020). There is therefore a demand for a comprehensive study of such apps.

In April 2021, I conducted an online study specifically to investigate the effectiveness of mobile mental health apps as a tool for dealing with psychological stress.

I hypothesised that users of mobile therapeutic apps would have lower levels of psychological stress, objectively and subjectively, than those who do not use them.

The sample consisted of 58 people and was formed according to the snowball sampling method. The tools of the study included an introspective questionnaire aimed at identifying the level of stress and physiological, intellectual, behavioral and emotional signs of psychological stress in the respondents, as well as their experience of mobile therapy programs, if any; the Psychological Stress Scale (PSM-25) and the Coping Strategies Indicator (CSI). It should be noted that the questionnaire contained the author's classification of the functionality of mobile therapy apps, which, unlike existing classifications, focuses not on the most integral apps, but on their actual functionality. This was due to the fact that many modern applications of this kind have several different functions under their shell and users may be interested in completely different functionality, although in fact they are users of the same application.

Firstly, the results of the survey revealed a tendency of the respondents to rate their stress level higher as compared to the PSM-25 index, i.e. "overestimate" it, which may be due, apart from individual features, to social factors - general anxiety background, over-information about possible psychological consequences of pandemic and COVID-19, anticipation of crisis, etc.

The frequency of use of mobile therapy apps was found to have little effect on both objective and subjective levels of stress. More respondents with high levels of subjective stress were represented in the group with frequent use of apps.

In turn, the objective indicator showed almost absence of high levels of stress, and in the group of respondents who use apps frequently, there is absolutely no stress at all.

Such results may indicate a tendency of users of mental health apps to slightly exaggerate their stress level, but this assumption needs to be investigated further.

By analyzing the stress symptoms selected by respondents and taking into account the most pronounced symptoms, a certain correlation can be traced between these symptoms and the functionality of the therapeutic apps used.

Since the majority of users of apps from the "psychological help" category chose the symptom "gloomy mood" (it should be noted that the same symptom was the least expressed among users of apps aimed at self-awareness), this may indicate that app functionality aimed at the spiritual aspect of personality is not seen as effective by those users

who experience general depression, are in a gloomy mood, and feel anxious. People with such symptoms are still more likely to turn to traditional methods of psychological help, albeit in the shell of a mobile app.

The design of the study, as well as its structure, has some limitations. One factor that influenced the statistical validity of the data was the small number of groups that were formed at some stages of the study, depending on the respondents' responses to the questionnaire objectives. The reason for this distribution was the decision to base the questionnaire objectives on the results and design of the foreign studies. In turn, this decision was dictated by the absence of such studies in Ukraine and the general lack of research into the effectiveness of therapeutic mobile apps as a stress management tool. The study I conducted can be considered as a pilot study and now, understanding the trends and pattern of stress experience characteristic of domestic users, the study design can be further developed and successfully applied in practice by adapting it to Ukrainian audience.

Also, during the study, respondents were asked to provide more information about what a mobile therapy app is; a significant proportion of respondents (about 40%) were not aware of this type of self-therapy at all.

On this basis, I decided to provide respondents with an information block not only about the psychological phenomenon being studied, which in this research was psychological distress, but also about the tools being researched, i.e. mobile mental health apps, when conducting research on a similar topic in the future. The lack of such a block in this case was due to its perceived irrelevance, the reason for which, again, was the significant use of the experience of foreign researchers in those countries (USA, England, Republic of Korea) in which the audience has a much more substantial background in using this kind of application.

The need for a correction to the therapeutic applications' own classification of functionality was also identified. The reason for this is that a group of functions such as art techniques was not included in the classification. The need for taking this group of functions into account was expressed both by the significant number of respondents (around 9%) who stated the lack of such an option for a complete response, and by the fact that art methods, art therapy, are an important element in the process of coping with stress symptoms. In the future, the functionality of art methods in the context of therapeutic applications will be explored and included in the classification.

To sum up, it is worth pointing out the fact that the mobile app market has managed to respond to consumer demand for accessible and mass therapy (Chowdhury, 2020), but not the research field - app stores are flooded with offers of various therapeutic apps and their number, as well as financial interest, only continues to rise, while research of the effectiveness of these apps is practically non-existent. Under current circumstances one should not deny the technologization of the sphere of psychological aid - it is inevitable, as well as technologization of other spheres of human professional activity and everyday life. It would be more productive to actively study and research this area and, according to findings, develop recommendations for users in the position of a client as well as users in the position of a psychologist or therapist.

Those independent studies conducted, including mine, do not demonstrate significant effectiveness of mental health apps as a tool for dealing with depression, anxiety, and psychological distress. The research hypothesis of lower levels of psychological stress in app users compared to those who do not use them has not been confirmed.

It can be assumed that this kind of software is currently useful as an auxiliary tool in therapy rather than as a valid alternative. Also based on the findings of the study, we should note the high interest of respondents in such apps - more than a third of respondents who were in the "non-users" category when they took the survey began to use mental health apps after taking the survey, as it was from the study that they learned about them. This enthusiasm, in my opinion, also confirms the relevance and necessity of research in the field of mental health apps. In turn, I plan to refine the author's questionnaire and classification of app functionality according to the gaps identified and reported and apply it to research the effectiveness and user attitudes towards such apps.

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# THE ROLE OF TRADEOFFS AND MORALIZATION IN THE ADOPTION OF BIG DATA TECHNOLOGIES

Big data technologies have emerged in various domains such as criminal investigations, healthcare, hiring, and retail, and come with both benefits and costs. They can improve healthcare and help solve crimes faster but continuous surveillance can also violate people's privacy and biased algorithms can be discriminatory. Researchers and ethicists voice concerns over the use of these technologies often in a language indicating a moral attitude, but people continue to use these technologies despite the concerns. We addressed the following open questions: 1) How do people make tradeoffs when benefits of these technologies are pitted against the costs, especially when they have to make these decisions for other people's privacy protection? And 2) What is the extent to which people hold moralized attitudes towards big data technologies and how can we change people's moralized attitudes? Overall, we found that people place importance on both data protection and benefits of the technology. However, people are willing to compromise others' privacy when their own privacy is protected. Inter-individual differences such as sensitivity to justice play a role in both tradeoffs and moralization and inter-individual differences in acquiring privacy information is associated with tradeoffs. People vary in their moralized attitudes and do not show consensus in moralization of these technologies. People can be persuaded to change their moralized attitudes with the use of moral and non-moral persuasive messages. However, moral persuasive messages can increase moralization and lower people's willingness to compromise on issues related to these technologies. These findings provide a foundation for understanding people's relationship with new big data technologies. They contribute to theories related to decision-making and moralization by applying existing theories to a new problem and simultaneously updating these theories.

### INTERGROUP INTERACTION IN THE SPACE OF IMAGINED AND VIRTUAL GROUPS

The development of Internet technologies and the creation of modern gadgets, such as smartphones and tablets, contributed to the fact that their use acquired new features and became more and more affordable. The creation of new programs and technologies helped people communicate with each other, exchange information, news, photographs and opinions in multitude of applications, for example, Viber, WhatsApp, Telegram, etc. These applications, in addition to possibility to create and maintain so-called "channels", provide ability to discuss or to create thematic groups and to engage verbal interaction in them. Thus, these groups develop a certain special communicative group field, virtual space, filled with emotional and informational interpersonal exchange based on mutual understanding.

Cyberspace is a certain reflection of the social environment, so the processes present in real groups take place in virtual ones. Fairly often a violation of certain boundaries of the group members and their protection, restoration and uphold. Members of such groups often provide group support to their comrades, use their in-group status and, in particular, leadership.

In the modern world full of uncertainty, in the realities of Ukraine, engulfed in the war due to the Russian unprovoked attack, people are looking for additional information that could shed light on what is happening and, thus, for some time reduce anxiety caused by uncertainty. Anxiety mobilizes informational behavior of people in the direction of clarifying and accessing risks and threatening events, as well as stimulates an exchange of views on what actions will help to reduce or avoid them.

Multitude of people in Ukraine forgo television programs in the favour of Internet, which provides much greater flexibility in accessing information. On the Internet, people have a choice - to view feeds of social networks (in particular, Facebook for those who prefer detailed and deep analysis; Twitter, with more brief, perhaps "bite-sized" pieces of news or information, which tend to be more interconnected; or perhaps any other social network) or use mobile/PC applications such as Viber, WhatsApp or Telegram (which provide the possibilities of tete-a-tete or group communication based on emotional connection or thematic interest).

With the beginning of an unprovoked full-scale Russian invasion, plethora of new Telegram channels arose, and many of pre-existing got experienced growth (be it in outreach, quality, or topics they cover). Many of those channels present information structured by the author(s) of the channel, which helps to navigate in those uncertain times. For our study, Telegram application will be a point of interest as a platform for creating groups for communication and interaction of interested participants.

In not-so-distant-past, there already was a sharp change in the communicative situation and habits in connection with the pandemic of COVID-19, when, due to the requirements of social isolation, people sought to overcome loneliness by communicating remotely, using social networks or other types of online social interaction [Korobanova, 2020]. In the study we conducted, significant connection was revealed between concern / anxiety in connection with the possibility of getting infected by COVID-19 and the use of social networks, as well as between the use of social networks and participation in online social interaction. Then, 62.6% of respondents noted growth of online interaction in the context of restrictions on social contacts, and 59.6% of respondents - growth in usage of social networks (Korobanova, 2020; Bondarenko et al., 2022).

In summary, it can be argued that the virtual world of communication in social networks and PC / mobile applications is real for their users and in a certain way compensates for the missing informational and emotional aspects of real communication, prompting a new type of behavior - "hanging in the Internet". According to our 2021 investigations, 57.1% of modern young people are included in online groups (Korobanova, 2022).

Considering the interaction in certain virtual online groups, we simultaneously consider that the participants in these groups partially consciously, partially unconsciously, consider themselves as members of several imagined groups. Interacting in virtual groups, they are members of their imaginary groups, therefore, in this way, intergroup interaction occurs between members of different groups. We consider group and intergroup interaction as the dynamics of the group conscious and unconscious. Imagined groups are groups present in the mentality of people, to which a person, an individual is belongs to. Virtual groups are groups of like-minded people created for a specific purpose, existing in virtual cyber reality, created in the Viber, Telegram, Facebook, Twitter PC/mobile application, etc., as well as discussion forums.

Let us denote that new member join the virtual group, while being members of certain real and imagined groups, having their own unique experience of intergroup interaction. Based on experience, they formed patterns, prescriptions and scenarios for such interaction. Thus, they react to the messages of the group as members of certain groups, according to previously learned communication models. At the same time, in the process of participating in the group, they take part in the formation of the interactive style characteristic of it.

Peculiarities of group and intergroup interaction in the space of virtual and imagined groups. Imagined groups are specially constructed communities, imagined and represented by people who perceive themselves as part of

them (Anderson, 2006). Members of the community hold in their minds a mental image of their similarity, and this unites them. Virtual (online) groups are characterized by the fact that, for the most part, in reality they have never met in full force and are only known virtually, via the Internet. However, the group members of such groups, with some experience of interaction, already form their own ideas about what can be expected from one or another participant, imagine his character and reactions that underlie behavior modeling.

Activity in virtual groups can be associated with leadership. Virtual groups may have several leaders, who can often change at the initial stage of the existence of these groups (Alexander, 2003). However, it takes time for an online group to recognize leadership (Hollingshead, 2011). An essential feature of virtual communication is the different geographical locations of the participants. The members of the groups we have examined do not live only in Ukraine and may be or may not be Ukrainians. Given the entry into virtual groups of participants from various territorial clusters, it should be recognized that cross-cultural communication often takes place in them. Sociocultural features and differences between cultures were identified, first of all, in the uncertainty avoidance - tolerance for uncertainty; power distance - closeness; individualism - collectivism; masculinity - femininity; long-term or short-term orientation (Hofstede, 1980). Thus, culture, as a value-normative system of collective mentality, determines many features of communication and social interaction of its representatives.

When interacting with a group, a person acts as a member of a particular group, although he may not always be aware of it, and is the bearer of the value potential of significant groups. If the group he is interacting with is not a group of his membership, intergroup interaction occurs. Another case of intergroup interaction is the interaction between microgroups within large groups. In accordance with sympathies and preferences, group members with a similar value background are combined into microgroups. In interaction with representatives of other microgroups with different values and life prospects, they will defend their point of view, their living space in the space of group interaction.

Sociocultural experience, the quintessence of the group conscious and unconscious, arises as a result of the territorial and geographical connection with the place of residence. Thus, territoriality is the sociocultural basis of normative unity and coherence of behavioral expectations established through the values and norms of interaction in a certain territory [Parsons, 1966]. Territoriality is fixed in the mentality, which reflects the group conscious and unconscious, as well as a layer of national culture, and affects the characteristics of interaction.

It is within the framework of intergroup interaction in the space of imaginary and virtual groups that territorial identity is honed. People tend to carry out the organization of space in a certain way in their lives, including the structuring of intersubjective space (Holl, 1991). In the space of group interactions important indicators, by our opinion, are significant relationships, the axiology of the life space, the territory of identity and the space of self-realization. They are associated with the significance, value of interaction in the group and have a motivating power.

Based on the tape of interaction in virtual groups, we present samples of social representations of intergroup interaction.

Processes of intergroup communication and	Samples, examples of interactions
interaction	samples, examples of interactions
Group Leadership	Admin: "Why are you stealing from our chat? Why did they take ownership of it? These are not your words; this is the post of our Victoria!
Maintain group status	"I won't argue and why)) If you could see, you wouldn't enter into an argument with me" "Should I expect an answer? Or is it an attempt to devalue the companion? "
Maintaining boundaries	"Dear members of the chat. Follow the thread of the conversation."
Keeping up the conversation	"Good morning, dear people! Have a nice day everyone!" "Thinking about the proposed topic, I remembered this film (link to the film)"
Confirmation of your membership in the group	"Good morning, dear people! Have a nice day everyone!"
Expression of support	"That's right. It was just the same feeling."
Maintaining a conversation, suggesting a new topic	"Girls, don't fight. Our task is to create, to create, and not to bring discord, of which there are already many now." Posts an image. "I propose better to contemplate the beautiful." (The picture moved the line of discussion into the mainstream of another topic).
Maintaining a conversation, suggesting a new topic	"Girls, don't fight. Our task is to create, to create, and not to bring discord, of which there are already many now."

*Table 1. Samples of interactions in virtual groups.* 

Maintaining a conversation, developing a topic	"My parents also collected certificates for retirement.
	Should have received an increase based on seniority. And
	in the end - there is no data there, it's gone here. If you
	don't like it, go to court, was the answer."
Opportunity, using conditional anonymity, to tell about	Ha, it's like this with my husband's father, when they
yourself, about some problem	started collecting documents for retirement, then an
	archive fire, then a flood. So I was shocked, how can a
	person be so unlucky. And now it is clear what is really
	happening.
Initiating, suggesting a discussion topic or event	Posting a photo of a fruiting raspberry. Caused a wave of
	enthusiasm, positive comments and photos of
	fruit-bearing shrubs
Manifestations of belonging to imagine groups	gardeners
	Utility users
	Trolls, spammers
	Followers of a healthy lifestyle
	Critical of official history
	Readers, lovers of literature
	Tax payers
	Travelers and tourists
	Family tree, family history researchers
	Connoisseurs of contemporary Ukrainian art
	Interested in mysticism
	Followers of national holidays
	Followers of the author of the channel, etc

There may be mutual understanding, emotional support, informational support, frankness, humor, sympathy, trolling, etc. You can analyze which groups are behind the communication of the participants based on the topics that sound in the channel feed. Among the imagined groups whose members entered into communication, are Gardeners, Users of public services, Followers of a healthy lifestyle, Criticals of official history, Readers, lovers of literature, Taxpayers, Travelers and tourists, Researchers of the family tree, family history, Connoisseurs of modern Ukrainian Arts, Interested in mysticism, Followers of folk holidays, Followers of the author of the channel, etc. For example, posting a photo of fruiting raspberries activated an imaginary group of gardeners. A heated discussion was caused by the theme of natural sites, beautiful landscapes, cleanliness of the environment by participants in imaginary groups of tourists, travelers, followers of a healthy lifestyle.

The study of the characteristics of virtual groups and the interactions that take place in them will be productive when taking into account the imaginary groups to which their members belong.

Activity in virtual groups can be motivated by the need for emotional support, the desire to express support oneself, the desire to join like-minded people, as well as status claims.

The processes taking place in virtual groups were the manifestation and maintenance of group status, the building of personal, interpersonal, group social boundaries. The means to achieve these goals that we found were, in particular, appealing to ethical standards, demanding a response, refusing to communicate, sending a member to a ban, etc.

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# PSYCHOLOGICAL ONLINE SUPPORT FOR FAMILIES EXPERIENCING AN AMBIGUOUS LOSS OF MISSING SOLDIERS

The open wounds of war remind us everywhere of numerous losses: material, physical, psychological, spiritual. But human losses were and remain the heaviest. More than one generation of psychologists will investigate the enormous damage caused by the war and occupation, which sharply divided people's lives before and after the war.

In one way or another, the entire population of Ukraine suffers from the circumstances of the war - destroyed houses, loss of work, loss of social status, injury and death of relatives. But the families of missing persons also face quite special psychological and socio-psychological problems. The main difficulty of this experience is the ambiguity of the loss, which freezes, interrupts and stops the flow of life of the relatives of the missing military. The term ambiguous loss was first conceived by researcher, Dr. Pauline Boss, in the 1970's. Ambiguous loss is recognized as one of the most stressful kinds of loss that individuals experience yet it often goes unrecognized. According to Dr. Boss, this type of loss occurs with a mixture of absence and presence and can be traumatic in its experience because of pain, confusion and distress (Boss, 2006).

Throughout the world, hundreds of thousands of people have lost track of a relative during an armed conflict or in a situation of violence. Due to the full-scale military aggression of the Russian Federation in Ukraine, these numbers of missing persons are only increasing.

When a family member goes missing during an armed conflict, it causes significant distress for all his or her relatives. Accompanying them in their search for the missing person and helping them to cope with the various difficulties their situation presents, is vitally important. Today, a number of individuals from various educational and cultural backgrounds are involved in providing such support. This is a particularly challenging task because it often requires action on many levels: financial, legal, administrative, professional, family, psychological, social (Andersen, etc., 2020).

In order to implement support during an ambiguous loss, interdisciplinary teams are needed, whose activities can be implemented at various micro and macro levels of community functions. It is about psychological support as a psychosocial process that contributes to the restoration and reconstruction of the living space that has suffered social, psychological and cultural damage. Agents of socio-psychological support of an individual when experiencing an ambiguous loss can be specialists of various profiles: according to the principle of professional intervention - professionally oriented (psychotherapists, social workers); on the principle of "equal to equal" (mentors, volunteers); according to the principle of trust - reference persons or groups, according to the principle of cooperation of efforts - mixed type (charitable organizations, specialized funds) (Tytarenko, Dvornyk, & Myronchak 2021).

During the search for missing relatives, the accumulation of psychological stress increases many times due to its prolongation in time and lack of clear results. Usual life seems to freeze during this period. There is a decrease in the individual resources of the individual, a decrease in the overall quality of life, a weakening of the functioning of the psychological mechanisms of protection and control, a slowdown in vital activity. Against the background of loss of control over external processes, a person instead seeks to strengthen internal control, which often creates excessive pressure, harms psychological health, restrains the recovery process and the ability of a person to clearly see things as they really are. As a result of ambiguous losses, various "mutations" and distortions occur in the processes of self-identification, perception of space and time, formation of life plans and perspectives, etc. All this can aggravate or deepen depressive states, states of anxiety, restlessness, apathy towards everyday life, depression, post-traumatic disorders (ICRC, 2013).

The reaction of relatives of missing persons to an ambiguous loss may include:

- Strong ambivalent feelings that range from confusion to anger and sadness
- Social isolation and building barriers
- Struggle with one's own thoughts (forbidden to think about death)
- Dissociative state (the feeling of living in a different reality where time has stopped)
- A feeling of guilty
- A feeling of hopelessness
- Blocked process of overcoming difficulties
- Difficulty with transitions and changes
- Symptoms of anxiety and depression
- Significant overlap with PTSD and others.

Loss, although not always according to its purpose, but by its nature is a deficit phenomenon. That is, what disappears from our mental reality due to various reasons naturally forms a temporary (prolonged or fixedly stable)

emptiness. This deficient void is by no means a complete void. After all, emptiness does not have any valence (a psychologically neutral or balanced state), while the deficient emptiness caused by the loss of a loved one is negatively charged.

When a person experiences a loss, which is accompanied by a feeling of desolation, he rather wants to fill these voids with something, to connect the parts of life torn by the loss, to restore the continuity of the life path, to restore balance to life, to stabilize. A deficit void can be compared to a black hole: it cannot be seen, it cannot be directly measured, but its "psychological weight" is so great that everything that falls into its gravitational field is absorbed by it. We can observe this phenomenon when experiencing difficult situations of loss, when a tragic or traumatic event becomes the center of a person's life experience and absorbs all his mental energy, thereby provoking self-isolation, the inability to go beyond the loss event, and depressive disorders.

If such negatively charged symptomatology persists long enough, then over time it can naturally provoke the emergence of one or another mental defect. If the term "defect" is understood broadly, then it will be a functional defect (violation of the basic functions of a person's vital activity), which will develop into neurotic states. The degree of severity of negative symptoms can vary in a fairly wide continuum: from a slight decrease in general vitality, a decrease in the level of self-efficacy and work capacity to serious mental disorders that destroy the integrity of the individual.

Given the demands of time, psychological support can be provided in two formats: face-to-face and online. Despite the debatable effectiveness of the online format in psychological activity, this form of interaction is quite popular. Most relatives of missing persons prefer seclusion, isolating themselves from "the world that continues to live a normal life." Therefore, the online format partially satisfies their need to be distanced, but at the same time have contact and receive help. Another advantage of online support is the flexibility of receiving a psychological service without being rigidly tied to place and time. It is also necessary to take into account the peculiarities of the martial law in the country, which creates temporal and spatial restrictions on free movement. Due to the instability of physical and psychological health, relatives of missing persons can often change the time of meetings, which is also not critical in the online format. Online meetings allow you to stay in touch with victims even if they are on the move. The online format allows you to create a safe space for the victims: they can be on their own territory, they do not need to worry about their appearance due to getting to the office, they can turn off the camera if necessary or if they want to include in the online meeting those participants who are important to them.

One of the main tools for supporting the families of the missing is listening to their stories. Unlike classic psychotherapy meetings, this process can last several hours, thereby gaining their trust. During such long conversations, a person can change places, experiment with body position, be in contact with relatives from time to time and include them in the conversation.

Despite the fact that this format of obtaining psychological services is characterized by not touching the deep processes of living the experience of loss, nevertheless, at the level of psychological education and obtaining basic self-help tools, this type of psychological support is quite viable and in demand.

In our previous study on the experience of loss, there were significant differences between respondents of different genders (Tytarenko, Dvornyk, & Myronchak 2021). If possible, women are more inclined to seek professional psychological help and have more experience in this, in particular in the following forms: reading popular scientific literature on psychology and self-development, participating in various psychological forums on specialized sites, subscribing to accounts. famous psychologists on Instagram and Facebook, participation in psychological support groups. Women consider the following forms of support more convenient and necessary when experiencing losses: the opportunity to grieve openly (cry, shout, swear, whine, etc.), more often than men they seek face-to-face counseling from specialists (medical worker, psychologist, social worker) and prefer to use electronic support (specialized applications, chats, Internet services, YouTube channels, etc.). Although all relatives of missing persons need support, women (mothers, wives of missing soldiers) seek real help more often than other relatives.

During the acute phase of an ambiguous loss, classical psychotherapy is not conducted online, because the grieving process has not yet arrived and relatives are often in dissociative states. Therefore, the main goal of online support is to help families through the acute phases of psychological pain, to cope with the fact that they do not know the fate and whereabouts of their missing relatives, to accept the uncertain reality, to reduce suffering and to restore a more functional life. Online support is not a substitute for therapy, but it is an important tool in interacting with families who are experiencing an ambiguous loss of missing persons.

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# CYBER PSYCHOLOGY AS A METHODOLOGICAL GROUND OF DIGITAL MEDIA EDUCATION

As British psychological society (BPS) defines cyber psychology is "a scientific inter-disciplinary domain that focuses on the psychological phenomena which emerge as a result of the human interaction with digital technologies, particularly the internet" (BPS, 2019, cit. by Kaye [8]). It is agreeable with definition by Gordo-López and Parker (Gordo-López, Parker, 1999) in the last century and by Attrill (Attrill, 2016; Attrill-Smith etc., 2019), Connolly (Connolly etc., 2016), Harley (Harley etc., 2018), Parsons (Parsons, 2017; 2019), Whitty (Whitty, Young, 2016), and other authors. Cyberpsychology is developed as a meta domain which covers the most widely many topics in context of future development of technology and their impact on human life in extended reality and promoted society digitalization.

The aim of this paper is to argue that cyberpsychology creates synthesis of theoretical and methodological basis for integration of media information literacy and digital literacies approaches in digital media education concept. The way is: first, to argue synthetic wide potential of cyberpsychology, second, to single out the cyber socialization aspects at cyber psychological topics and third, to show an importance of cyber socialization as a basis in contemporary education issues at all and in media education trends particularly.

*Synthetic wide potential of cyberpsychology*. See, Linda Kaye in her analysis of modern issues of cyber psychology proposed the distinctions of different popular terms in the researches of the psychological phenomena of the human interaction with digital technologies, in which cyberpsychology is about interaction and covers three topics: a) motivation for using technology, b) interaction with others using technology, c) effects and impacts association with using technology and internet (Kaye, 2021: 8). Human-computer interaction (HCI) as a field focuses on interaction between human and machine in the context of usability of a system (its design, implementation, and evaluation) and is interconnected with cyber psychology (Kaye, 2021: 7-8). Digital- prefix typically relate to the pertaining to technology and its affordance. Internet-, Online-, Virtual psychology she used as synonyms of cyber psychology in her book.

As Irene Connolly and her colleagues from at Dun Laoghaire Institute of Art, Design and Technology (IADT) Marion Palmer, Hannah Barton and Gráinne Kirwan say in the Introduction to cyberpsychology: cyberpsychology is the branch of psychology that examines how we interact with others using technology, how our behaviour is influenced by technology, how technology can be developed to best suit our needs, and how our psychological states can be affected by technologies (Connolly etc, 2016). They proposed cyber psychology as a very wide field which includes online methodology for researching all psychological phenomena, not only in connection with the internet, but other technologies too. The curriculum for cyberpsychology MSc which are proposed at IADT demonstrates such wide approach in education including "principles of psychology online" and "social psychology of internet" as sub-discipline of cyber psychological domain; "fundamentals of UX design" and "computer mediated communication" are included in cyber psychological curriculum as traditional HCI parts. Psychology of gaming and multimedia entertainment; psychology of virtual reality and artificial intelligence and critical research: foundations, futures and skills are the parts which move cyberpsychology toward future technology implementation in the lives of adults and children. Our media and cyber psychology curriculums (Naydonova, 2015; Naydonova, Chaplinska, Dyatel, 2021) are the way to move from media risks conceptions to age-appropriate socialization in cyberspace.

The Oxford handbook of cyber psychology (Attrill-Smith, 2019) and internet psychology (Joinson etc., 2009) highlight many of the same aspects and psychological phenomena: online self and personality, groups and communities, interactivity. Internet psychology is more focused on psychological phenomena of internet using and internet-based research. Cyber psychology is structured in such spheres as media, game, health, crime and technology across the lifespan. Unfortunately, lifespan analysis started from adolescence and their risk online behaviours, but our research showed that children started their life in cyber space in preschool age (Naydonova, Chaplinska, 2021). While Media psychology (Dill, 2012; Naydonova, 2015) covers the same topics of safety in cyber space from violence, discrimination, crime using interactive and emerging technologies, the cross-domain approach is needed.

*Cyber socialization aspects.* Cyber socialization is defined as processes of socialization in society which are digitally transformative. In the context of cyber socialization all three Kaye's main topics are very important in the modern age of pandemic and remote distant education, when instruction, developing social environment organization, management of children learning and social activities ets. are conducted by distance and in technology mediated manners. Digital risks in the conditions of distance education during a pandemic became bigger (Naydonova, 2021). War in Ukraine brings new challenges to remote education in connection with evacuation and temporary occupation.

The first research goal on cyber socialization is to single out the potential risks for children's development which are erased using technologies in different combinations, time and way of using for education. Map and classification of the risks and set of the adequate answers and prevention rules and events are the main topics for family media education on the base of cyber psychological knowledge. But a negative approach to technology for cyber socialization is non adequate.

Cyberspace is a living environment for children and adults personally and in groups and communities as social entities. Individual and group subjects are socialized developing social skills and competencies, but not only new generation adaptation is for norms and values of elder generations but opposite direction too. And now we must to shift cyber socialization concept includes socialization of AI by deep machine learning from data, which are users generated. Our internet behaviour is data, which impacts to machine and gives the information about society and AI modify itself for them, because we can say about AI socialization too.

The idea of digital humanism gives the possibility to talk about the interconnection of human and machine cyber socialization as an interactive process with transferable subjectivity. In this context many aspects of cyber socialization takes a new interpretation: from philosophical conceptualization of cyber socialization phenomena in circumstances of global changes and uncertainty (posthumanism, transhumanism, digital humanism, cyborgization, biohacking, territoriality, physicality, extended reality critical issues) through issues of information safety and cybersecurity challenges (infodemic, deep fakes, bot farms, cyber interventions) and to new technologies and trends in changes of cyber practices during the last decade and thereafter, technological trends, virtual and augmented reality in education and health care. Psychological and age-appropriate peculiarities of cyber practices in conditions of distance education? children rights in cyberspace, cyber education, digital parenting are the most actual pool of research tasks in educational context. Information literacy is impossible without understanding the sources and authors of media content, and digital literacy is impossible without understanding the sources sources both human and artificial ones.

Cyber socialization as a basis in contemporary education. Cyber space is an instrumental environment but for educational purposes it must be safe, healthy and developmental. Cyber socialization trajectory proposes not only instruments but demonstrates values, social norms and relational and activity sense patterns. Open educational space is expanded by cyberspaces with different mechanics and realities. It gives possibilities for social modelling, experimentation in communication with different entities, creating problem-solving and reflexive environments in cyber psychological curriculums. Education shifts to distance and socialization to cyber socialization. As educational psychology is the basis of learning process organization as cyber psychology is the basis of digital media education. The main topics for contemporary education are learning motivation and trust for educational services, health and well-being of the learning process for the best interests of children, criteria of technology abuse and overuse in the core of the idea of digital humanism. The cyber psychological community is differentiated but empowers the next generation to optimistic technological future.

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# NEW DIRECTION IN POLITICAL CYBER PSYCHOLOGY: CYBER ETHICS AGAINST TOTALITARIANISM

Russia's war against Ukraine is an attack by totalitarianism on human civilization in general. Totalitarianism, with its technologies of creating an alternative (false) reality in mass consciousness primarily for its own citizens, makes transformation of the state into a terrorist machine using intimidation, arrests, falsification, and information blockades. Totalitarianism is a psychosocial pathology that needs appropriate "treatment".

How does a healthy society live? For awareness: A healthy society is a different subjective, diverse society. The reaction of Poles to advertising is healthy! "Hypocrisy is the ancestor of wars and tyrants" - the assessment of the use of broken dolls as a symbol of suffering for commercial advertising is considered unethical. How does a sick society live? A sick society is a unified society that is unable to protect its dissidents from repression even if their very limited rights are violated. In Russia, there was a wave of arrests of single picketers with "imaginary slogans." They are accused of calling against the overthrow of the government. Absurd logic of alternative facts post-truth and double thinking are norms in sick society. Media proposed to people the content for norms of joint common lye. Socializations in a healthy society and in a sick society are different.

As artificial intellect has cyber socialization too (Naydonova, 2022) through machine learning and using of data generated by human users. Because we have the challenge of AI totalitarian contagion through cyber socialization in sick society.

Reproduction of totalitarianism hypothesis. Assumption: there are certain characteristics of society that reproduce totalitarianism even in the event of removal / death of the leader-dictator (person, group) from the system of society. Goal: to identify the psychological basis of totalitarianism, which leads to military terrorism and its public support. Task: create a tool to measure support / rejection of totalitarianism.

Political signs of totalitarianism are: a) does not recognize the autonomy from the state of such non-state spheres of human activity as economics and economy, culture, education, religion; b) requires unrestricted control of subordinates and their complete submission to the political goals set from above; c) the forced unification and relentless brutality of totalitarian power which is justified by internal or external threats to the existence of the state; d) the presence of the figure of the leader (Fuhrer), dictatorship and terror; e) regular mobilization of the population in mass organizations; f) isolation or murder of actual or potential dissenters; g) the role of representative bodies of central government and self-government has been nullified... violent suppression of the opposition; h) maintaining the nation in a constant state of readiness for war. Creating a culture of "military citizenship" for preemptive strike on an imaginary "enemy".

Totalitarianism in the psychological dimension has such features: 1) TERROR for destructive sharing emotions and false of social connectivity; 2) LIES for disruptive cognitions; 3) PSEUDOETICS for dehumanization, violence and war improving; 4) IMBALANCE and 5) DEPRIVATION OF SUBJECTIVITY.

**I. TERROR (emotions) includes: 1) FEAR:** experience of fear / media fear / condition of the victim / lack of resistance / normalization of violence; 2) **COERCION:** feelings of oppression / acceptance of coercion / exercise of coercion / coercion as the patriotism of totalitarianism; 3) **CRUELTY:** feelings / realization / glorification of cruelty / cruelty as patriotism of totalitarianism.

**II. LIES (cognitions) includes: 1) in MEDIA system promotion on** alternative reality (fact) / medianoncriticism / knowledge about manipulations / sense of influence of technologies / enthusiasm - sharing the picture of the world; **2) DUALISM**: doublethink, doublediscourse (bilingualism) / breaking the mechanism of meta-value (regulation by the values) / intolerance of uncertainty (avoid by stereotypization).

**III. PSEUDOETICS (war promotion) based on such ideas: 1) EVIL:** justification of evil / motive of lesser evil / substitution of ethics (ethics: guidelines, values); 2) **READINESS FOR WAR, THE IMAGE OF THE ENEMY**: dehumanization / tolerance to war crimes / tolerance to criminal orders / idea of the glory of the weapons of the people (geopolitical instruments of influence) / isolation of internal - external "enemies"; 3) **IRRESPONSIBILITY:** shifting the locus of control / delegation of responsibility to management (leader) / lack of guilt / impunity.

**IV. IMBALANCE tendencies are in such spheres: 1) OVER-IDEA = HIGHER ADVISABILITY** and **SACRIFICE:** devaluation, frustration and the desire for satisfaction / envy as a form of frustration / renunciation of civil needs and rights in favor of higher advisability / the notion about mobilization, repression - restrictions for the sake of a higher goal / refusal to overcome the disproportion "financial luxury - poverty" in favor of higher advisability / stagnation of the common good / representation about lifestyle; 2) **COLLECTIVE NARCISSISM:** exaggerated significance / special civilizational mission of the "people" / social dominance (the idea about yourself as an older Brother to the fraternal people); 3) **UNIFICATION:** sense of unification / the need to control the unification of the

surroundings / prejudice / intolerance of otherness / the need for totality (integrity) - a primitive ersatz of integrity / the action of unification as patriotism of totalitarianism.

V. DEPRIVATIONS OF SUBJECTIVITY are in forms of: 1) SUPPRESSION OF SUBJECTIVITY of society, groups and individuals / the rigidity of political action / mass organizations as a tool of security and caree; 2) UNLIBERTY (LACK OF LOVE FOR FREEDOM): the primacy of the state over the value of individual freedom (acceptance - opposition - rejection); 3) SYSTEM OF SICK IDEAS: about availability / restrictions / repertoire / resources about freedoms, rights and needs in economic, legal, political, cultural, educational, religious ets. Religious role of the moral doctrine of the people (geopolitical instruments of influence) includes religion as patriotism of the russian world, key economic resource of the people (gas, microelements, water, territories ets.) as geopolitical instruments of influence, legal awareness / focus on laws (justice) instead of focus on rights and their observance.

MODELING in the results of the author's reflection on the synthetic version of a group of five experts for hypothesis verification in 4 stages. First, based on the group of equivalents of politological meanings in psychology, a measurement tool is proposed by L.Naydonova Synthetic scale of totalitarianism regeneration measurement SSTRM (**30 judgments**). Four groups of indicators are used in the synthetic proposal: 1) normalized violence (punishment, humiliation as mechanisms of cooperation, acceptance of war);2) emotional features - distorted relationships (negative states: fear, envy, lack of empathy, distrust); 3) cognitive features - distorted worldview (alternative reality: hope, images of the enemy and the leader, media illiteracy); 4) regulatory component - distorted ethics (projection of evil, non-admission of guilt, responsibility, rights, values of rights and freedoms). Second, EXPERT MODELING. The conditional russian recipient will mostly bypass the concepts, i.e. the tool is not universal. Third, FIELD MODELING. Panel complex study (400 judgments) includes numbers of methods (Naydonova, Naydonov, Hrihorovska, 2022). And finally, analysis and preparing of final synthetic proposal.

To this end, we are announcing a call to the partners to establish a consortium of such a joint scientific and practical project (the situation cannot end only with sanctions and alienation). Security can come only after all these institutional measures, military victories, communication, etc. force the aggressor to change his position. The changed / unchanged position should also be monitored in psychological indicators protected against falsification (adjustment and readjustment) in accordance with the expectations of observers (lies, propaganda, etc.).

**TO PREVENT SUPPORT OF HYBRID TOTALITARIAN REGIMES, IT IS NECESSARY:** to establish in education the development of competencies that would be based on self-determination and mastering the skills of building civil society; in civic education, we need to focus on a more conscious choice of profession, which would be based on our current - during the war - feeling: everyone is approaching victory, doing in his place, what works best for him, feeling the shoulder of another (this cohesion of society shows the direction in which we must move in civic education, so that, having won, we do not lose this achievement); the post-war challenges include not only the restoration of Ukraine, but also the restructuring of the consciousness of a sick society in Russia. Hence the fight against lies and falsification of reality.

As a result: combined with civic professional self-determination is an informational definition, one that is based on the truth of reality and is realized in reality. There is no post-truth era - this is Russia's weapon. There is a reality. One must determine one's future by understanding the impact of one's small contribution on the common good. This is how civil society should be: by caring for the common good, you decide that you can invest in it from what is given to you.

Taking into account the aggressive expansion of Russian totalitarianism in the claim of global intervention of the Russian world and totalitarian mentality, the risk of the influence of a sick society on cybersocialization should be considered as a global challenge. It is necessary to counteract this challenge by creating cyberethics based on digital humanism with a clear group reflection of totalitarian features, and creating technologies to counteract the destruction of subjectivity. One of the directions of creation of such technologies is the technology of representative group reflection proposed by the authors (Naydonov, Hrihorovska, 2016), which provides an opportunity on the basis of the common good to carry out analysis and self-determination regarding its properties in the context of non-confrontational group subjects of various scales (regional, national, local).

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# WAR AND PANDEMIC: DIALOGUE WITH THE BODY IN THE CONDITIONS OF UNCERTAINTY

At the present stage, the interdisciplinary field of psychosomatics for almost a century of history, there is a lot of controversy around phenomenology and there are many accusations of lack of evidence and a scientific approach. In connection with the development of information technologies and the transformation of mankind in the conditions of: cybersocialization, war and pandemic of mankind of the XXI century (experience by mankind of collective trauma in the conditions of a hybrid war and pandemic of mankind of the XXI century, intensive development of cyberspace in society); the breakthrough development of innovative psychotechnological, cyberpsychology and the impossibility of combining the medical and psychological approach of psychosomatics, and insufficient attention is paid by modern scientists to the phenomenon of corporeality and the study of psychosomatic phenomena in conditions of uncertainty, a pandemic of mankind and in the conditions of war in the XXI sentury.

The issue of conducting a dialogue with the bodily-self was studied by domestic and is being studied by modern scientists such as R. Beris, M. Vladimirova, I. Kon, V. Mukhina, A. Nalchadzhyan, E. Sokolova, O. Tkhosov, T. Khomulenko, I. Chesnokova and other scientists (Gordon, 1949; Betts, 1909; Vasylenko, 2013). But the study of the issue of conducting a dialogue with the bodily–self in conditions of uncertainty (in conditions of war and in a pandemic) has not been sufficiently studied by domestic and modern scientists.

Structural-functional model of the bodily-self consists of the archetype of the internal body (without conscious bodily), the bodily-self.

The bodily-self consists of emotional, cognitive and functional (behavioral) components.

The bodily – self is a subject that appears as a receptacle of his self and mediates the sensory and psychomotor interaction of the subject with the world; self – physical – is a product of self – consciousness, one of the dimensions of the self of the concept of a person, which includes an emotional, cognitive and behavioral component. These components help a person to conduct a dialogue with the bodily– self.

Dialogue with the bodily – self is the psychological capabilities of the bodily – self, with the help of which the components of develop the bodily – self regulation of emotional feelings, the use of symbols, communication of consciousness and the unconscious, and cognitive operations during the dialogue.

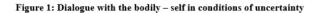
Dialogue with the bodily- self in conditions of uncertainty is carried out with the help of psychoeducation, the latest, innovative healing psychotechnological in cyberspace, including offline work with a psychologist or psychotherapist. With the help of this dialogue, there is a uniform development of the components of the bodily – self regulation of emotional feelings, the use of symbols, communication of consciousness and the unconscious, and cognitive operations. In the course of the dialogue with the corporeal self is the development, regulation and transformation of corporality in conditions of uncertainty (in conditions of war and in the pandemic of humanity of the XXI century). When conducting an internal dialogue with the bodily – self, under conditions of uncertainty, there is an awareness of the causes of bodily diseases, sometimes healing, the transformation of corporality, with the help of which new abilities and new opportunities are developed, and cyber - socialization of a person. To conduct a dialogue with the bodily- self in conditions of uncertainty, the latest psychological are used, such as: psychological counseling and psychological correction online or offline, psychological games, metaphorical associative cards, art methods, online creative activities, distance learning of health psych technological and provision of primary psychological care on different platforms, in social networks and in different messengers of channels and social networks; improve and master new abilities in conditions of uncertainty (in conditions of war and a pandemic of humanity in the XXI st century). Summing up what we have indicated, that conducting a dialogue with the bodily self in conditions of uncertainty (under the conditions of a pandemic of humanity of the XXI st century and in conditions of war) will help a person in the process of transforming the world acquire self-regulation skills for conducting an internal dialogue. A constructively conducted dialogue with the bodily – self in conditions of uncertainty has a positive effect on the physicality and health of a person as a whole.

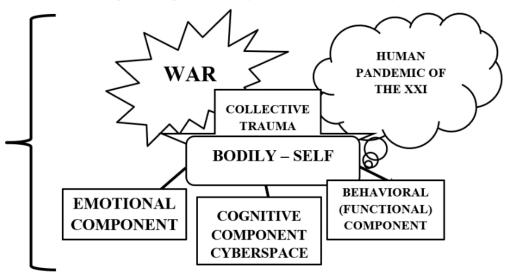
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The scheme was developed by the author.

# CYBER-MISTREATMENT: THE NEW FACE OF MISTREATMENT AND EXCLUSION IN THE WORKPLACE

The impact of modern technologies on our working lives cannot be neglected. Organizations have increasingly adopted Information and Communication Technologies (ICTs) since their introduction into the working life in the '80s. This gave rise to a virtual workplace characterized by a lack of traditional boundaries such as physical space and time, and in which core tasks and interactions are performed using various technologies (Broadfoot, 2001). An increasing number of organizations support virtual workplaces, with employees spending more time communicating through e-mail than face-to-face (Wajcman & Rose, 2011). Notably, this trend was happening much before the start of the COVID19 pandemic and has only been further exacerbated due to the pandemic measures.

A challenge for organizations is adapting to the fast-paced changes technology brings. The rapid tempo of development has intensified work processes, leaving workers constantly racing to keep up with the ever-evolving work environment. In addition, a new virtual environment has been established: one that creates its own social dynamics in how people express themselves, communicate with others and construct their own sense of identity. Unfortunately, this virtual environment also provides people with a new avenue for mistreatment.

Cyberbullying – online aggressive behavior that makes the target of the behavior feel powerless – is an important example of this. The first studies on cyberbullying emerged at the beginning of the 21st century and were solely focused on adolescents. This field has known an enormous growth ever since with a further proliferation of studies on cyberbullying behavior in the workplace that suggest that prevalence rates of workplace bullying ranges from 3 to 33% depending on the measure used and the study sample (Vranjes et al., 2020a).

In my own work on this topic, I expanded the emerging field of workplace cyberbullying in several ways. First, by developing a definition of workplace cyberbullying accounting for this phenomenon's new and unique characteristics, such as anonymity, viral reach and boundarylessness and a theoretical model predicting its occurrence (Vranjes et al., 2017). I developed and validated a measurement tool for assessing the occurrence of workplace cyberbullying encompassing both the more traditional acts (person and work related) and the rather cyber-typical acts (intrusive) (Vranjes et al., 2018a). Finally, I empirically tested the propositions of my model by using different samples and analytical techniques (cross-sectional, longitudinal and daily diary studies), finding evidence that: (a) work stressors play an important role in creating a context in which workplace cyberbullying behaviors can emerge (Vranjes et al., 2018a; Vranjes et al., 2020b), (b) stressor-evoked discrete emotions of fear and sadness play an important role in greptration (Vranjes et al., 2018a), while the stressor- evoked discrete emotion of anger plays an important role in cyberbullying perpetration (Vranjes et al, 2020b), and that (c) three different types of cyber victims can be distinguished based on the negative online acts they experience (the non-cyber-victims, the similar-to-offline cyber-victims, and the pervasive cyber-victims) and their emotion regulation strategies (Vranjes et al., 2018b).

Ever since, many more studies on this topic have emerged that further refined our understanding of this phenomenon, suggesting that while online forms of mistreatment often co-occur with offline forms, it is also evident that cyber-mistreatment possesses new characteristics, highlighting differential impacts and challenges in the management of workplace cyberbullying (D'Souza et al., 2022; Kowalski et al., 2018). In my presentation, I quickly discuss some advancements and some opportunities for further exploration.

Importantly, cyber-mistreatment is much more than cyberbullying alone. The online environment, including its characteristics, such as the invisibility of people on the other side of the screen, the potential anonymity of the perpetrator, the asynchrony in communication, and its boundarylessness (Zhang & Leidner, 2018) poses some additional threats and challenges that may lead to new forms of cyber-mistreatment. In this presentation, I therefore want to point out some less obvious forms of cyber-mistreatment at work: Cyber-Exclusion, Cyber-Intrusion, and Cyber-Mismanagement.

# Cyber-Exclusion

Telework and other types of flexible work arrangements are becoming a common practice in organizations. While such arrangements bring a lot of advantages to employees by allowing them to better balance their work and private lives, these types of arrangements can also lead to social isolation or even exclusion. First, the quality of interpersonal interactions can be reduced due to the absence of formal (e.g., meetings) and informal (e.g., in the coffee corner) face-to-face communication and the use of less rich communication mediums (Griep et al., 2021). Second, these types of arrangements can further be used to socially or professionally exclude already vulnerable workers, such as minority employees or working mothers. It is highly likely that exclusion is much harder to spot online and can serve to disadvantage certain employees who are not even aware of it, manifesting itself overtime in a lack of promotion or career opportunities for those employees. This issue highlights the responsibility of organizations to promote inclusion of their flex workers with fair policies and practices.

Cyber-Intrusion

Today, boundaries between work and private life are becoming increasingly blurred due to mobile devices that enable sharing and receiving work-related information regardless of location and time. This means that previously separate social spheres of employees are becoming increasingly mixed and overlapping (Marwick & Boyd, 2011). The crossing of boundaries between work and private life can also be perceived as a pervasive form of cyber-mistreatment (D'Souza et al., 2022; Forssell, 2019).

A plethora of research suggests that the combination of long working hours and the inability to take breaks is a serious risk factor for work-home interference and fatigue (Zijlstra & Sonnentag, 2006). Employees also indicate that not being able to escape the work life, including their supervisors, colleagues or clients, can feel particularly threatening (Forssel, 2019). As such, the intrusive nature of technology and the misuse of technology to invade employees' private lives is an important aspect of cyber-mistreatment. As a corollary, organizations should invest in proper recovery management for all workers regardless of their work location to ensure that employees' boundaries are respected.

#### Cyber-Mismanagement

Technology is also increasingly being employed as an employee management tool. Employers can use algorithmic management to establish control over employees through three mechanisms (see Kellogg et al., 2020): direction (i.e., which tasks need be performed, in what order and time period, and with what degree of accuracy), evaluation (i.e., correct mistakes, assess performance, and identify those who are not performing adequately), and discipline (i.e., punishment and reward so as to elicit cooperation and enforce compliance). On the one hand, this can lead to increased efficiency and perceptions of objectivity. However, use of technology for management can also lead to a perceived loss of control, feelings of constant surveillance and dehumanization of individual workers by their employers (Griep et al., 2021). As such, cyber-mistreatment can be happening under the guise of performance management (D'Souza et al., 2022) with supervisors exploiting their position in organizational 'hierarchies of power' and hiding 'their abusive behaviors and activities within legitimate organizational routines and processes' (Hutchinson et al., 2006: 122). This highlights the responsibility that governments have to monitor and regulate organizational use of technological aids for performance management, as well as the responsibilities organizations have to install humane management practices.

In sum, cyber-mistreatment is multifaceted and can take forms of bullying, exclusion, intrusion and mismanagement. As organizations play an important role in curtailing the negative effects of cyber-mistreatment (D'Souza et al., 2022; Nikolic et al., 2017), they should think about and develop policies that take into consideration that challenges as well as the opportunities associated with new technologies in the workplace.

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#### THE CENTER FOR DIGITAL EDUCATION AND MEDIA LITERACY IN MYKOLAIV (UKRAINE): RESPONDING TO THE CHALLENGES OF THE INFORMATION WAR

The rapid development of the world's digital and media technologies, reforms in the field of education in Ukraine, the formation of a new society requires qualitatively new approaches to raising children and the process of improving the qualifications of teachers in various fields. And this is impossible without highly qualified employees capable of mobility, orientation in a complex info-media environment, lifelong learning, those who are able to quickly make adequate decisions. That is why the Mykolaiv In-Service Teachers Training Institute faces new tasks, the fulfillment of which is possible only under the condition of forming a modern informational and educational environment and understanding the level of media culture of teachers of the Mykolaiv region, perception of modern challenges and threats, awareness of the importance of educating a harmonious personality with critical thinking.

The informatization of education caused the active use of information and communication technologies, which had a positive effect on the effectiveness of the educational process at all levels and the formation of a set of competencies.

The objective reality of the modern world indicates the urgency of updating the education system in general and pedagogical technologies and approaches to the formation of digital competence in particular.

The creation and effective functioning of a modern informational and educational environment becomes possible thanks to the implementation of digital information technologies in the field of design, ICT and means of communication. The development of the modern information society puts forward new requirements for the training and retraining of teachers to the world education system.

More than two years have passed since the moment when the world and Ukraine became hostages not only to the coronavirus infection COVID-19, but also to the information pandemic caused by it - the rapid, uncontrolled spread of unverified, undifferentiated information, which creates fear and panic in society and prompts the adoption of rash decisions emotional decisions. In 2021, the Ministry of Digital Transformation of Ukraine published the results of the study "Digital Literacy of the Population of Ukraine", which indicated that the digital skills of 47.8% of Ukrainians are below the "basic level" mark (according to the digital skills assessment methodology used by the European Commission) (Digital literacy of the population of Ukraine: a report based on the results of a national survey, 2021). In the same year, the non-governmental organization "Detector Media" published an analytical report based on the results of a comprehensive study "Media Literacy Index of Ukrainians", according to which 15% of Ukrainians have a low level of media literacy, a third (33%) - below average, 44% - above average and only 8% is high (Media Literacy Index of Ukrainians: analytical report based on the results of a comprehensive study: <u>https://bit.ly/3djdaaU</u>).

Today, Ukraine faced a new challenge - unprovoked large-scale aggression on the part of the Russian Federation, destruction of civilian infrastructure, educational institutions. Mykolaiv and the Mykolaiv region is a front-line area that is under daily Russian rocket fire. The Mykolaiv In-Service Teachers Training Institute did not interrupt the educational process, continued to improve the qualifications of regional teachers, prepare teachers for the New Ukrainian School and implement the new State Standard of Basic Secondary Education in Ukraine, providing informational and psychological support.

The purpose of the article is to find ways to comprehensively solve problems associated with a low level of digital literacy and media culture and to build a model of acquiring knowledge in the specified areas by teachers and other categories of residents of the Mykolaiv region: pensioners, civil servants, people with disabilities, military personnel, entrepreneurs, etc. in conditions real and informational and psychological warfare.

**Basic presentation.** Back in 2019, the academic council of the Mykolaiv In-Service Teachers Training Institute adopted the concept of an information and educational environment, the purpose of which is to organize practical steps for the development of the institute not only as a regional center for the retraining of teaching staff of the Mykolaiv region, but also as a modern center for the development of digital education, media culture and innovations in the context of the implementation of the "New Ukrainian School" concept (Zaporozhchenko M., 2019).

In December 2021, the first digital education and media literacy center in Ukraine was opened on the basis of the Mykolaiv In-Service Teachers Training Institute (story – <u>https://youtu.be/24e4sORAbEQ</u>), the purpose of which is to increase the level of digital education and media culture of residents of the Mykolaiv Region:

- formation/improvement of knowledge on the basics of computer, information and digital literacy, safe use of digital technologies;

- formation/improvement of digital content creation skills, ability to work with data;

- development of attitudes towards personal and professional self-improvement, positive attitude towards digital transformation, lifelong learning.

#### The main functions of the Center:

- development training and professional development programs for the formation and development of digital competencies of specialists in various fields of activity;

- introduction of digital and media literacy courses;
- formation of digital culture in educational institutions;

- conducting activities aimed at increasing the level of digital competences of participants in the educational process (leaders, teachers, students, parents, etc.) in accordance with new professional standards;

- provision of methodical support to educational institutions regarding the use of digital laboratories;

- formation of a network of digital mentors, volunteers in institutions of higher and vocational education;

- organizing and conducting training on the development of digital skills of civil servants and officials of regional and local self-government bodies;

- organization of regional digital orientation forums for senior citizens;
- organization of a system of informing about the possibilities of increasing the level of digital literacy:
- creation of a landing page on digital literacy;
- development of an interactive map of digital education. (Zaporozhchenko M., 2022).
- Structure of the Center:
- STEM laboratory/training room;
- teleconference hall/training hall;
- Open Media Center;
- workspace.

**STEM laboratory/training room of the Center.** As part of teacher training courses and the work of the Center, special attention is paid to familiarization with the elements of robotics.

Even if the specifics of the subject are not directly related to coding and robotics, learning elements of robotics in school equips students with important skills such as analytical thinking, programming, teamwork, collective thinking, innovation perception, and more. That is why teachers need to be shown the functions of various robots and their possibilities for the educational process

(Shulyar V., Makhrovska N., Pogromska H., Zaporozhchenko M., 2021).

**Video conference hall/training hall.** The functional purpose of the audience is to hold video conferences, which provides simultaneous two-way transmission, processing, transformation and presentation of interactive information at a distance in real time using computer hardware and software.

This media tool can be used to hold joint conferences between several institutions, cities, regions, and countries.

**Open Media Center**. The main goal of the operation of the media center on the basis of The Mykolaiv In-Service Teachers Training Institute is to create conditions for the integration of quality media texts in the process of improving the qualifications of teaching staff of the Mykolaiv region in various fields (language and literature, social science, art, natural science, health care, etc.) and the transfer of an effective toolkit for the formation of the basics of infomedia literacy in the children they teach.

The uniqueness of the equipped media center as a toolkit is that, thanks to it, media texts are created for teachers of various fields from a subject that corresponds to a certain direction of training and performs a number of important functions at once:

- teaching teachers to integrate one or another media text into the content of the lesson so that the learning process is effective and interesting;

- formation of media text analysis skills, maintaining a balance of opinions, using only facts, not judgments, debunking historical myths, stereotypes and modern fakes;

- implementation of educational projects through the creation of multi-disciplinary media texts about world-renowned scientists, writers, athletes, artists, musicians, whom fate somehow connected with the Mykolaiv region, as the implementation of the local lore mission, integration of infomedia literacy with the local lore component of education;

- demonstration of the content creation process and its components in compliance with the principles of academic integrity;

- creation of content that responds to topical issues of various fields: education, inclusion, health, children's safety;

- increasing the level of research competence of teachers and the use of acquired knowledge in the educational process;

- creation of one of the centers of the new informational and educational environment of the institute, which will determine the development of pedagogical education in general.

One of the promising areas of activity of the Center for Digital Education is project-experimental work and cooperation with the mass media on spreading the key principles of media literacy and digital education among the residents of the region.

Since its inception, the center has implemented more than 10 media education projects involving more than 3,000 teachers from the region.

Mykolaiv In-Service Teachers Training Institute cooperates with local media, in particular with the TV channel "Mykolaiv", to effectively cover media education activities and promote infomedia and digital literacy. Employees of the center took part in more than 20 "media-educational" broadcasts (call for broadcasts - <u>https://cutt.ly/5G6vsav</u>).

Since February 24, 2022, the Center has been working continuously in the field of information security of the Mykolaiv region, since the war is being waged on two fronts - real and informational and psychological: the spread of fake reports on the activities of the Ukrainian central and local authorities, discrediting Western partner networks and their support, labeling Ukrainian refugees and immigrants, artificial division of Ukrainian society along regional or linguistic lines. Such messages, unfortunately, are widely distributed in European countries as well, as the Kremlin spends huge amounts of money on "fueling" propaganda in these countries as well. The Center regularly holds webinars and trainings on the topic of information security during the war for teachers and students of the Mykolaiv region. The Center's employees create short educational videos to counter fakes, Russian propaganda, and manipulation so that the residents of front-line Mykolaiv are able to receive verified information, analyze media messages, and keep themselves in psychological balance.

We are also working on the development of new educational programs that include elements of media literacy for teachers of all fields, because critical thinking is a vital skill today.

**Conclusions and perspectives of research.** Summarizing the above, we believe that the creation of a digital education and media literacy center in combination with project-experimental and image work, the development of new and improvement of existing educational programs with the integration into their content of the skills of critical evaluation of information and digital literacy is the comprehensive solution that offers institute to address issues related to low levels of digital and media literacy. In addition, cooperation with the mass media, participation of the Center's employees in thematic broadcasts will encourage residents of the region to improve their own media hygiene and develop digital skills, which makes everyday life easier, simplifies access to many services, and helps to be protected in the information environment.

Continuation of the implementation of the specified set of measures will contribute to the free access of teachers to digital education tools for the effective formation of knowledge, abilities and skills of the end user of the educational service - the child.

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